## Courses of Instruction

## York Campus

## Courses of Instruction

## African Studies - Arts

Programme Office:
314 Founders College, (416) 736-5148, extension 66939
Coordinator of the Programme: P. Idahosa

Members:
A. Baudot, Glendon/French; M.J. Blincow, Anthropology; H. Bouraoui, French Studies; J. Carruthers, Environmental Studies; J. Craig, Sociology; I. Davies, Sociology; G. Desfor, Environmental Studies; N. DeShane, Fine Arts/ Dance; Z. Ellis, French Studies; B. Found, Environmental Studies; D.B. Freeman, Geography; M.J. Goodman, Atkinson/ Sociology; J. Hellman, Political Science/Social Science; S. Kanya-Forstner, History; B. Kettel, Environmental Studies; P.E. Lovejoy, History; G. Luianda, Glendon/Women's Studies; H. Rosenberg, Social Science; J.S. Saul, Political Science, Atkinson/Social Science; A. Sekyi-Otu, Social Science; P. Stamp, Social Science; H.M. Stevenson, Political Science; D. Trotman, History/Humanities; R.B. Witmer, Fine Arts/Music; C.D. Yawney, Atkinson/ Sociology; D. Yon, Anthropology/Education

Since its inception in 1974, the African Studies programme has been an interdisciplinary programme providing students with the opportunity to combine their interest in Africa with a proficiency in a given discipline: Anthropology, English, Economics, French Studies, History. Political Science and Sociology. Women's Studies will be forthcoming next year. Students can take either a double major in African Studies and one of these disciplines, or they can take a series of courses which complement their specialization in another subject area.
Students in the programme usually take an interest not only in the broad range of thematic academic issues of the programme, but also in the wider issues which have an impact upon Africa and its peoples. This interest is represented through a newsletter, events mounted by the programme in conjunction with students, faculty and often the community and outside institutions. Because African Studies has a commitment to both the intrinsic benefits of academic inquiry and to the well being of the peoples of Africa, the programme can therefore equip students seeking to do graduate work, work with African communities within Canada and work abroad.

York's African Studies programme is designed to give graduates a broad theoretical framework and a set of highly-developed analytical skills. The career and employment opportunities for our graduates are potentially excellent, in view of society's growing awareness of the importance of international, gender and equity issues. Prospective employers welcome employees who are sensitive to international issues and comfortable with the emerging diversity of Canadian society. Alumni from our programmes have found work in a wide range of fields, including government, education, law, social work, public service, business and media. A degree in African Studies will offer you the challenge of personal and political insight, and it
will encourage you to grow intellectually beyond the confines of traditional academic learning.
Note: For the specific requirements of this programme, please consult the Programmes of Study section, Faculty of Arts.

## Departmental and Divisional Courses in African Studies

Note: Not all courses listed will be offered in any one year. A number of courses are offered on a rotating basis. Further, some regular courses qualify as a programme course only when taught by an Africa specialist in the department. Majors should plan their course of studies with the advice of the coordinator to ensure they are able to take advantage of courses when they are offered. Please consult the annual supplementary calendar of the relevant department/division and that of the African Studies Programme (available in the spring from the Social Science Division office, or from the coordinator) for details on all current courses and prerequisites. For African Studies courses at Glendon and Atkinson colleges, and in the Faculty of Fine Arts, students are subject to Faculty of Arts regulations governing out-of-Faculty courses; please consult the Registration and Fees section, Faculty of Arts for information on infaculty and out-of-faculty courses.
Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
AS/ANTH 3320 6.0 Religious Ritual and Symbolism.
AS/ECON 3310 3.0 Development Economics I.

AS/ECON 3320 3.0 Development Economics II.

AS/EN 2370 6.0 Post-Colonial Literature.
AS/EN 3160C 6.0 African Literature.
AS/EN 3160F 6.0 West Indian Literature.
AS/EN 4230D 6.0 Studies in Post-Colonial Literature: Derek Walcott.
AS/EN 4230E 6.0 Studies in Post-Colonial Literature: Wole Soyinka.
ES/ENVS 4220 3.0 Urbanization in Developing Countries.
FA/FILM 3610 3.0 Studies in National Cinemas.
AK/FILM 3750 3.0 Studies in National Cinema. AS/GEOG 3090 3.0 The African Environment. AS/HIST 1000A 6.0 Evolution of Urban Black America.
AS/HIST 1010 6.0 War, Revolution and Society in the Twentieth Century.
AS/HIST 3750 6.0 Modern Africa.
AS/HIST 3830 6.0 Slavery.
AS/HIST 4700 6.0 The Partition of Africa.
AS/HIST 4710 6.0 The Last Years of Slavery.
AS/HIST 4770 6.0 The African Urban Past.
AS/HIST 4930 6.0 History of South Africa.
AS/HUMA 1300 9.0 Cultures of Resistance in the Americas: The African American Experience.
AS/HUMA 3660 6.0 The Oral Tradition.
GL/HUMA 3923 3.0 La littérature sénégalaise de langue française. (Cross-listed to: GL/FR 3923 3.0)
FA/MUSI 3350 3.0 Music of the Americas. AS/POLS 3560 3.0 Politics of the Third World.

AS/POLS 3570 3.0 Africa: The Politics of Continental Crisis.
AS/POLS 3580 6.0 Politics of South Africa.
AS/POLS 4575 3.0 The Politics of Southern Africa.
AS/SOSC 2480 9.0 Introduction to African Studies.
AS/SOSC 2810B 6.0 Literature, Art and Society: Social Thought in African and Caribbean Literature.
AS/SOSC 3480 6.0 Culture, Democracy and Development In Africa.
AS/SOSC 4090 6.0 Directed Reading.
Prerequisite: Permission of the Social Science Division.
AS/SOSC 4170 6.0 Gender Relations in the Third World.
AS/SOSC 4480 6.0 African Studies Seminar. (Consult with the programme coordinator in advance.)
AS/SOSC 4990N 6.0 African Popular Culture. GL/SOCI 3610 3.0 Sociologie de l'Afrique Noire.

## Anthropology - Arts

## Department Office:

2054 Vari Hall, (416) 736-5261
Associate Professor and Chair of the Department:
W.K. Little

Distinguished Research Professor Emeritus:
P.H. Gulliver

Professors Emeriti:
F. Henry, E. Kallen, J.R. Rayfield

## Professors:

J. Nagata, M. Rodman, M. Silverman, P. Harries-Jones, P. Van Esterik

Associate Professors:
M. Blincow, G.L. Gold, E. Graham, W. Kenneth Little, D.P. Lumsden, S. Romalis, G. Thaiss

Assistant Professors:
N. Adelson, S. Gururani
[Jt. with Fac. of Education]
D. Yon

The Department of Anthropology concentrates its attention and resources in the area of change in the contemporary world, especially as we move toward new social challenges at the end of this century. Our courses deal with how people live their lives at the unpredictable edges of political, social, and cultural stability. As anthropologists, we are interested in exploring with you how people are subjected to, participate in, and contest the processes of living in a world that is now interconnected by new and powerful economic, cultural, and technological forces. Thus, we have courses that engage a range of issues: diasporic communities and displaced peoples such as refugees; contemporary problems in health and nutrition; the role that gender, religion, science, and popular cultures play in the construction of everyday social life; and a critical analysis of evolution, ecology, and environmental movements. Other courses focus on processes of change in the prehistoric and historic past and examine the rise of tropical urbanism, the colonial process, and
the ways people invent themselves through the use of the past. Within these varying subject matters we ask questions about how class, race, gender, and ethnic identity politics are produced and expressed in shifting local and global contexts of power. Rather than saying that anthropology simply reflects on the world, we also try to show you how it is actually immersed in the changing state of things. The programme focuses on both the uses and challenges of theories and methods of the cultural, historical, and social sciences to produce a unique anthropological understanding of the processes of prehistorical, historical and contemporary change. The hope is that such courses will prepare you to ask critical questions about the possibility of all expressions of contemporary and future social life.

## Courses in Anthropology

Courses in Anthropology have three class hours a week. The terms in which half courses are to be offered will be announced in the preceding March.
Note: For specific requirements of programmes in anthropology, please consult the Programmes of Study section, Faculty of Arts. Not all courses will necessarily be offered in any given year; consult the department's supplementary calendar for details of courses to be offered.

AS/ANTH 1110 6.0 Introduction to Social Anthropology. An introduction to anthropology from the perspectives acquired through comparative study of primitive and complex societies. The course illustrates both the diversity and the recurring principles of social behaviour. Topics include economic organization, kinship patterns, political and legal systems, and ritual and religion.

## AS/ANTH 2000 3.0 Selected Topics in Social Anthropology. Information

 concerning Anthropology's annual selected topic course offerings is available in the department's supplemental calendar.AS/ANTH 2010 6.0 Selected Topics in Social Anthropology. Information concerning Anthropology's annual selected topic course offerings is available in the department's supplemental calendar.

AS/ANTH 2100 6.0 One World, Many Peoples. A fundamental change in recent history has been the formation of an increasingly interdependent world amidst widespread diversity of societies and cultures. This course surveys the possibilities and problems of implementing programmes of social, economic, and cultural development within this context.

AS/ANTH 2110 6.0 Issues in Anthropology. How do anthropologists explain the various issues current in the discipline? The course focuses on explanations of such topics as symbolic versus materialist approaches, the rationality of peasant economic action and the formalistsubstantivist debate.

Prerequisite: AS/ANTH 1110 6.0.
AS/ANTH 2140 6.0 Introduction to Archaeology and Palaeoanthropology. How did the human species originate? How did human society and culture develop? This course introduces students to archaeological and palaeoanthropological methods for studying human antiquity. They will also survey the prehistory of humankind's biological, social and cultural evolution.

AS/ANTH 2150 6.0 Early Civilizations: Cities, Urbanism, and Early States. This is a survey of the archaeology and historical anthropology of early complex societies in the old world (such as the peoples and cultures of Egypt, Mesopotamia, Iran, and China) and in the New World (such as the Aztecs, Maya, and Inca).

AS/ANTH 2160 6.0 Native Peoples of North America. An examination of the origins and diversity of Canadian Indian culture types prior to and during the historical period of contact (First term). A discussion and analysis of legal, political, economic and cultural issues during the later years of Euro-Canadian influence (Second term).

AS/ANTH 2180 3.0 Social Anthropology of the Middle East. Despite the many sociocultural differences in the Middle East, there is, nevertheless, a sense of "unity in diversity." Using anthropological concepts, such similarities and differences in religion, politics, the family, urban, rural and tribal life, and modernization are explored.

AS/ANTH 2190 3.0 Social Anthropology of the Caribbean. The course gives students an understanding of Caribbean society and culture in light of anthropological research, problems and theoretical constructs. The main focus is on the English-speaking Caribbean, concentrating on: The Colonial Past; The Institutional Present; and The Future.

AS/ANTH 3000 3.0 Selected Topics in Social Anthropology. Information concerning Anthropology's annual selected topics course offering is available in the department's supplemental calendar.

AS/ANTH 3010 6.0 Selected Topics in Social Anthropology. Information concerning Anthropology's annual selected topics course offering is available in the department's supplemental calendar.

AS/ANTH 3020 6.0 Race, "Racism" and Popular Culture. This course concentrates on race and racism as a major source of conflict, particularly in Canadian, British and American societies. The theoretical literature on racism as well as applied models developed to reduce racial conflict will be studied in depth.

AS/ANTH 3080 6.0 Modes of Enablement: A Cultural Perspective on Physical Disability. A comparative look at visible and non-visible disabilities, the relationship between the disabled and others. Topics include the symbolic and behavioural
correlates of physical disability, relationships between the disabled, their support persons and the health professionals.

AS/ANTH 3090 6.0 Gender, Science and Society. This course focuses on a critical study of the biomedical sciences, especially the role of women in science, interpretations of their social and reproductive roles and an assessment of major concepts in the representation of gender and visible minorities in medicine.

AS/ANTH 3110 6.0 Acquiring Research Skills. This introduction to research focuses on learning both qualitative and quantitative research skills within the context of a project designed and implemented by the class. Fieldwork, survey design, and data analysis are covered, all within the context of using a computer.
Prerequisites: AS/ANTH 11106.0 and AS/ ANTH 2110 6.0.

AS/ANTH 3120 6.0 Anthropology of Tourism. This course explores the sites/ sights of tourist practice. Beginning with an historical analysis of tourism in relationship to European colonial expansion, we then consider the cultural significance of contemporary tourism both at home and abroad.
Degree credit exclusion: AS/ANTH 3010B 6.0.
AS/ANTH 3140 6.0 Archaeological Research Techniques: York University MTRCA Summer Archaeological Field School. The course introduces students to basic methods of archaeological field work and laboratory analysis through the excavation of a Late Iroquoian site in Ontario. Students integrate the data derived from their investigations with what is known about the culture and history of the people under study.
Prerequisite: Any one of AS/ANTH 2140 6.0; AS/ANTH 2150 6.0; or AS/ANTH 2160 6.0.

AS/ANTH 3150 6.0 Culture, Evolution and Ecology. The course begins with a discussion of Darwinian evolution and moves on to consider how global ecology alters these conventional views. Ideas about the interlinkage between evolution and ecology and aspects of the new naturalistic approach is discussed.

AS/ANTH 3160 6.0 Family and Kinship in Comparative Perspective. This course seeks to develop cross-cultural perspectives on such topics as marriage and mating, the formation of domestic groups, extended kinship ties and social networks, the kindred and various forms of descent groups, the family as a "pathway to madness", and many other topics. The stress is on the importance of kinship as an ideology and set of symbols for ordering human relationships.

AS/ANTH 3170 6.0 Historical Anthropology and Politics of History. This course examines (a) how and why anthropologists have incorporated history into their ethnographic work and (b) the ways in which
the past is perceived and used, both by anthropologists and the people amongst whom they study.
Degree credit exclusion: AS/ANTH 3000P 3.0.
AS/ANTH 3180 6.0 Human Evolution and Physical Anthropology. An introduction to physical anthropology within the perspective of evolutionary theory. Topics include: the modern evolutionary synthesis; the primate fossil record; human physical evolution: ethnology and the evolution of behaviour; human biology in respect to adaptation and natural selection.

AS/ANTH 3190 6.0 Nutritional Anthropology: Food and Eating in Cross-cultural Perspective. This course introduces students to nutritional anthropology. It uses a biocultural model, linking biological, social and cultural determinants of food use. The course stresses linkages between food and health, and application of anthropological field methods to examining food-related problems.

AS/ANTH 3200 3.0 Millenarian and Utopian Religious Movements. This is an anthropological, as opposed to a theological, approach to religion, attempting to show how new religious ideas develop and are articulated and disseminated in specific social situations. It examines the social support groups, patterns of organization, types of leadership and "followship," and suggests the conditions under which these emerge.

AS/ANTH 3230 6.0 Women, Culture and Society. This course examines the contribution of anthropology to women's studies. We discuss the relationship between biology and culture, the evolution and learning of sex roles, and the roles and status of women in comparative perspective.

AS/ANTH 3250 3.0 China and the Chinese Diaspora. This course focuses on selected issues in the culture, economics, politics and international role of today's China, as well as on the identity and experiences of the overseas Chinese (e.g., as in Canada and the Caribbean), to address anthropological theorizing of "diasporas".
Degree credit exclusion: AS/ANTH 3000M 3.0.
AS/ANTH 3280 6.0 Psychiatric Anthropology and Social Stress. This course is concerned with furthering the mutual relevance of social anthropology and psychiatry, and with developing a true "Anthropology of Suffering." It integrates theories and findings from the fields of medical anthropology, transcultural psychiatry, psychosomatic medicine, in its focus on psychosocial stress research.

AS/ANTH 3320 6.0 Religious Ritual and Symbolism. Religious systems are examined in cross-cultural perspective. Emphasis is placed on the religious, ritualistic, and moral aspects of behaviour in preliterate and modern societies. Attention also focuses on the cosmologies which give meaning to these categories of behaviour.

AS/ANTH 3330 6.0 Health and Illness in CrossCultural Perspective. Comparative perspectives on health, illness and medical systems are studied from the viewpoint of
anthropology and related disciplines. Emphasis is placed on understanding the roles of the practitioner and patient in their social and cultural contexts and the importance of applied medical anthropology to the wider community.

AS/ANTH 3350 3.0 Culture as Performance: The Anthropology of the Arts. This course covers expressive aspects of culture: ritual, drama, the visual arts, dance and oral literature, in the framework of contemporary anthropological theories.
Degree credit exclusion: AS/ANTH 3350 3.0.
AS/ANTH 3360 6.0 The Politics Of Power: Sexuality, Violence, And Property In Everyday Life. This course focuses on the interconnections among three key sites of the everyday politics of power - sexuality (the body), violence, and property - in a wide variety of different societies and cultures.
Degree credit exclusion: AS/ANTH 3010A 6.0.
AS/ANTH 3410 6.0 Ethnicity and Nationalism. This course examines the significance and perception of ethnicity and of class, both as concepts and as modes of establishing or of manipulating identity and of organizing social life in non-western societies.

AS/ANTH 3450 3.0 Negotiations \& Bargaining. To explore processes by which people negotiate resolution of disputes (rather than seeking adjudication), theories are examined from anthropology and other social sciences with reference to Western and nonWestern societies. Students participate in four simulations of real-life cases.

AS/ANTH 4000 6.0 Independent Research. The advanced student has the opportunity to do independent research under the supervision of a faculty advisor chosen by the student. The research must be written in the form of a final major essay. Specific details have to be worked out with the supervisor.

AS/ANTH 4010 3.0/4010 6.0 Directed Reading. A full-year (or half-year in either term) reading course may be taken by prior arrangement with an instructor. A copy of the agreed-upon requirements must be submitted to the department Chair.
Note: Please consult the 'Enrolment and Registration' section, Faculty of Arts for regulations on independent reading courses.

AS/ANTH 4020 3.0 Human Rights in Canada: Key Issues. Using International Human Rights concepts as a framework for analysis, the course analyses key issues in Human Rights in Canada: 1) discrimination; 2) rights in conflict (pornography, hate propaganda); and 3 ) minority rights issues. Strategies for change designed to strengthen protection for the human rights of all Canadians are considered.

AS/ANTH 4030 6.0 Intercultural Training Skills. The purpose of this course is to offer students a body of theoretical knowledge and a repertoire of tools and skills that can be applied to training in intercultural
communication, anti-racism, educational and employment equity and organizational development.
Degree credit exclusion: AS/ANTH 4200A 6.0.
AS/ANTH 4040 6.0 Organizational Culture and Symbolism. Problem-based learning is applied to the anthropology of organizations focusing on concepts such as culture, symbolism, metaphors, rituals, ceremonies and spectacles, myths and stories and the embedding of local cultural worlds in larger impersonal systems of political economy.
Note: Use of the Internet is required for this course.

AS/ANTH 4110 6.0 Development of Theory in Social Anthropology. Starting from the major scholars of the last century, the course of anthropology is critically traced through the present century, with the ultimate aim of assessing the contemporary condition of social anthropology.
Prerequisites: AS/ANTH 1110 6.0, AS/ANTH 21106.0 and AS/ANTH 3110 6.0.

Degree credit exclusion: AS/ANTH 4360 6.0.
AS/ANTH 4140 6.0 Field Techniques in Maya Archaeology and Cultural Resource Management. Basic archaeological techniques are expanded to include the excavation, mapping, and recording of complex architecture within the context of examining the course of ancient Maya urbanism.

AS/ANTH 4180 3.0 Mayan Mesoamerica. "Mayan Mesoamerica" explores Mesoamerican urban tradition and its roots. New data from archaeology and dynastic histories permit a detailed focus on Maya florescence. This is followed by an examination of short- and long-term cultural and environmental consequences of the Spanish Conquest.

AS/ANTH 4200 3.0/6.0 Selected Topics in Social Anthropology. Information concerning Anthropology's annual selected topics course offering is available in the department's supplemental calendar.

AS/ANTH 4210 3.0 Selected Topics in Social Anthropology. Information concerning Anthropology's annual selected topics course offering is available in the department's supplemental calendar.

AS/ANTH 4230 3.0 Place and Space: CrossCultural Approaches. Virtually every aspect of human activity involves ways in which space an place are conceptualized, used, and shaped. This course examines the sociocultural construction of places from anthropological and interdisciplinary perspectives, emphasizing student writing and participation in seminar discussion.
Degree credit exclusion: AS/ANTH 4210M 3.0.
AS/ANTH 4260 6.0 Social and Cultural Change. Critical considerations of the theoretical dimensions in this field of anthropology (concepts, models,
methodologies, explanations) leads to study of the causes, processes, and effects of social change in a range of developed and Third World societies. Particular and contrasting case studies are examined in detail.

AS/ANTH 4280 3.0 Health and Healing in Asia. This Medical Anthropology seminar analyzes the epidemiology and processing of physical or mental disease and illness, and examines the popular, folk, and professional sectors of selected Asian health care systems, focusing on East Asia and on theoretical and policy implications.

AS/ANTH 4340 6.0 Advocacy and Social Movements. This course examines how modern forms of communication have totally transformed the nature of advocacy and the social construction of knowledge in modern society. Specifically, it examines ways in which cultural norms are modified by the activities of social movements.

## Applied Mathematics - Arts, Pure and Applied Science

See Mathematics and Statistics.

## Norman Bethune College Pure and Applied Science, Arts, Environmental Studies

## Academic Programme Office:

205 Norman Bethune, (416) 736-5164 ext. 22035
Director of Student Development:
J. Libman

216 Norman Bethune, (416) 736-2100 ext. 33940
Regulations governing College Courses vary from Faculty to Faculty. Students should consult the Faculty-specific sections of this Calendar for such information.

## Science Courses

SC/BC 1800 3.0 First-Year University Seminar in Science. An introduction to university scholarship through an in-depth exploration of a scientific theme. Focus is on small-group problem-based learning, guided by close contact with a faculty member. Emphasis is placed upon critical skills appropriate for the discipline and may include written and oral presentation, critical analysis, library research, and computer/Internet use. One and one half hours per week for two terms. Three credits

Prerequisite: Open only to students in their first year of university studies in Science or by permission of the instructor. Some sections may require specific science and/or mathematics course prerequisites at the OAC level.

SC/BC 18506.0 Biomedical Ethics and the New Genetics. Recent developments in genetics and biotechnology are rapidly generating both medical breakthroughs and societal dilemmas. This course provides an understanding of basic principles of molecular biology and human genetics, and examines societal and bioethical implications of the new genetics. (Same as SC/NATS 1850 6.O.) Three lecture/seminar hours. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1680 6.0, SC/NATS 1800J 6.0A, SC/NATS 1800J 6.0B, SC/NATS 1850 6.0. Not open to students enrolled in Biology programmes.

SC/BC 3030 3.0 Technical and Professional Writing. This writing-intensive course is for upper-year students in Computer Science, Space and Communication Sciences, and related fields. Students develop confidence and competence in professional and technical writing. Focus is on communication of complex information in a clear, sensible style. (Same as AS/SC/COSC 3530 3.0.) Three hours per week. One term. Three credits.

Prerequisite: At least 6 non-science general education credits.
Corequisite: Concurrent enrolment in at least one 3000- or 4000-level course in Computer Science, Physics, or other applied science.
Degree credit exclusions: SC/BC 3050 3.0, AS/SC/COSC 3530 3.0.

Note: This course counts as elective Science (SC) credits towards satisfying Faculty BSC degree requirements but does not count as Computer Science credits.

## Faculty of Arts Foundations Courses

Listed below are the 1000 -level and 2000 -level 9 -credit Foundations courses which are part of the Faculty of Arts General Education requirement and are affiliated with Norman Bethune College. These courses introduce students to interdisciplinary study, emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.

AS/HUMA 1905 9.0 Dangerous Visions, Brave New Worlds: The Science Fiction Culture and our Scientific Age. This course explores how the medium of science fiction has given cultural expression to changing attitudes towards modern science and technology. Topics include science fiction and the computer, relativity and quantum theory, religious belief, genetics and potential apocalypses.

AS/HUMA 1910 9.0 Science and the Humanities: Nature and Human Nature. This course investigates how scientific thinking about the place of human beings in nature involves humanistic thinking about the place of nature in being human.
Degree credit exclusion: AS/HUMA 1910 6.0.

AS/HUMA 2915 9.0 Darwin, Einstein, and the Humanities. An intensive examination of how Darwin and Einstein's scientific thought both shaped and was shaped by their respective intellectual, cultural, and social context.

AS/HUMA 2920 9.0 Spreading the Word: Knowledge, Technology and Culture. This course explores technologies of knowledge in social and cultural context, examining histories of classification, ethical and political concerns about information, debates over artificial intelligence and artificial life, and the social impact of technologies like the book, telegraph and computer.

AS/SOSC 2040 9.0 Nature and Human Nature. An enquiry into the biological dimensions of human culture with emphasis on findings of evolutionary theory, zoology, and primate studies in order to understand the evolutionary determinants of "primitive" and "modern" societies.

Degree credit exclusion: AS/SOSC 1040 6.0.

## Biology - Pure and Applied Science

Department Office:
247 Farquharson, (416) 736-5243
Undergraduate Office:
132 Lumbers, (416) 736-5311
Professor and Chair of the Department:
B.G. Loughton

Distinguished Research Professors:
K.G. Davey, D. Regan

Distinguished Research Professor Emeritus:
P.B. Moens

Professors:
B. Colman, M.B. Coukell, M.B. Fenton, A. Forer, I.B. Heath, J.A.M. Heddle, L.E. Licht, D.M. Logan, D.J. McQueen,
L.D.M. Packer, R.E. Pearlman,
A.S.M. Saleuddin, J. Sapp, C.G.H. Steel, R.A. Webb

Professors Emeriti:
G. Boyer, C.D. Fowle, D.M. Nicholls

Associate Professors:
D.R. Bazely, A. Bédard, M.M. Crerar, D.R. Goring, R.R. Lew, J.G. Little, J.S. Shore, B.J. Stutchbury

Associate Professors Emeriti:
D.M. Cameron, J.S. Tait

Assistant Professors:
I. Coe, R.T. Mullen, C. Peng, K.A. White Associate Lecturers:
E.C. Gardonio, P.J. Wilson

NSERC Women's Faculty Awardee:
C. Peng

Research Associates:
H. Heng, N. Levina, X. Vafopoulou, R.A. Wagner, G. Zhang, Y. Zhang

## Postdoctoral Fellows:

S. Arnott, N. Degousee, Q. Feng, S. Mukai, S. Perera, T. Read, N. Shima

Biology is the science of life. It is concerned with structure, function, evolution and distribution of all living organisms. The Department of Biology is sufficiently large and
its faculty members sufficiently varied in research interests to offer undergraduate instruction in all the major areas of biology. It specializes, however, in four areas: physiology, cell biology, molecular biology and population biology. Specialized programmes in biology (Science section V) require completion of a prescribed core of courses which expose the student to general areas of biology, but also give the student wide flexibility in selecting courses.

## Courses in Biology

Biology courses whose numbers begin with the digit "4" are normally offered in alternate years with the exception of SC/BIOL 40008.0 (4000 3.0), SC/BIOL 4170 3.0, SC/BIOL 4200 3.0, SC/ BIOL 45103.0 and SC/BIOL 4600 3.0.
The contact hour information in the course outlines below specifies the number of hours per week when the course is taught in the daytime in a Fall/Winter Session. If the course is offered in the evening and/or in a Summer Session, the format and scheduling may be different, though equivalent in credit value.

SC/BIOL 1010 6.0 Biological Science. A
course for Biology students examining unifying concepts and fundamental principles of biology. The course offers an introduction to cell and molecular biology, genetics, ecology and evolution. The laboratory exercises are an integral component; therefore, students must pass the laboratory section in order to pass the course. Three lecture hours, two lecture hours per week in alternate weeks; one tutorial hour per week; twelve three-hour laboratories. Two terms. Six credits.
Prerequisite: OAC Chemistry or SC/CHEM 1500 4.0 or SC/CHEM 1520 4.0.

Degree credit exclusions: SC/BIOL 1020 6.0, SC/ BIOL 1410 6.0, AK/NATS 1910 6.0.

SC/BIOL 1410 6.0 Principles and Processes in Biology. Emphasizing fundamental biological principles and processes of both plants and animals, this course examines aspects of the evolution and diversity of life, cell structure and function, heredity, and ecosystems. For science students who do not plan to continue in biology. Because laboratory exercises are an integral component of the course, students must pass the laboratory section of the course in order to pass the course. Three lecture hours, two lecture hours per week in alternate weeks; one tutorial hour per week; twelve three-hour laboratories. Two terms. Six credits.
Prerequisite: OAC Chemistry or SC/CHEM 1500 4.0 or SC/CHEM 1520 4.0.

Degree credit exclusions: SC/BIOL 1010 6.0, SC/ BIOL 1020 6.0, AK/NATS 1910 6.0.

SC/BIOL 2010 4.0 Plants. A study of plant structure, physiology and development, and an introduction to the diversity of plants. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisite: SC/BIOL 10106.0 or a grade of at least 80 percent in OAC Biology or, especially for non-Science students, permission of the course director.

Degree credit exclusion: AK/BIOL 2010 8.0.
SC/BIOL 2020 4.0 Cell Biology and Biochemistry I. A study of the cell biology and biochemistry of biomolecules. Topics include intermediary metabolism related to bioenergetics, including the biology of mitochondria and chloroplasts, protein structure and function, nucleic acid replication, gene expression, chromosome organization and recombinant DNA technology. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/BIOL 1010 6.0; SC/CHEM 10006.0 or SC/CHEM 1010 6.0.

Corequisite: SC/CHEM 2020 5.0.
Degree credit exclusions: SC/BIOL 2020 8.0, AK/BIOL 2020 4.0.

SC/BIOL 2021 4.0 Cell Biology and Biochemistry II. A study of those aspects of cell biology and biochemistry not included in SC/BIOL 2020 4.0. Topics include membranes, the endomembrane system, the cytoskeleton, cellular motility, the extracellular matrix, intercellular communication and intracellular regulation. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisite: SC/BIOL 2020 4.0.
Corequisite: SC/CHEM 2020 5.0.
Degree credit exclusions: SC/BIOL 2020 8.0, AK/BIOL 2030 4.0.

SC/BIOL 2030 5.0 Animals. A study of the diversity of animals, their structure, physiology and evolution. Two lecture hours per week, twelve three-hour laboratories, over two terms. Five credits.
Prerequisite: SC/BIOL 10106.0 or a grade of at least 80 percent in OAC Biology.
Degree credit exclusions: SC/BIOL 2031 4.0, AK/BIOL 2010 8.0.

SC/BIOL 2031 4.0 Animals. A lecture study of the diversity of animals, their structure, physiology and evolution. (Same as the lecture part of SC/BIOL 2030 5.0.) Two lecture hours. Two terms. Four credits.
Prerequisite: SC/BIOL 10106.0 or a grade of at least 80 percent in OAC Biology.
Degree credit exclusions: SC/BIOL 2030 5.0, AK/BIOL 2010 8.0. Not open to students enrolled in Biology programmes.

SC/BIOL 2040 5.0 Genetics and Evolution. A study of the organization and behaviour of genes and chromosomes and their roles in populations and evolution. Two lecture hours and one tutorial hour per week, twelve three-hour laboratories, over two terms. Five credits.
Prerequisite: SC/BIOL 1010 6.0.
Degree credit exclusion: AK/BIOL 2140 5.0.
SC/BIOL 2050 3.0 Ecology. An introduction to basic ecological concepts and levels of organization via an examination of major ecosystems. Three lecture hours. One term. Three credits.

Prerequisite: SC/BIOL 10106.0 or a grade of at least 80 percent in OAC Biology or, especially for non-Science students, permission of the course director.
Degree credit exclusion: AK/BIOL 2070 3.0.
SC/BIOL 30013.0 (3001 2.0) Field Course. A course given at one of several biological stations, the objective of which is to give the student the opportunity to study plants and animals in their natural surroundings. The departmental brochure should be consulted for further details. Two-week field course. Three credits (3001 3.0). One-week field course. Two credits (3001 2.0).
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 20305.0 or SC/BIOL 2031 4.0; plus special prerequisites where specified for some modules.
Note: Students must be manually enrolled in this course through the Biology Department early in the January prior to the session in which the course is offered. Enrollment is not possible at any other time of year. In addition to the tuition fee levied by the University, each student must pay for transportation, room and board.

SC/BIOL 30023.0 (3002 2.0) Field Course. This is a second field course, which may be taken for credit, the contents of which must differ materially from SC/BIOL 30013.0 (3001 2.0) as determined by the course director. The departmental brochure should be consulted for further details. Two-week field course. Three credits (3002 3.0). One-week field course. Two credits (3002 2.0).
Prerequisite: SC/BIOL 30013.0 or SC/BIOL 30012.0 or permission of the course director; plus special prerequisites where specified for some modules.

Note: Students must be manually enrolled in this course through the Biology Department early in the January prior to the session in which the course is offered. Enrollment is not possible at any other time of year. In addition to the tuition fee levied by the University, each student must pay for transportation, room and board.

SC/BIOL 30033.0 (3003 2.0) Field Course. This is a third field course, which may be taken for credit, the contents of which must differ materially from SC/BIOL 30013.0 (3001 2.0) and SC/BIOL 30023.0 (3002 2.0), as determined by the course director. The departmental brochure should be consulted for further details. Two-week field course. Three credits (3003 3.0). One-week field course. Two credits (3003 2.0).
Prerequisite: SC/BIOL 30023.0 or SC/BIOL 30022.0 or permission of the course director; plus special prerequisites where specified for some modules.
Note: Students must be manually enrolled in this course through the Biology Department early in the January prior to the session in which the course is offered. Enrollment is not possible at any other time of year. In addition to the tuition fee levied by the University, each student must pay for transportation, room and board.

SC/BIOL 3010 3.0 Advanced Biochemistry. A detailed discussion of enzyme structure and function. The chemistry and metabolism of biological molecules. Metabolic regulation at the level of enzyme activity. Knowledge of general concepts of metabolism and of basic aspects of enzyme structure and function is assumed. (Same as SC/CHEM 3050 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/CHEM 2020 5.0.
Prerequisite or corequisite: 3 additional Chemistry credits at the 2000 or 3000 level (e.g., SC/CHEM 20113.0 or SC/CHEM 2021 3.0 or SC/CHEM 20503.0 or SC/CHEM 2620 3.0) are strongly recommended.

Degree credit exclusion: SC/CHEM 3050 3.0.
SC/BIOL 3030 4.0 Physiology of the Invertebrates. A treatment of the physiology of major invertebrate phyla with emphasis on interphyletic relationships. Laboratory exercises address the diversity and physiology of invertebrates. Three lecture hours, three laboratory hours. One term. Four credits.

Prerequisite: SC/BIOL 2030 5.0.
SC/BIOL 3060 4.0 Animal Physiology I. Fundamental concepts in sensory, neural and behavioural physiology. The biochemical mechanisms whereby nerve cells detect and transmit information and the processes whereby information is integrated in the nervous system and gives rise to the outputs of behaviour. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisite: SC/BIOL 2030 5.0; both SC/BIOL 20204.0 and SC/BIOL 20214.0 strongly recommended as prerequisite(s) or corequisite.

SC/BIOL 3070 4.0 Animal Physiology II.
The processes of digestion, osmoregulation and excretion, circulatory systems and gaseous exchange, metabolism, growth and reproduction are considered. The course adopts a comparative approach, first analyzing the basic principles underlying physiological activities, then examining the means whereby different organisms perform them. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisite: SC/BIOL 2030 5.0; both SC/BIOL 20204.0 and SC/BIOL 20214.0 strongly recommended

SC/BIOL 3090 3.0 Science Statistics. Problems of experimental design encountered in biological and physical research; basic statistical theory using non-parametric as well as parametric approaches. The project period is devoted to the solving of statistical problems with the use of computers. Two lecture hours, one project period. One term. Three credits.
Prerequisites: AK/AS/SC/COSC 15203.0 or AK/AS/SC/COSC 1540 3.0; AS/SC/MATH 1014 3.0, or AS/SC/MATH 1505 6.0, or both AS/SC/MATH 10133.0 and AS/SC/MATH 1025 3.0, or equivalents.

Degree credit exclusions: SC/BIOL 3080 3.0, AK/BIOL 3080 6.0, AK/BIOL 3080 3.0, AK/ BIOL 3090 3.0, AS/ECON 2500 3.0, AS/ECON 3210 3.0, AS/ECON 3500 3.0, EN/ENVS 2010 3.0, ES/ENVS 2010 6.0, ES/ENVS 2010 3.0, AS/SC/GEOG 2420 3.0, AS/SC/GEOG 3421 3.0, AS/SC/KINE 2050 3.0, AS/SC/AK/MATH 1131 3.0, AS/SC/MATH 1132 3.0, AK/MATH 2430 6.0, AS/SC/AK/MATH 2560 3.0, AS/SC/ AK/MATH 2570 3.0, AS/SC/PHED 2050 3.0, AS/SC/PSYC 2020 6.0, AS/SC/PSYC 2021 3.0, AS/SC/PSYC 2022 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.

SC/BIOL 3100 2.0 Current Topics in Biological Research. A review of the research in progress by members of the Department of Biology. This course is designed to prepare Honours students for $\mathrm{SC} /$ BIOL 40008.0 or SC/BIOL 4000 3.0. Two lecture hours per week in the Fall Term, assignments due in the Winter Term. Two credits.

Prerequisite: Open only to students registered in an Honours programme in Biology, normally in the year prior to that in which they will undertake their Honours Thesis work.

SC/BIOL 3110 3.0 Molecular Biology I: Nucleic Acid Metabolism. Discussion of the metabolism of DNA and RNA, including the physical-chemical properties of nucleic acids; DNA-protein interactions; chromosome structure; nucleic acid replication, repair and recombination; recombinant DNA technology. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 3120 3.0 Immunobiology. The biology and chemistry of the immune response. Structure and function of antibodies; antibody diversity; anatomy and development of the immune system; cellular interactions; immunological responses in disease. Production and use of monoclonal and polyclonal antibodies. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0.

SC/BIOL 3130 3.0 Molecular Biology II: Regulation of Gene Expression. Gene structure and function. Mechanisms of gene expression in prokaryotes and eukaryotes. Storage and retrieval of genetic information; transcription, translation and their control. Three lecture hours. One term. Three credits.

## Prerequisite: SC/BIOL 3110 3.0.

SC/BIOL 3140 4.0 Advanced Biochemistry and Molecular Genetics Laboratory. Research techniques used in biochemistry and molecular biology, including recombinant DNA technology, are illustrated. Purification of a restriction endonuclease; isolation and mapping of bacterial plasmids, bacteriophage and recombinant molecules; PCR (polymerase chain reaction); nucleic acid hybridization. Enrolment restricted to 12 students. One
lecture hour, six laboratory hours one day per week, plus additional laboratory hours throughout the week. One term. Four credits.
Prerequisite or corequisite: SC/BIOL 3110 3.0. SC/BIOL 31303.0 strongly recommended as a prerequisite or corequisite.
Degree credit exclusion: SC/BIOL 3140 3.0.
SC/BIOL $3150 \quad 3.0 \quad$ Microbiology. Fundamentals of microbiology; microbial organisms; microbe-host interactions; viruses and viral infections; microorganisms and human disease; environmental and applied microbiology. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 3160 4.0 Plant Physiology. Basic physiological processes of plants and plant cells, including photosynthesis, respiration, nitrogen metabolism, water relations, solute uptake and translocation. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 2020 4.0; SC/BIOL 2021 4.0.

SC/BIOL 3170 3.0 Concepts in Animal Ecology. Current major topics in ecology, with special reference to animals. Lecture material is based upon text and primary sources, and emphasizes reproductive tactics, ecological diversity, species interactions and co-evolution, and behavioural ecology. Laboratory material stresses quantitative approaches to related questions. Two lecture hours, three laboratory hours. One term. Three credits.

Prerequisites: SC/BIOL 20305.0 or SC/BIOL 2031 4.0; SC/BIOL 2050 3.0; AK/AS/SC/ COSC 15203.0 or AK/AS/SC/COSC 1540 3.0.

SC/BIOL 3200 3.0 Processes of Evolution. The process and principles of evolution, the mechanisms by which genetic change occurs, the patterns of genetic variation and molecular studies that relate the structure of organisms to their evolution are examined. Three lecture hours. One term. Three credits.

## Prerequisite: SC/BIOL 2040 5.0.

SC/BIOL 3500 3.0 Plant Geography. An analysis of the geography of higher plants, emphasizing processes that operate at the species population level, the origin and diversity of higher plant life, geographic patterns of diversity and floras, and dynamics of species populations at local and continental scales. (Same as AS/SC/GEOG 3500 3.0.) Two lecture hours, two laboratory hours. One term. Three credits.
Prerequisite: SC/BIOL 20503.0 or AS/SC/ GEOG 25003.0 or permission of the instructor.
Degree credit exclusion: AS/SC/GEOG 3500 3.0 .

SC/BIOL 40008.0 (4000 3.0) Honours Thesis. A substantial review essay based on library investigations (4000 3.0) or research thesis based on laboratory and/or field investigations (4000 8.0) under the supervision of a faculty member. Rules governing this
course are outlined in the Department of Biology undergraduate handbook. Two terms. Eight credits (4000 8.0). One term. Three credits (4000 3.0).
Prerequisites: Normally, students take SC/ BIOL 31002.0 as a prerequisite for SC/BIOL 40008.0 (4000 3.0). In exceptional circumstances, SC/BIOL 31002.0 may be taken as a corequisite with the permission of the course director. Open only to students in the final year of the Specialized Honours Programme in Biology or, in exceptional circumstances, by permission of the department.

SC/BIOL 4020 3.0 Mycology. A study of the fungi, emphasizing their diversity, physiology and biology and their interactions with human affairs. Some field collecting, identification and culture work are required. Two lecture hours, three laboratory hours. One term. Three credits.

## Prerequisite: SC/BIOL 2010 4.0.

SC/BIOL 4040 3.0 Genetic Stability and Change. Stability and flexibility of the genomes of prokaryotic and eukaryotic cells. Genetic recombination, DNA repair, mutation inductions; genome rearrangement and the transposition of DNA. The roles of these processes in evolution and in the induction of human disease. Three lecture hours. One term. Three credits.
Prerequisite: SC/BIOL 3110 3.0; SC/BIOL 3130 3.0 strongly recommended as prerequisite or corequisite.

SC/BIOL 4050 3.0 Plant Development. Physiological processes controlling the growth, differentiation and reproduction of plants. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; or by permission of the course director.

SC/BIOL 4061 3.0 Cell and Molecular Biology of Development. This course presents a genetic and molecular biological approach to the field of developmental biology. Topics range from unicellular systems, both prokaryotic and eukaryotic, to more complex, multicellular systems. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 4070 3.0 Behavioural Ecology. Interactions between the behaviour and ecology of animals are discussed from several points of view, including feeding, use of space, mate selection, mother-young interactions, social behaviour, learning and communication. Laboratories include techniques for studying behaviour and seminars reviewing recent research. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisite: SC/BIOL 20305.0 or SC/BIOL 2031 4.0.

SC/BIOL 4080 3.0 Methods in Aquatic Ecology. Lake morphometry; water movement; temperature effects; water chemistry; freshwater flora and fauna; productivity. The laboratory deals with the taxonomy of freshwater organisms, the
use of limnological equipment and the practical aspects of energy flow. Six hours per week (including lectures, laboratories and field experience). Two weekend field trips. One term. Three credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 20305.0 or SC/BIOL 2031 4.0; SC/BIOL 2050 3.0 .

Note: An additional fee will be charged for room and board while at the field site.

SC/BIOL 4090 4.0 Plant Ecology. This course reflects the diversity of topics that makes up the field of plant ecology: ecosystems, plant population ecology, physiological and evolutionary ecology, plantherbivore interactions and applied ecology. Laboratories cover field and laboratory techniques, including sampling methods. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 2050 3.0.

SC/BIOL 4095 3.0 Applied Plant Ecology. This course concentrates on how pollution, including acid precipitation and climatic change, and activities such as overgrazing have affected plant growth and productivity. Three lecture hours. One term. Three credits.
Prerequisite: SC/BIOL 20503.0 or permission of the instructor; SC/BIOL 40904.0 is recommended.

SC/BIOL 4100 3.0 Natural History. A study of the life histories of selected flora and fauna in major ecosystems, with special emphasis on local species and interrelationships within ecosystems. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 2030 5.0; SC/BIOL 2050 3.0.

SC/BIOL 4110 4.0 Eukaryotic Genetics. The relationship between chromosomal structure and function, with emphasis on eukaryotic, especially human, genetics. The laboratory is designed to teach mammalian cell culture and cytogenetic techniques. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 4120 3.0 Phycology. Classification and phylogeny of the algae; life cycles and reproduction; some aspects of algal physiology. Two lecture hours, three laboratory hours. One term. Three credits.

## Prerequisite: SC/BIOL 2010 4.0.

SC/BIOL 4130 3.0 Plant Evolution. An analysis of patterns of variation among plants, emphasizing the evolutionary processes which brought them about. Topics include biosystematics, speciation, hybridization, isolating mechanisms and mating systems. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 2050 3.0.

SC/BIOL 41404.0 (4140 3.0) Advanced Cell Biology I. Selected topics in cell biology, such as the principles of microscopy, cell motility. Restricted laboratory enrolment. Three lecture hours, three laboratory hours. One term. Four credits (4140 4.0). Three lecture hours. One term. Three credits (4140 3.0).

Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 20405.0 and SC/BIOL 31103.0 recommended as prerequisites.

SC/BIOL 4150 3.0 Cellular Regulation. A detailed examination of molecular, cellular and physiological processes associated with the action of peptide hormones, neuro-transmitters and growth factors. Emphasis is on cell receptors and signal transduction mechanisms involving cyclic nucleotides and calcium. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 30103.0 and SC/BIOL 31103.0 strongly recommended as prerequisites or corequisites.

## SC/BIOL 4151 3.0 Membrane Transport.

The fundamental properties of solute transport are presented by discussing active ion pumps, passive transporters and ion channels of bacteria, plants and animals. The role of transport in regulating the intracellular environment in animals and plants is emphasized. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 30103.0 and SC/BIOL 31103.0 strongly recommended as prerequisites or corequisites.

SC/BIOL 4160 3.0 Photosynthesis. A study of the process of photosynthesis at the biochemical, organelle and whole-organism levels, including structure of the photosynthetic apparatus; primary light-harvesting processes; electron transport; photophosphorylation; mechanism of carbon dioxide fixation in higher plants and algae; photorespiration. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisite: SC/BIOL 3160 4.0.
SC/BIOL 41704.0 (4170 3.0) (4170 2.0) Special Topics. Half courses on special topics not ordinarily included in other courses in Biology. One term. Four, three or two credits.

SC/BIOL 41904.0 (4190 3.0) Advanced Cell Biology II. A discussion course emphasizing the relationships between ultrastructure, function and development, especially processes involving the cytoskeleton. Restricted laboratory enrolment. Three lecture hours, three laboratory hours. One term. Four credits (4190 4.0). Three lecture hours. One term. Three credits (4190 3.0).
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0.

SC/BIOL 4200 3.0 Selected Readings in Biology. A reading course offered by special arrangement between an individual student and a faculty supervisor which focuses on a specialized area of biology of mutual interest. The subject matter must be significantly different from that of the student's honours thesis. A student may take this course only once for credit. One term. Three credits.

Prerequisite: Students can be in any programme in Biology, but must have a science grade-point average equal to or greater than 6.0.

SC/BIOL 4220 4.0 Histology. Structure and function of tissues in vertebrates, with special emphasis on human histology. The laboratory deals with basic histological and histochemical techniques, such as tissue sectioning and staining, and localization of enzymes. Three lecture hours, three laboratory hours. One term. Four credits.

Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0.

## SC/BIOL 4230 4.0 General Entomology.

The distinguishing characteristics, biology and economic importance of the major orders and families of insects. Three lecture hours, three laboratory hours. One term. Four credits.

## Prerequisite: SC/BIOL 2030 5.0.

SC/BIOL 4240 4.0 Mammalian Systematics and Ecology (Mammalogy). The systematics, life history and ecology of mammals. Emphasis is on North American genera and the species of eastern Canada. Field and laboratory techniques are an integral part of the course. Three lecture hours and three laboratory hours per week, one required weekend field trip. One term. Four credits.
Prerequisites: SC/BIOL 2030 5.0; SC/BIOL 2050 3.0.

## SC/BIOL 4245 3.0 Conservation Biology.

 This course explores the role of biological science in efforts to conserve natural resources, systems and the organisms therein. (Same as ES/ENVS 4110 3.0.) Two lecture hours, three laboratory hours. One term. Three credits.Prerequisites: SC/BIOL 2010 4.0; SC/BIOL 20305.0 or SC/BIOL 2031 4.0; SC/BIOL 2040 5.0; SC/BIOL 2050 3.0; or permission of the instructor.
Degree credit exclusions: SC/BIOL 4170G 3.0, EN/ENVS 4110 3.0, ES/ENVS 4110 3.0.

SC/BIOL 4250 3.0 Ornithology. A review of the adaptations of birds, including flight, physiology, behaviour and ecology, and their taxonomic diversity and evolution. Laboratories include field trips, a study of bird anatomy and examination of museum specimens. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisite: SC/BIOL 20305.0 or SC/BIOL 2031 4.0.
Degree credit exclusion: SC/BIOL 4170K 3.0.

SC/BIOL 4255 3.0 Biodiversity. We do not know the number of species on Earth, even to the nearest order of magnitude. This course discusses the factors that influence the number of species in an area and the importance of biodiversity to humanity. (Same as ES/ENVS 4111 3.0.) Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisite: Completion of 60 credits towards a degree in Biology or Environmental Science or Environmental Studies, or permission of the instructor.

Degree credit exclusions: SC/BIOL 4170 N 3.0 , EN/ENVS 4111 3.0, EN/ENVS 4800P 3.0, ES/ ENVS 4111 3.0.

## SC/BIOL 4270 3.0 Reproduction.

Molecular, genetic, cytological, and evolutionary aspects of sexual reproduction. Comparison of the regulatory genes and proteins of sexual differentiation in Saccharomyces, Drosophila, Caenorhabditis elegans, mice, human, and plants. Evolutionary advantages and disadvantages of sexual reproduction; asexual reproduction through parthenogenic mechanisms. Three lecture hours. One term. Three credits
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 4280 3.0 Plant Molecular Biology. This course covers the uses of genetically engineered plants in basic research and industry. Emphasis is placed on methods for isolating higher plant genes and elucidating regulatory mechanisms. The agronomic potential of plant genetic engineering is discussed. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 3110 3.0; SC/BIOL 3160 4.0.

SC/BIOL 4285 3.0 Human Molecular Genetics. The course covers the application of genetic and molecular biological techniques to study human diseases and other related areas, and discusses ethical concerns that might arise from this research. Three lecture hours. One term. Three credits.
Prerequisite or corequisite: SC/BIOL 3130 3.0.
SC/BIOL 4290 3.0 Biotechnology. This
laboratory course covers some of the methods currently in use in biotechnology research in industry and academia. Emphasis is placed on methods for transforming eukaryotes with marker genes. Advanced methods used in molecular biology are also covered. One lecture hour, six laboratory hours. Winter Term. Three credits.
Prerequisite: SC/BIOL 3110 3.0.
SC/BIOL 4300 3.0 Origins and Development of Biological Theories. An analysis of some central ideas in the philosophy of science. The origins and expansion of biological theories, with emphasis on Darwinism, the gene concept, "the new synthesis", and the reinterpretation of these theories in molecular biological terms. Three lecture hours. One term. Three credits.

Prerequisite: Open only to students in the final year of an Honours programme in Biology, or with permission of the instructor.
Degree credit exclusion: SC/BIOL 4170Q 3.0.
SC/BIOL 4305 3.0 Controversies in the Modern Life Sciences (formerly SC/BIOL 4170Q 3.0 - before 1999/2000). The study of past and contemporary controversies in genetics, evolutionary theory and ecology. The focus is on analyzing the diverse aims, concepts, theories, techniques, and institutional strategies which have shaped the development of modern biology. Three lecture hours. One term. Three credits.

## Prerequisite: SC/BIOL 2040 5.0.

Prerequisite or corequisite: SC/BIOL 3200 3.0.
Degree credit exclusion: SC/BIOL 4170Q 3.0.
SC/BIOL 4310 3.0 Biological Timekeeping. An examination of the biological rhythms of cells, tissues and whole animals; the mechanisms of biological timekeeping and how those "clocks" interact with each other to coordinate physiological events within an animal and with the environment. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 20305.0 or SC/BIOL 2031 4.0.

SC/BIOL 4320 3.0 Vertebrate Endocrinology. Vertebrate endocrine structure and function; synthesis and regulation of hormones; mechanisms of hormone actions; and hormonal integration of physiological processes. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 20305.0 or SC/BIOL 2031 4.0.

SC/BIOL 4330 3.0 Invertebrate Endocrinology. An examination of the hormonal control of processes in selected invertebrates, particularly those involved in the control of postembryonic development. Three lecture hours. One term. Three credits.

Prerequisite: SC/BIOL 2030 5.0.
SC/BIOL 4340 3.0 Fish Biology. A study of fish biology (ichthyology), including anatomy, systematics, physiology, behaviour, and ecology of fresh water and marine fishes. Special emphasis is placed on the unique features of fishes and their functional adaptation to aquatic environments. Three lecture hours. One term. Three credits.
Prerequisite: SC/BIOL 2030 5.0.
SC/BIOL 4350 4.0 Comparative Chordate Anatomy. A comparative study of the biology of chordate animals in which the evidence of their evolutionary relationships is emphasized. Three lecture hours, three laboratory hours. One term. Four credits.

Prerequisite: SC/BIOL 2030 5.0.
Degree credit exclusion: SC/BIOL 4350 3.0.

SC/BIOL 4360 4.0 Parasitology (formerly SC/BIOL 4360 3.0-before 1999/2000). Biology of animal parasites; developmental, structural and functional adaptations to the parasitic environments; immune and other responses of hosts; parasitic diseases. Three lecture hours, three laboratory hours. One term. Four credits.

## Prerequisite: SC/BIOL 2030 5.0.

Degree credit exc/usion: SC/BIOL 4360 3.0.
SC/BIOL 4370 3.0 Neurobiology. An
analysis of recent advances in neurobiology, particularly information processing and storage in nervous systems and the biochemical basis of learning, memory and behaviour. The neurobiology of addiction, diseases of the nervous system and regeneration are also discussed. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 3060 4.0.

SC/BIOL 4400 3.0 Behavioural Genetics. Differences in behaviour are analyzed through evolutionary and mechanistic approaches. Hypotheses, models, experimental and field data are used to address the importance of heredity and environment in the development of individual differences, social systems, communication, habitat and sexual selection. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: SC/BIOL 2040 5.0; SC/BIOL 2050 3.0; SC/BIOL 3090 3.0.

SC/BIOL 4410 3.0 Advanced Drosophila Genetics. A study of recent advances in Drosophila genetics. The course addresses techniques such as chromosomal analysis, lethal tagging, genetic dissection, mosaic analysis, genetic screens, transposon tagging, enhancer trapping, methods for manipulating genes in transgenic flies and genetic ablation. Three lecture hours. One term. Three credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2040 5.0.

SC/BIOL 4420 3.0 Herpetology. A detailed presentation of the biology of amphibians and reptiles (herpetology) is given. Topics include taxonomy, reproduction, feeding, defence, environmental physiology of living forms. Special emphasis is placed on identification and life history of Canadian herpetofauna. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: SC/BIOL 2030 5.0; SC/BIOL 2050 3.0.

SC/BIOL 4450 4.0 Animal Development. Fertilization, cleavage, differentiation and development in selected animals. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/BIOL 2020 4.0; SC/BIOL 2021 4.0; SC/BIOL 2030 5.0; SC/BIOL 2040 5.0.

SC/BIOL 4510 3.0 Cellular and Molecular Basis of Muscle Physiology. Topics include muscle development, muscle-specific gene expression, molecular basis of muscle
contraction, biochemical plasticity of muscle, sarcolemmal and nuclear signal transduction in muscle. (Same as AS/SC/KINE 4510 3.0.) Three lecture hours. One term. Three credits.
Prerequisite(s): Both SC/BIOL 20204.0 and SC/BIOL 2021 4.0, or AS/SC/KINE 3011 3.0, or AS/SC/KINE 3070 3.0.
Degree credit exclusions: AS/SC/KINE 4510 3.0, AS/SC/PHED 4510 3.0.

SC/BIOL 4600 3.0 Honours Reading Course. Selected readings from the biological literature designed to provide an overview of the discipline. The aim is to expose students to differing views of the science and, in so doing, encourage them to develop a disciplinary philosophy of their own. One hour per week. One term. Three credits.
Prerequisite: Open only to Honours Biology students in their final year of study.

## Business-Oriented Programmes

## Coordinated Programmes in Business, Public Policy and Administrative Studies

Students interested in administration or business may delay their choice of programme until the end of their first year by declaring the Coordinated Programme in Business, Public Policy and Administration. This is a specially designed "entry" programme. Students interested in the Bachelor of Business Administration (BBA) are encouraged to apply directly into their Year I programme. However, those requiring a year in which to discover their interests and strengths, and to learn about other business options at York, may enter the Coordinated programme in Year I. At the end of that year, which provides a common set of prerequisite courses, students may apply for admission to:

- Bachelor of Business Administration (BBA, Schulich School of Business)
- Bachelor of Administration Studies BAS, Atkinson College - evening study)
- Economics and Business (BA, Faculty of Arts)
- Public Policy and Administration (BA, Faculty of Arts)
or they may seek advising for a change of major to:
- Business and Society (BA, Faculty of Arts)
- Mathematics for Commerce (BA, Faculty of Arts)
- Another BA programme in the Faculty of Arts
Normally, students in the Coordinated programme select the following set of courses among their first 30 credits in the Faculty of Arts: (1) 9 credits in a 1000 - level Humanities or Social Science Foundations course; (2) Economics AS/ECON 1000 3.0/1010 3.0; (3) one of Mathematics AS/MATH 15506.0 or AS/ MATH 1530 3.0/1540 3.0 (same as Economics AS/ECON 1530 3.0/1540 3.0), or equivalent;
(4) 6 credits in a 1000 -level Natural Science course, or 6 credits in an elective; (5) 3 credits in an elective.
Students proceeding to the second year of the Coordinated Business programme normally select the following courses: (1) and introductory Computer Science course AS/ COSC 1520 3.0/1530 3.0 or AS/COSC 1020 3.0/1030 3.0; (2) a course in Statistics: AS/ ECON 2500 3.0/3500 3.0, or AS/ECON 2500 3.0/3210 3.0, or AS/MATH 2560 3.0/2570 3.0, or AS/MATH 2030 3.0/AS/MATH 2131 3.0, or equivalents; (3) 6 credits in a 1000 -level Natural Science course (if not previously taken) or 6 credits in an elective; (4) 12 credits from those required by specific programme(s).
Students may choose to remain in the Coordinated programme through the second year if they are unsure of their choice between the three Arts business-related programmes listed above. It is recommended, however, that they seek academic advice from the preferred programme(s) to guarantee that their course selection is appropriate. Otherwise, there may be extra courses to take in order to satisfy degree requirements.
Note: Students interested in any of the programmes flowing from the Coordinated programme are strongly advised to include Calculus among their OAC credits.


## Business and Society

Programme Office:
Faculty of Arts Advising Centre, S319 Ross (416) 736-5022

## Coordinator:

D. Reed

The Business and Society (BUSO) programme is a liberal arts degree programme that provides students with the tools needed to study and research the relationship between business and society. The Ordinary and Honours BUSO programmes represent innovative multidisciplinary degree programmes that provide students with the opportunity to study the relationship between business and society in a variety of new forms. The core courses, which include a secondyear Foundations course (AS/SOSC 2340 9.0) will provide students with basic analytical tools to study business and society. In addition to the core, both Ordinary and Honours BUSO students will choose two of the six following streams to focus their studies in: economics, mathematics, political science, psychology, sociology, and social science (labour studies).
Some students in the BUSO programme and in other degree programmes may also wish to pursue basic courses in business skills in order to prepare for employment. Faculty of Arts students interested in enhancing their business related skills are eligible to enrol in any of the professional certificates offered by Atkinson College or the Faculty of Arts Certificate in Business Fundamentals. These certificates provide an additional avenue for Faculty of Arts students to develop business related skills.

## Departmental and Divisional Courses in Business and Society

For specific programme requirements please refer to the Faculty of Arts Programmes of Study Section in this calendar. Course descriptions for the courses listed below are contained in the appropriate departmental and divisional listings in the Courses of Instruction section of this Calendar.

## Programme Core

AK/ADMS 10003.0 Introduction to Administrative Studies.
AS/COSC 1520 3.0 Introduction to Computer Use I.
AS/ECON 10003.0 Introduction to Microeconomics.
AS/ECON 10103.0 Introduction to Macroeconomics.
AS/MATH 1581 3.0 Business Mathematics I.
AS/POLS 1090 3.0 Introduction to Business Government and Society.
AS/SOSC 2340 9.0 Foundations of Business and Society.
*AS/SOSC 4040 6.0 Issues in Business and Society.
*Required for the Honours programme in Business in Society

## Economics Stream

AS/ECON 2500 3.0 Introductory Statistics for Economists.
AS/ECON 3210 3.0 Use of Economic Data AS/ECON 3140 3.0 Monetary Economics. AS/ECON 3150 3.0 International Trade I. AS/ECON 3580 3.0 Introductory Financial Accounting for Economists.
AS/ECON 3590 3.0 Introductory Managerial Accounting for Economists.
AS/ECON 4400 3.0 Corporate Finance I. AS/ECON 4410 3.0 Corporate Finance II.
AS/ECON 4500 3.0 Canadian Business Law I. AS/ECON 4510 3.0 Canadian Business Law II.

## Mathematics and Statistic Stream

Option A: Operations Research
AS/MATH 1300 3.0 Differential Calculus with Applications.
AS/MATH 1310 3.0 Integral Calculus with Applications.
AS/MATH 1530 3.0 Introductory Mathematics for Economists I.
AS/MATH 1540 3.0 Introductory Mathematics for Economists II.
AS/MATH 1550 6.0 Mathematics with Management Applications.
AS/MATH 2221 3.0 Linear Algebra with Applications I.
AS/MATH 2222 3.0 Linear Algebra with Applications II.
AS/MATH 2500 3.0 An Introduction to the Basic Practice of Statistics.
AS/MATH 2560 3.0 Elementary Statistics I. AS/MATH 2570 3.0 Elementary Statistics II. AS/MATH 3170 6.0 Operations Research I. AS/MATH 4570 6.0 Applied Optimization.

## Option B: Statistics

AS/MATH 1530 3.0 Introductory Mathematics for Economists I.
AS/MATH 1540 3.0 Introductory Mathematics for Economists II.
AS/MATH 1550 6.0 Mathematics with Management Applications.
AS/MATH 2560 3.0 Elementary Statistics I. AS/MATH 2570 3.0 Elementary Statistics II. AS/MATH 3034 3.0 Applied Categorical Data Analysis.
AS/MATH 3330 3.0 Regression Analysis. AS/MATH 3430 3.0 Sample Survey Design. AS/MATH 4730 3.0 Experimental Design AS/MATH 4930 3.0 Time Series and Spectral Analysis.

## Political Science Stream

AS/POLS 1000 6.0 Introduction to Politics: Exploring the Democratic Experience.
AS/POLS 2100 6.0 Introduction to Canadian Government and Politics.
AS/POLS 2610 6.0 Public Policy and Administration.
AS/POLS 3110 3.0 The Process Of Urban Politics I: Issues, Institutions and Ideology.
AS/POLS 3115 3.0 Process Of Urban Politics II: Structure, Agency and Urban Change.
AS/POLS 3140 3.0 Political Economy Of Labour In Canada.
AS/POLS 3145 3.0 Government and Business in Canada.
AS/POLS 3165 6.0 Problems in Canadian Business Law.
AS/POLS 3190 6.0 Public Administration.
AS/POLS 3270 3.0 Global Political Economy I: Theory and Approaches.
AS/POLS 3275 3.0 Global Political Economy II: Issues and Problems Since 1945.
AS/POLS 3300 6.0/AS/SOSC 30306.0 Statistics for Social Sciences.
AS/POLS 3600 3.0 Public Law I: The Constitution and the Courts in Canada.
AS/POLS 3605 3.0 Public Law II: The Charter of Rights and Freedoms and the Limits of Public Administration.
AS/POLS 3610 6.0 Organization and Administration.
AS/POLS 4110 6.0 Canadian Urban Policy.
AS/POLS 4114 3.0 Topics In Canadian State Finance: The National vs. The Global Political Economy.
AS/POLS 4115 6.0 The Political Economy of State Finance.
AS/POLS 4125 3.0 Women \& Current Policy Issues.
AS/POLS 4175 6.0 Canadian Federalism in Comparative Perspective.
AS/POLS 4600 3.0 Politics and the Judicial Process in Canada.
AS/POLS 4605 3.0 Ethical Politics.
AS/POLS 4620 3.0 Health Policy In Canada.
AS/POLS 4625 3.0 Issues In Canadian Health Policy.
AS/POLS 4650 3.0 Provincial and Municipal Government in Ontario.

## Psychology Stream

AS/PSYC 1010 6.0 Introduction to Psychology.
AS/PSYC 2020 6.0 Analysis of Psychological Data.

AS/PSYC 2021 3.0 Introduction to Descriptive Statistics.
AS/PSYC 2022 3.0 Introduction to Inferential Statistics and the Analysis of Variance.
AS/PSYC 2120 3.0 Social Psychology.
AS/PSYC 2130 3.0 Personality.
AS/PSYC 2230 3.0 Motivation.
AS/PSYC 3140 3.0 Abnormal Psychology.
AS/PSYC 3430 3.0 Behaviour in Groups: Small Group Processes.
AS/PSYC 3450 3.0 Environmental Psychology.
AS/PSYC 3570 3.0 Organizational Psychology.
AS/PSYC 4020 6.0 Advanced Seminar in Social Psychology.
AS/PSYC 4030 6.0 Behaviour Modification and Behaviour Therapy.
AS/PSYC 4060 6.0 Psychology of Counselling.

## Social Science (Labour Studies) Stream

AS/ECON 3240 3.0 Labour Economics Theory.

AS/ECON 3250 3.0 Labour Economics Institutions.
AS/SOSC 2210 9.0 Labour Relations in Canada.
AS/SOSC 3130 6.0/AS/WMST 35106.0
Women \& Work: Production \& Reproduction.
AS/SOSC 3210 6.0 Working Class In
Canadian Society.
AS/SOSC 3240 6.0 Labour and Globalisation I: North American Perspectives.
AS/SOSC 3380 6.0 Law, Labour \& The State.
AS/SOSC 4210 6.0 Collective Bargaining Simulation.
AS/SOSC 4250 6.0 Special Topics in Labour Studies.

## Sociology Stream

AS/SOCI 1010 6.0 Sociological Perspectives.
AS/SOCI 2070 6.0 Social Order and Social Organization.
AS/SOCI 3030 6.0/AS/POLS 33006.0
Statistics for Social Sciences.
AS/SOCI 3620 6.0 Formal Organizations.
AS/SOCI 3600 3.0 The Sociology of Work and Industry.
AS/SOCI 3610 3.0 The Sociology of Occupations and Professions.
AS/SOCI 4120 6.0 Social Organization and Urban Culture.
AS/SOCI 4200 6.0 The Sociology of Conflict and Co-operation.
AS/SOCI 4210 6.0 Economic Sociology.
AS/SOCI 4300 3.0 Sociology Of Health Care Delivery.
AS/SOCI 4450 6.0 Women In Development.

## Certificate in Business

## Fundamentals

## Certificate Office:

Faculty of Arts, Advising Centre, S319 Ross (416) 736-5022

Coordinator:
D. Reed







The Certificate in Business Fundamentals provides students, and particularly those in one of the Faculty of Arts business related programmes, with the opportunity to complete a concentration of courses related to the business management disciplines. This concentration: a) assists students who wish to pursue a career in the private sector, and b) provides an introduction to business management skills for students who are considering the pursuit of an MBA degree. The Certificate consists of 30 credits: 18 credits in courses offered by the Faculty of Arts, and 12 credits offered by the Schulich School of Business (SSB). The SSB courses have been designed specifically for the certificate to provide students who complete the Certificate in Business Fundamentals with an introduction to business organizations, financial techniques, markets, and management strategies and implementation issues.
For Certificate requirements please refer to the Faculty of Arts Programmes of Study Section in this calendar.

## Departmental and Divisional Course Listings required for the Certificate in Business Fundamentals

Course descriptions for the courses listed below are contained in the appropriate departmental and divisional listings in the Courses of Instruction section of this Calendar.
AS/ECON 10003.0 Introduction to Microeconomics.
AS/ECON 1010 3.0 Introduction to Macroeconomics.
AS/ECON 2300 3.0 Intermediate Microeconomic Theory I .
AS/ECON 2350 3.0 Intermediate Microeconomic Theory II.
AS/ECON 2400 3.0 Intermediate Macroeconomic Theory I.
AS/ECON 2450 3.0 Intermediate Macroeconomic Theory II.
AS/ECON 2500 3.0 Introductory Statistics for Economists.
AS/MATH 1300 3.0 Differential Calculus with Applications.
AS/MATH 1530 3.0 Introductory Mathematics for Economists I.
AS/MATH 1550 6.0 Mathematics with Management Applications.
AS/MATH 2560 3.0 Elementary Statistics I.
AS/MATH 2580 3.0 Mathematics of Investment and Actuarial Science.
AS/PHIL 2070 3.0 Introductory Ethics.
AS/PHIL 2075 3.0 Introduction to Practical Ethics. AS/POLS 2100 6.0 Introduction to Canadian Government and Politics.
AS/POLS 2610 6.0 Public Policy and Administration.
AS/POLS 3300 6.0/AS/SOSC 3030 6.0 Statistics for Social Sciences.
AS/PSYC 2020 6.0 Analysis of Psychological Data.
AS/PSYC 2021 3.0 Introduction to Descriptive Statistics.
AS/SOCI 3030 6.0/AS/POLS 3300 6.0 Statistics for Social Sciences.

Listed below are required courses for the Business Fundamentals Certificate mounted by the Schulich School of Business.

SB/BFND 3100 3.0 Management and Business: An Introduction. This course will provide an intensive introduction to the nature and role of business organizations. The role of business organizations in the political economy of Canada will be described. Management functions including planning, decision making, and control will be examined, and the major specialized management roles (operations management, finance and accounting, marketing/sales, human resources) will be introduced.

SB/BFND 3200 3.0 Finance and Accounting. Managers in business (as in all formal organizations) need to interpret and use financial information. This course will provide students with the fundamental conventions, standards, and basic techniques used in collecting and using financial information in organizations. (Note: Degree credit exclusions: AS/ECON 3580 3.0 Financial Accounting and AS/ECON 35903.0 Managerial Accounting. Students who have successfully completed AS/ECON 35803.0 and AS/ECON 35903.0 may not enrol in SB/ BFND 3200 3.0, and are therefore exempt from this requirement.)

SB/BFND 4100 3.0 Markets and Marketing. This course examines the relationship between the business and a key component of its environment - the individuals or organizations to which it sells products and services. The primary focus of this course is how businesses learn about the markets they deal in, and how they act so as to be effective in attracting and keeping customers and clients.

SB/BFND 4200 3.0 Management Strategy and Implementation. Businesses exist in changing multi-dimensional environments. As social inventions, businesses in such environments need explicit strategy to survive and succeed. This course will identify different strategic options and the environment situations that make those options preferable. It will also examine the organizational design and human resource management implications of various strategic choices.

## Calumet College - Arts

Academic Programme Office:
235 Calumet, (416) 736-5098
College Master:
Michael Copeland
Academic Advisor:
Christopher Dewdney
Listed below are the 1000-level and 2000-level 9 credit Foundations courses which are part of the Faculty of Arts General Education requirement. These courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.

Students enrolling in Calumet College Foundation courses, in either the Division of Humanities or the Division of Social Sciences, will be members of Calumet College with access to academic advising, orientation programmes, social and co-curricular events.

## 1000-Level Courses

AS/HUMA 1650 9.0 The Networked Imagination. This course explores the technological determinants operating today on almost all cultural forms. The main theme of this course is how the nature of digital representation and communication affects the nature of literature, visual arts and music, altering not only the forms and content, but the roles of artist/author and their audiences.

AS/HUMA 2190 9.0 Germany Through the Ages. Germany is now united after almost a half-century of division. In attempting to answer the question as to how new and how united this "New Germany" is, events and personalities are examined which throughout German history have shaped German culture and society.
Degree credit exclusion: AS/HUMA 2190 6.0.
AS/SOSC 1000 9.0 Introduction to Social Science. The course considers the distinctive characteristics of modern society including the impact of modernization on the family, religion, economic behaviour, politics and belief systems. It introduces many of the major concepts social scientists use in analyzing how society works.
Degree credit exclusion: AS/SOSC 1000 6.0.
AS/SOSC 1080 9.0 Information and Technology. This course provides students with critical stances with which to view our society's preoccupation with "information" and "technology". We explore how computers can manage information and how this impacts on issues of ethics, control, privacy, censorship, and copyright.
Degree credit exclusion: AS/SOSC 10806.0 and AS/SOSC 1080 9.0(FW98).

AS/SOSC 1731 9.0 CyberCities: The Community and Communication in Changing Urban Areas. Technology's impact on cities is examined, with emphasis on institutions and landscapes. Changes of metropolitan form, issues of community formation, and emerging patterns of work, leisure and urban life are explored in the context of shifting modes of electronic communication.

AS/SOSC 1740 9.0 Development of Urban Economies: Comparing Canada and The Third World. This course compares urban economic development in Canada and the Third World in terms of industrialization, urbanization and economic dependency. Themes are: colonial cities and industrial dependence; the multinational corporation, technological dependence and urban employment; urban problems and alternative solutions.
Degree credit exclusion: AS/SOSC 1740 6.0.

AS/SOSC 2310 9.0 Introduction to Communications. This course examines the relationships among the structure of information, the media and technology that convey it, its perception and interpretation by individuals, groups and organizations, and the social, economic and political processes that affect information production and dissemination.

Degree credit exclusion: AS/SOSC 2310 6.0.
AS/SOSC 2330 9.0 The Economics of Law, Policy and Organization. This course considers Economics as a form of moral argument. This course considers how economists evaluate existing government policies in a broad variety of areas, including housing policies and rent control, environmental protection, and gender equity in the workplace.

Degree credit exclusion: AS/SOSC 3530 6.0, AS/POLS 3310 6.0.

## Canadian Studies - Arts

## Programme Office:

S741 Ross, (416) 736-5054
Professor and Coordinator of the Programme:
J. Hutcheson, Social Science

The Faculty of Arts offers a programme in Canadian Studies combining 36 credits in the programme with a major in any one of the following subjects: anthropology, economics, English, French Studies, geography, history, political science, sociology.

The main purposes of the programme are:
i. to learn about Canada through the content, concepts and methodologies of a student's major subject;
ii. to broaden the knowledge of Canada gained through the major subject, and also deepen a student's understanding of the country, by study of Canada through other disciplines and through interdisciplinary approaches;
iii. to coordinate a student's programme of courses on Canada;
iv. to ensure that students will receive a sound training in the basic principles and methodological approaches of their major subject, and study some significant nonCanadian subject matter in their major so that they will have a broad grasp of their discipline.
Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.

## Centre for Academic Writing Arts

Department Office:
S329 Ross, (416) 736-5134
Director of Department:
J. Spencer

Associate Professors:
R. Sheese

## Associate Lecturers:

T. Greenwald, J. Rehner, J. Spencer Current Contract Faculty:
M. L. Bat-Hayim, J. Bell, J. Blazina, B. Giblon, B. Lowinsky, P. MacEwen, B. McComb, M.L. McKenna, D. McKim, R. Parker, P. Rozendal, J. Shafer, G. Vanstone, J. Webber, M. Willis, B. Zimmerman

Through the Centre for Academic Writing, the Faculty of Arts offers individualized and group instruction in academic writing to students registered in undergraduate Faculty of Arts courses. In addition, the Centre for Academic Writing offers the following course.

AS/CAW 1000 3.0 Academic Writing in the Social Sciences. The course examines the process of reading and writing academic papers with emphasis on the latter. Topics considered include writing as a learning process, developing academic ideas, using and documenting academic sources, planning and organizing a paper, revising, and editing.

## Chemistry - Pure and Applied Science

Department Office:
124 Chemistry and Computer Science Building, (416) 736-5246
Associate Professor and Chair of the Department:
C.M. Sadowski

University Professor Emeritus:
H.I. Schiff

Distinguished Research Professors:
D.K. Bohme, A.B.P. Lever

Distinguished Research Professors Emeriti:
G.O. Aspinall, H.O. Pritchard

Professor and Guy Warwick Rogers Chair in Atmospheric Chemistry:
G.W. Harris

Professor and NSERC/MDS SCIEX Chair: K.W.M. Siu

Professors:
S.V. Filseth, J.M. Goodings, D.R. Hastie, C.E. Holloway, A.C. Hopkinson, E. Lee-Ruff, C.C. Leznoff, J. Rudolph

Professors Emeriti:
T. Carrington, S. Madras

Associate Professors:
R.K. Allan, M. Mozurkewich, W.J. Pietro, P.G. Potvin, D.V. Stynes, I.M. Walker

Associate Professors Emeriti:
D.N. Butler, G. Hunter, C.R. McArthur

Assistant Professors:
R. Fournier, R. McLaren, M.G. Organ

Adjunct Professors:
L.A. Barrie, J.W. Bottenheim, S.-M. Li, P.B. Shepson

Associate Lecturer: M. Hempstead

Research Associates:
H. Mirza, C. Schiller

Postdoctoral Fellows:
S. Bratovanov, W.-T. Chan, C.E. Dixon,
J. Guo, A. Khanamiryan, Y. Ling,
D. Mayhew, D. Parks, C. Rodriquez, Y. Wang, J. Zhou

Chemistry is the study of the structure and properties of matter including the energy changes that accompany chemical reactions. The understanding gained from these studies is applied in the prediction of the behaviour of matter and in the interpretation of a wide variety of phenomena. Chemistry is linked closely with a number of other subjects, ranging from astrophysics and Earth science to the biological and medical sciences, which involve matter at various levels of complexity.

The Department of Chemistry offers undergraduate courses in all the major subdisciplines of the subject, including physical, theoretical, analytical, inorganic, organic and biological chemistry. Specialized programmes in chemistry (Science section V) include a required core of courses to ensure that the student acquires a broad knowledge of the subject, but also provide opportunities for the student to concentrate on areas of particular interest. In the applied chemistry area the Department of Chemistry also offers specialization in Atmospheric Chemistry (Science section V).

## Courses in Chemistry

The contact hour information in the course outlines below specifies the number of hours per week when the course is taught in the daytime in a Fall/Winter Session. If the course is offered in the evening and/or in a Summer Session, the format and scheduling may be different, though equivalent in credit value.

SC/CHEM 1000 6.0 Chemistry (formerly SC/ CHEM 10106.0 - before Summer, 1998). Topics include the states of matter with emphasis upon the gaseous and liquid states, phase changes, energy changes in chemical processes, equilibrium processes, atomic structure and periodic table, molecular bonding and structure, simple rate processes and properties of hydrocarbon compounds. Two lecture hours per week and seven laboratory sessions in the first term; three lecture hours per week and six laboratory sessions in the second term. Tutorial hours are allocated for testing and assistance with problem solving. Six credits.
Prerequisites: OAC Chemistry or SC/CHEM 15004.0 or SC/CHEM 1520 4.0; OAC Physics or SC/PHYS 15104.0 normally required.

Degree credit exclusions: SC/CHEM 1010 6.0, AK/CHEM 2000 6.0.

SC/CHEM 15004.0 Introduction to Chemistry (formerly SC/CHEM 15204.0 before Summer, 1998). An introductory course in chemistry for students needing an adequate preparation for SC/CHEM 1000 6.0. Topics include basic atomic theory, stoichiometry, the periodic table, chemical bonding, equilibria, acids and bases, oxidation-reduction and organic chemistry. Each student is counselled by a faculty advisor to enrol either in this course or in SC/CHEM 10006.0 depending on previous chemistry experience. Three lecture hours per week, three laboratory hours and two tutorial hours in alternate weeks. One term. Four credits.

Degree credit exclusions: SC/CHEM 1520 4.0, AK/CHEM 1500 3.0. May not be taken by any student who has taken or is currently taking another university course in chemistry.

SC/CHEM 2010 3.0 Symmetry, Electronic Structure and Bonding. An introduction to elementary group theory and wavefunctions for atoms and molecules. Topics include descriptions of bonding and the use of symmetry in the construction of molecular orbitals and in the derivation of selection rules for electronic and vibrational spectroscopy. Three lecture hours, one tutorial hour. One term. Three credits.
Prerequisites: SC/CHEM 10006.0 or SC/ CHEM 1010 6.0; AS/SC/MATH 1013 3.0; AS/ SC/MATH 1014 3.0.
Prerequisite or corequisite: SC/PHYS 14106.0 or SC/PHYS 1010 6.0.

SC/CHEM 2011 3.0 Introduction to Thermodynamics (formerly SC/CHEM 2050 3.0 -before Summer, 1998). This course is an introduction to equilibrium chemical thermodynamics. The three laws of thermodynamics and the thermodynamic state functions are described. Many applications are considered, including the operation of heat engines, phase transformations, thermochemistry and chemical reaction equilibria. Three lecture hours, one tutorial hour. One term. Three credits.
Prerequisites: AS/SC/MATH 1013 3.0; AS/SC/ MATH 1014 3.0.
Degree credit exclusions: SC/CHEM 2050 3.0, AK/CHEM 2050 3.0.

SC/CHEM 2020 5.0 Organic Chemistry. Structure including stereochemistry, physical and chemical properties of simple organic compounds; methods in structure determination; introductory concepts of reaction mechanisms and methods for determination of mechanisms. Two lecture hours per week, three laboratory hours every second week, one tutorial hour every week. Two terms. Five credits.
Prerequisite: SC/CHEM 10006.0 or SC/CHEM 1010 6.0.
Degree credit exclusion: AK/CHEM 2020 7.0.
SC/CHEM 2021 3.0 Mechanistic Organic Chemistry (formerly SC/CHEM 26203.0 before Summer, 1998). Reaction mechanisms; introduction to synthetic sequences; polyfunctional molecules with emphasis on those of biological importance. Three lecture hours. Second term. Three credits.
Prerequisite or corequisite: SC/CHEM 2020 5.0.
Degree credit exclusion: SC/CHEM 2620 3.0.
SC/CHEM 2030 4.0 Basic Inorganic Chemistry. The descriptive chemistry of the more common elements is discussed within the context of qualitative inorganic analysis. Principles of ionic equilibria in aqueous solution, elementary coordination chemistry and electrochemical potentials are presented. Three lecture hours, three laboratory hours, one tutorial hour. One term. Four credits.
Prerequisite: SC/CHEM 10006.0 or SC/CHEM 1010 6.0.

SC/CHEM 2080 4.0 Analytical Chemistry (formerly SC/CHEM 21104.0 - before Summer, 1998). Introduction to quantitative chemical analysis and the analytical method; errors and statistical analysis of data; gravimetric and volumetric methods of analysis including acid-base, precipitation, complexation and redox titrimetry; the effect of equilibria on chemical analysis; introduction to potentiometry and spectrophotometry. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisite: SC/CHEM 10006.0 or SC/CHEM 1010 6.0.
Degree credit exclusions: SC/CHEM 2110 5.0, SC/CHEM 2110 4.0, AK/CHEM 2110 5.0.

SC/CHEM 3010 4.0 Physical Chemistry. An introduction to spectroscopy and statistical thermodynamics for atoms and small molecules. Determination and applications of enthalpies of formation, reaction and solution for different systems. Three lecture hours per week, five three-hour laboratories. First term. Four credits.
Prerequisites: SC/CHEM 2010 3.0; SC/CHEM 20113.0 or SC/CHEM 2050 3.0.

SC/CHEM 3011 4.0 Physical Chemistry (formerly SC/CHEM 32104.0 - before 1997/ 98). This is an introductory course in chemical kinetics as applied primarily to reactions in the gas phase but also in solution and at electrode surfaces. Three lecture hours per week, five three-hour laboratories. Second term. Four credits.
Prerequisite: SC/CHEM 20113.0 or SC/CHEM 2050 3.0.
Degree credit exclusion: SC/CHEM 3210 4.0.
SC/CHEM 3012 3.0 Chemical Thermodynamics (formerly SC/CHEM 3310 3.0 - before Summer, 1998). A continuation of SC/CHEM 2011 3.0. The emphasis is on the application of thermodynamics to systems of variable composition. Topics include partial molar quantities, especially the chemical potential, standard states and activities in solutions of electrolytes and non-electrolytes, and electro-chemical cells. Average of two and a half lecture/tutorial hours per week, five three-hour laboratory sessions. One term. Three credits.
Prerequisite: SC/CHEM 20113.0 or SC/CHEM 2050 3.0; SC/PHYS 10106.0 or SC/PHYS 14106.0 strongly recommended as prerequisite or corequisite.
Degree credit exclusion: SC/CHEM 3310 3.0.
SC/CHEM 3020 4.0 Organic Chemistry II (formerly half of SC/CHEM 30208.0 - before 1997/98). A course organizing structural organic chemistry on a mechanistic basis and applying these mechanisms to synthesis and degradation. The application of spectroscopic methods is also incorporated where appropriate. Three lecture hours per week, seven three-hour laboratories. One term. Four credits.
Prerequisites: SC/CHEM 2010 3.0; SC/CHEM 2020 5.0; SC/CHEM 2030 4.0.

Degree credit exclusion: SC/CHEM 3020 8.0.
SC/CHEM 3021 4.0 Organic Chemistry III (formerly half of SC/CHEM 30208.0 - before 1997/98). A course building on SC/CHEM 30204.0 and introducing methods for probing mechanisms, base-catalyzed reactions, rearrangements, cyclization, strain, pericylic reactions and other topics. Three lecture hours per week, eight three-hour laboratories. One term. Four credits.
Prerequisite: SC/CHEM 3020 4.0.
Degree credit exclusion: SC/CHEM 3020 8.0.
SC/CHEM 3030 4.0 Transition Metal Chemistry (formerly half of SC/CHEM 3030 8.0 - before 1997/98). The chemistry of the transition metals is discussed from an historical perspective and within the context of modern theories of bonding, structure, and spectroscopy. Topics include classical coordination compounds, organometallics, metallocenes, metal carbonyls, and bioinorganic chemistry. Three lecture hours, seven three-hour laboratory sessions. One term. Four credits.
Prerequisites: SC/CHEM 2010 3.0; SC/CHEM 2020 5.0; SC/CHEM 2030 4.0.
Degree credit exclusion: SC/CHEM 3030 8.0.
SC/CHEM 3031 4.0 Physical Inorganic Chemistry (formerly half of SC/CHEM 3030 8.0 - before 1997/98). An introduction to physical and theoretical methods in inorganic chemistry. Topics are selected from the following: atomic structure and spectra, molecular orbital and ligand field theory, bonding, electronic spectroscopy, magnetism of metal complexes, photochemistry, electrochemistry, solid state chemistry, metalmetal bonding. Three lecture hours, eight three-hour laboratory sessions. One term. Four credits.
Prerequisite: SC/CHEM 3030 4.0.
Degree credit exclusion: SC/CHEM 3030 8.0.
SC/CHEM 3040 3.0 Computational Chemistry. An introduction to numerical methods for modeling reaction kinetics, thermodynamics, and molecular spectra and structure. Operating system commands, symbolic algebra and molecular modeling software are used for computing exercises. Molecular orbitals, the Born-Oppenheimer approximation, and potential energy surfaces are discussed. Two lecture hours, three computer laboratory hours. One term. Three credits.
Prerequisites or corequisites: SC/CHEM 2010 3.0; AK/AS/SC/COSC 1540 3.0.

SC/CHEM $3050 \quad 3.0$ Advanced Biochemistry. A detailed discussion of enzyme structure and function. The chemistry and metabolism of biological molecules. Metabolic regulation at the level of enzyme activity. Knowledge of general concepts of metabolism and of basic aspects of enzyme structure and function is assumed. (Same as SC/BIOL 3010 3.0.) Three lecture hours. One term. Three credits.

Prerequisites: SC/CHEM 2020 5.0; SC/BIOL 2020 4.0.
Prerequisite or corequisite: 3 additional Chemistry credits at the 2000 or 3000 level (e.g., SC/CHEM 20113.0 or SC/CHEM 2021 3.0 or SC/CHEM 20503.0 or SC/CHEM 2620 3.0) are strongly recommended.

Degree credit exclusion: SC/BIOL 3010 3.0.
SC/CHEM 3051 3.0 Macromolecules of Biochemical Interest (formerly SC/CHEM 31503.0 - before Summer, 1998).

A discussion of the structures and functions of naturally occurring macromolecules, including nucleic acids, proteins, polysaccharides and related macromolecular conjugates. Three lecture hours. One term. Three credits.
Prerequisite: SC/CHEM 2020 5.0.
Prerequisite or corequisite: SC/CHEM 2021 3.0 or SC/CHEM 26203.0 or SC/CHEM 3020 8.0 or SC/CHEM 3020 4.0.

Degree credit exclusion: SC/CHEM 3150 3.0.
SC/CHEM 3060 3.0 Introductory Atmospheric Chemistry (formerly SC/ CHEM 31603.0 - before Summer, 1998).
An introductory course linking chemistry and atmospheric science. Topics include atmospheric evolution; biogeochemical cycles; sources, transformations and sinks of atmospheric species; human impacts such as acid rain, photochemical smog, and depletion of the ozone layer. (Same as SC/EATS 3130 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: SC/CHEM 10006.0 or SC/ CHEM 1010 6.0; one of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0, AS/SC/MATH 1505 6.0.
Degree credit exclusions: SC/CHEM 3160 3.0, SC/EATS 3130 3.0.

SC/CHEM 3070 3.0 Industrial Chemistry and the Environment (formerly SC/CHEM 34503.0 - before Summer, 1998). The chemistry of industrial processes is studied together with the impact of their products on the environment. Topics include petroleum refining, the petrochemical industry, polymers, pesticides, dyes and pharmaceuticals. Molecular aspects of toxicology and pharmacology are discussed. Three lecture hours. One term. Three credits.
Prerequisite: SC/CHEM 2020 5.0.
Degree credit exclusion: SC/CHEM 3450 3.0.
SC/CHEM 3080 4.0 Instrumental Methods of Chemical Analysis (formerly SC/CHEM 31204.0 - before 1997/98, or SC/CHEM 3110 4.0 -before Summer, 1998). The theory and application of a variety of modern instrumental methods. Topics include basic electronics, signal processing, electroanalytical methods, optical spectroscopy, atomic absorption and emission spectroscopy, chromatography and mass spectrometry. This course covers applications relevant to modern chemical analysis. Three lecture hours, three laboratory hours. One term. Four credits.

Prerequisites: SC/CHEM 20804.0 or SC/ CHEM 21105.0 or SC/CHEM 2110 4.0; SC/ PHYS 10106.0 or SC/PHYS 1410 6.0.
Degree credit exclusions: SC/CHEM 3110 4.0, SC/CHEM 3120 4.0, SC/CHEM 3130 4.0.

SC/CHEM 4010 3.0 Introductory Quantum Chemistry. The theory of electronic structure and bonding in molecules in terms of Schroedinger wave mechanics; Pauli exclusion principle; Slater determinants; BornOppenheimer separation; variation principle; methods of constructing electronic wave functions for molecules; Hartree-Fock and configuration interaction methods. Three lecture hours. First term. Three credits.
Prerequisites: AS/SC/MATH 2015 3.0; AS/SC/ AK/MATH 2270 3.0.

SC/CHEM 4011 3.0 Physical Chemistry (formerly SC/CHEM 40703.0 - before Summer, 1998). Dynamics of collision events in gas phase chemical kinetics, reactions in bulk systems and in molecular beams, applications to chemical lasers, atmospheric chemistry and combustion. Three lecture hours. Second term. Three credits.
Prerequisite: SC/CHEM 30114.0 or SC/CHEM 3210 4.0.
Degree credit exclusion: SC/CHEM 4070 3.0.
SC/CHEM 4012 3.0 Statistical Mechanics (formerly SC/CHEM 40903.0 - before Summer, 1998). Probability distributions; ensembles; partition functions; classical Boltzmann statistics; Fermi-Dirac and Bose-Einstein quantum statistics. Applications are emphasized for the calculation of thermodynamic quantities for gases and solids. Three lecture hours. Second term. Three credits.
Prerequisites: SC/CHEM 20113.0 or SC/ CHEM 20503.0 (SC/CHEM 30123.0 is also advisable); SC/CHEM 40103.0 or equivalent.
Degree credit exclusions: SC/CHEM 4090 3.0, SC/PHYS 3030 3.0.

SC/CHEM 4020 3.0 Organic Chemistry IV. Stereochemistry, with emphasis on the determination of configuration, conformation analysis and reaction stereochemistry. Discussion of the biosynthesis of aromatic compounds, the acetate rule, the terpene rule and alkaloids. Structure elucidation and synthesis of selected natural products. Three lecture hours. One term. Three credits.
Prerequisite: SC/CHEM 30208.0 or SC/CHEM 3021 4.0.

SC/CHEM 4021 3.0 Synthetic Organic Chemistry. A course concentrating on strategies of synthesizing complex molecules, with emphasis on carbon-carbon bond-forming reactions, blocking groups, regioselectivity and stereochemical methods. Three lecture hours. One term. Three credits.
Prerequisite: SC/CHEM 30208.0 or SC/CHEM 3021 4.0.
Degree credit exclusion: SC/CHEM 4060C 3.0 (1995/96).

SC/CHEM 4022 3.0 Theoretical Organic Chemistry (formerly SC/CHEM 40403.0 before Summer, 1998). Molecular orbital theory, with applications to structure and reactivity of saturated and unsaturated molecules. Woodward-Hoffmann rules of orbital symmetry. Three lecture hours. Second term. Three credits.
Prerequisites: SC/CHEM 2010 3.0; SC/CHEM 2020 5.0.
Prerequisite or corequisite: SC/CHEM 3020 8.0 or SC/CHEM 3021 4.0.

Degree credit exclusion: SC/CHEM 4040 3.0.
SC/CHEM 4023 3.0 Physical Organic Chemistry (formerly SC/CHEM 41203.0 before Summer, 1998). Advanced topics, including methods for determining mechanisms, the study of reactive intermediates (carbocations, carbanions, carbenes, carbon radicals), acid catalysis, and other aspects of mechanistic organic chemistry. Three lecture hours. One term. Three credits.
Prerequisite: SC/CHEM 30208.0 or SC/CHEM 3021 4.0.
Degree credit exclusion: SC/CHEM 4120 3.0.
SC/CHEM 4030 3.0 Instrumental Methods in Inorganic Chemistry. Theory and applications of instrumental methods for investigating the structure and properties of inorganic and organometallic compounds. Magnetic resonance techniques (NQR and ESR), ultraviolet-visible, infrared, Raman and resonance Raman spectroscopy are introduced and discussed. Three lecture hours. First term. Three credits.
Prerequisite: SC/CHEM 30308.0 or SC/CHEM 3031 4.0.

SC/CHEM 4031 3.0 Advanced Inorganic Chemistry (formerly SC/CHEM 41303.0 before Summer, 1998). Advanced topics in inorganic chemistry, including ligand field theory, magnetism in dilute and coupled spin systems, NMR of paramagnetic molecules, electron spin resonance spectroscopy, space groups and crystal structure determination, photoelectron and x-ray spectra of inorganic molecules and ions. Three lecture hours. Second term. Three credits.
Prerequisite: SC/CHEM 30308.0 or SC/CHEM 3031 4.0.
Degree credit exclusion: SC/CHEM 4130 3.0.
SC/CHEM 4032 3.0 Chemical Applications of Group Theory (formerly SC/CHEM 4210 3.0 - before Summer, 1998). A general introduction to symmetry operations, point groups, character tables, reducible and irreducible representations and direct products. Applications of group theory to problems in chemistry, with special reference to electronic and vibrational spectroscopy, crystal field and molecular orbital theory. Three lecture hours. One term. Three credits.
Prerequisites: SC/CHEM 2010 3.0; SC/CHEM 2030 4.0; a background in inorganic chemistry is desirable.

SC/CHEM 4060 4.0 Chemistry of the Natural and Polluted Atmosphere (formerly SC/ CHEM 41404.0 - before Summer, 1998). A
detailed study of the chemistry of atmospheric trace gases, including stratospheric ozone, tropospheric oxidants, photochemical smog, and acid deposition. Computer simulation of chemical reaction mechanisms is used throughout the course. Three lecture hours, two computer laboratory hours. One term. Four credits.
Prerequisites: SC/CHEM 30114.0 or SC/ CHEM 3210 4.0; SC/CHEM 30603.0 or SC/ CHEM 31603.0 or SC/EATS 3130 3.0.

Degree credit exclusions: SC/CHEM 4140 4.0, SC/CHEM 4140 3.0.

SC/CHEM 4061 4.0 Transport and Chemistry of Atmospheric Trace Gases (formerly SC/CHEM 41504.0 - before Summer, 1998). A study of the processes that affect the composition of the atmosphere and the methods used to include these in numerical models. Included are sources, transport, deposition, photochemistry, biogeochemical cycles, one-dimensional computer models and analysis of atmospheric data sets. (Same as SC/EATS 4170 4.0.) Three lecture hours, two computer laboratory hours. One term. Four credits.
Prerequisites: SC/CHEM 30603.0 or SC/CHEM 31603.0 or SC/EATS 3130 3.0; AK/AS/SC/ COSC 1540 3.0; AS/SC/AK/MATH 2270 3.0.
Degree credit exclusions: SC/CHEM 4150 4.0, SC/CHEM 4150 3.0, SC/EATS 4170 4.0, SC/ EATS 4170 3.0.

SC/CHEM 41006.0 (4100 3.0) Research Project. An original laboratory or theoretical project, supported by studies of the relevant scientific literature. Not fewer than 200 laboratory hours, twelve tutorial hours. Two terms or equivalent. Six credits. Not fewer than 100 laboratory hours, six tutorial hours. One term or equivalent. Three credits.
Prerequisites: Only open to Honours students in the final year of study, with permission of the department.

SC/CHEM 42006.0 (4200 4.0) (4200 3.0) Special Topics [formerly SC/CHEM 40506.0 (4050 4.0) (4050 3.0) - before Summer, 1998]. Topics not ordinarily covered in other chemistry courses. Lectures and laboratories over one or two terms as appropriate. Six, four or three credits.

SC/CHEM 43006.0 (4300 3.0) Selected Topics in Chemistry [formerly SC/CHEM 40606.0 (4060 3.0) - before Summer, 1998]. By special arrangement through the Chair of the Chemistry Department, a student may enrol in a reading course under the direction of a member of the Chemistry faculty to study in a special area of chemistry. Regular meetings. Two terms. Six credits. One term. Three credits.

## Classical Studies (Classics) Arts

Programme Office:
210 Vanier (416) 736-5910
Assistant Professor and Director of the Programme:
V. Stephens

Distinguished Research Professor:
M.W. Herren

Professors Emeriti:
V.J. Hunter; H. Parry

Professors:
P.T.R. Gray; D. Hobson; G.P.R. Métraux

Associate Professor Emeritus:
J.C. Stephens

Associate Professors:
S. Mason; G. Naddaf; P.R. Swarney

Assistant Professor:
M. Clark; J. Rives; V.G. Stephens; J.C. Trevett

Honorary Member:
A.G. McKay

Associate Member:
B. Roe

The Classical Studies Programme offers a varied approach to the study of the Greek and Roman world through degree programmes designed to meet a wide range of needs and interests. Courses in Greek and Latin language training and in classical literature are available to students who wish to develop their understanding of the history, poetry, and philosophy of ancient Greece and Rome through detailed study of classical authors in the original languages. Classical Studies in conjunction with History, Humanities, Philosophy and Fine Arts also offers courses based on English translations of classical authors which afford students an opportunity to investigate more generally the history, philosophy, literary history, and the art and architecture of the classical world. For the several programmes of study available in Classical Studies, please consult the 'Programmes of Study' section, Faculty of Arts.
Note: Not all courses will be offered in any given year; consult the Programme Director for details.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## Courses in Greek

## I. Language Course

AS/GK 1000 6.0 Elementary Classical Greek.
Note: See Languages, Literatures and Linguistics.

## II. Literature Courses

NOTE: Prerequisites for 2000-level courses: AS/GK 10006.0 or equivalent or permission of the instructor.

AS/GK 2000 6.0 Intermediate Classical Greek. Selections from various ancient Greek authors chosen at the discretion of the instructor.

AS/GK 3010 3.0 Greek Tragedy (formerly AS/GK 3010 6.0). A study of the plays of Aeschylus, Sophocles, and Euripides.

AS/GK 3030 3.0 Greek Epic Poetry (formerly AS/GK 3030 6.0). Readings from Homer's Iliad and Odyssey.

AS/GK 3040 3.0 Greek Historians (formerly AS/GK 4020 6.0). A study of selected works by Greek historians such as Herodotus, Thucydides and Xenophon.

AS/GK 3050 3.0 Socrates. A careful study of Socrates, the man and the philosopher, in the dialogues of Plato and the writings of other Classical Greek authors.

AS/GK 3060 3.0 Greek Rhetoric (formerly AS/GK 3060 6.0). A study of Greek prose style and the principles of Greek rhetoric.

AS/GK 4010 3.0 Greek Lyric and Choral Poetry (formerly AS/GK 4020 6.0). A study of selected poems by Pindar and other lyric poets and of choral poetry drawn from Greek drama.

AS/GK 4030 6.0 Guided Reading in Greek Authors. An independent reading programme with material chosen according to the interest of the student.
Note: Open only with the permission of the Director. Please consult the 'Enrolment and Registration' section, Faculty of Arts for regulations on independent reading courses.

AS/GK 4040 6.0 Honours Essay. Open only to honours candidates with the permission of the Director.
Note: Consult the Director of the Programme for further information on course offerings in Greek literature.

## Courses in Latin

## I. Language Courses

## AS/LA 1000 6.0 Elementary Latin.

Note: See Languages, Literatures and Linguistics.

## II. Literature Courses

Note: Prerequisites for 2000-level courses: OAC Latin or AS/LA 10006.0 or permission of the instructor.

AS/LA 2000 6.0 Intermediate Latin. This is an intensive course in the reading of Latin prose and poetry intended for students who have had OAC Latin or AS/LA 1000 6.0.

AS/LA 3010 3.0 Roman Epic Poetry (formerly AS/LA 3010 6.0). A study of two Augustan epics: Vergil's Aeneid and Ovid's Metamorphoses.

AS/LA 3020 3.0 Roman Lyric Poetry (formerly AS/LA 3020 6.0). A study of selected works of lyric poetry by authors such as Catullus and Horace.

AS/LA 3030 3.0 Roman Elegiac Poetry (formerly AS/LA 3030 6.0). A study of the love poems of Propertius, Tibullus, and Ovid.

AS/LA 3040 3.0 Roman Philosophical Writings. A study of the works of Lucretius, Cicero, and others.

AS/LA 3050 6.0 A Survey of Latin Literature. A survey of ancient Latin literature designed to supplement existing course offerings and to give students a sense of the range of Roman literary expression.

AS/LA 3060 3.0 Roman Historians (formerly AS/LA 4020 6.0). A study of selected works by Roman historians such as Caesar, Livy and Tacitus.

AS/LA 3070 3.0 Roman Rhetoric. The course examines the main principles of Roman rhetoric through a study in the original Latin of selected speeches of Cicero, speeches incorporated into other Roman prose texts, and passages from works of rhetorical theory.

AS/LA 4010 3.0 The Roman Novel (formerly AS/LA 4010 6.0). Studies in Petronius and Apuleius.

AS/LA 4020 3.0 Roman Satire (formerly AS/ LA 3060 6.0). A study of the development and the central themes of Roman satire, and the literary achievement of the Roman satirists, particularly Horace and Juvenal.

AS/LA 4030 6.0 Guided Readings in Roman Authors. An independent reading programme with material chosen according to the interest of the student.
Note: Open only with the permission of the director. Please consult the Enrolment and Registration section, Faculty of Arts for regulations on independent reading courses.

AS/LA 4040 6.0 Honours Essay. Open only to honours candidates with the permission of the director.

Note: Consult the Director of the Programme for further information on course offerings in Latin literature.

## Departmental and Divisional Courses in Classical Studies

## Literature and Culture

AS/HUMA 1100 9.0 The Worlds of Greece and Rome.
AS/HUMA 1105 9.0 Myth and Imagination in Ancient Greece and Rome.
AS/HUMA 2100 6.0 The World of the Ancient Greeks.
AS/HUMA 2110 9.0 Egypt in the Greek and Roman Mediterranean.
AS/HUMA 2830 9.0 The Founders of Christianity.
AS/HUMA 3100 6.0 Greek Drama and Culture. AS/HUMA 3110 6.0 Roman Culture and Society.

AS/HUMA 4100 6.0 Studies in Greek and Roman Culture.

## Greek and Roman History

AS/HIST 2100 6.0 Ancient Greece and Rome. AS/HIST 3120 6.0 Foundations of Athenian Democracy.
AS/HIST 3130 6.0 The Roman Revolution.
AS/HIST 3131 6.0 Rome and Empire: From War to the Pax Romana.
AS/HIST 4120 6.0 Problems in the History of Ancient Greece.
AS/HIST 4130 6.0 Problems in Roman History. AS/HIST 4140 6.0 Problems in Hellenistic History.
AS/HIST 4150 6.0 Topics in Ancient Social History.

## Philosophy

AS/PHIL 2010 3.0 The Origins of Western Philosophy.
AS/PHIL 2015 3.0 Plato and Aristotle.
AS/PHIL 4030 3.0 Topics in Ancient Philosophy.

## Political Thought

AS/POLS 3010 3.0 Ancient and Medieval Political Thought.
AS/POLS 4030 3.0 Classical Political Thought.

## Art and Architecture

FA/VISA 2520 3.0 Greek Art and Architecture. FA/VISA 2530 3.0 Roman Art and Architecture.
FA/VISA 4540 6.0 Problems in Ancient or Medieval Art and Architecture.

The following courses are largely, but not exclusively, concerned with classical antiquity. No more than two may satisfy degree requirements in Classical Studies.
AS/HUMA 1110 9.0 Greek and Biblical Traditions.
AS/HUMA 3895 6.0 Magic and Imagination. AS/HIST 2110 6.0 The Ancient Near East.
AS/HIST 3100 6.0 Mesopotamian History. AS/HIST 3110 6.0 Ancient Israel: From its Origins in the Settlement to the Babylonian Exile.
AS/HIST 4100 6.0 Selected Problems in Israelite History.
AS/HUMA 4650 6.0 Myth and Mythology. FA/VISA 4370 6.0 Signs and Symbolism in Western Art.

## Colleges - Refer to Individual College

## Communication Arts - Joint Programme with Colleges of Applied Arts and Technology

Students in the Faculty of Arts may study concurrently towards a BA Degree at York and a Diploma or Certificate in one of five areas of study in Communication Arts at Centennial or Seneca College. The following areas are available through the Community Colleges:

- Book and Magazine Publishing (Centennial - Certificate)
- Corporate Communications (Centennial Diploma)
- Audio-Visual and Multi Media Production (Seneca - Diploma) (not offered in Fall/ Winter1999/2000)
- Creative Advertising (Seneca - Diploma)
- Radio and Television Broadcasting (Seneca - Diploma)
Students are eligible for entry to the Joint Programme after completion of a minimum of 24 credits at York, and must complete all the requirements for a BA Ordinary or Honours degree in the Faculty of Arts; the Joint Programme normally takes only one year longer to complete because some advanced standing credit is given by York and the College, if conditions of eligibility for advanced standing are met. For further information, contact the Advising Centre, S319 Ross, (416) 736-5022.


## Computer Science - Pure and Applied Science, Arts, Atkinson College

Department Office:
126 Chemistry and Computer Science Building, (416) 736-5053
Undergraduate/Graduate Office:
125 Chemistry and Computer Science Building, (416) 736-5334
Associate Professor and Chair of the Department:
M.R.M. Jenkin

Professors:
E. Arjomandi, P.W. Dymond, J.W.H. Liu

Associate Professors:
M. Aboelaze, J. Amanatides, T.B. Brecht, X. Deng, J. Edmonds, E.E. Milios, A. Mirzaian, J. Ostroff, P.H. Roosen-Runge, H. Roumani, M. Spetsakis, Z. Stachniak, R.M. Wharton, J. Xu

## Assistant Professors:

G.J. Gotshalks, J. Gryz, Y. L'Esperance, R. Paige, H.S. Sandhu, W. Stuerzlinger, F. van Breugel, A. Wallis

## Associate Lecturer:

P.H. Cribb

Computer science is the study of processes involving the storage, transmission and transformation of information in the context of modern electronic technology. Both theoretical and applied areas of computer science are represented in the courses offered by the department. The introductory courses (two for majors, three for non-majors) are concerned largely with programming as the primary tool used for understanding and controlling computation. The higher-level courses deal with theoretical concerns, the practical design of hardware and software, and a variety of application areas.
The department offers a Specialized Honours applied science degree stream in Space and Communication Sciences, developed to meet the needs of rapidly expanding technologies in these fields. The required
courses for this stream are extensive and are detailed in Science section V.
For specific requirements of programmes offered by this department, see Science section V for BSc programmes and the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes.

## Courses in Computer Science

A supplemental calendar detailing courses and topics to be offered in the next year is available from the department office in March.
For the purpose of satisfying departmental degree requirements, the number of Computer Science credits taken outside the Department of Computer Science may not exceed 6 credits in core areas (here defined to be 1000- and 2000-level Computer Science courses, 3000level Computer Science courses satisfying the breadth requirement, and, for Specialized Honours students, any required 3000- and 4000 -level Computer Science courses) and 12 credits in total.
Computer Science courses with "5" as the second digit of the course number may be used to satisfy Faculty degree requirements but do not count as Computer Science credits.
Courses in Computer Science have three class hours a week for one term (3 credits course numbers end in "3.0"), unless otherwise indicated.
The Department of Computer Science will not permit any student to take more than 12 Computer Science credits per term in the Fall and Winter terms and 6 Computer Science credits in the Summer Term. Students who work full-time are strongly advised to take no more than 6 credits in any term.
For prerequisite purposes, AS/SC/MATH 1000 3.0 or AS/SC/MATH 10133.0 may be substituted in lieu of AS/SC/AK/MATH 1300 3.0. Similarly, AS/SC/MATH 10253.0 or AS/SC/MATH 20213.0 may be substituted in lieu of AS/SC/AK/MATH 2221 3.0.

## 1000-Level Courses

AK/AS/SC/COSC 1020 3.0 Introduction to Computer Science I. The main objective of the course is to introduce the student to problem solving using a procedural programming language. The course also covers the tools and techniques of an advanced interactive programming environment and simple data structures and algorithms. (Same as AS/AK/ITEC 1020 3.0.) Three lecture hours, laboratory exercises.
Prerequisites: If no university-level mathematics: OAC Calculus and one other OAC in mathematics (normally Finite Mathematics or Algebra and Geometry) with an average grade of 75 percent in all OAC mathematics and no grade less than 65 percent; otherwise: at least 6 credits of university-level mathematics with a grade average over all MATH credits of $C+$ or better [ $B+$ or better if it is a service course (second digit is 5) or AK/MATH 1710 6.0]. Recommended: Previous programming experience; for example, a high school programming course or AK/AS/SC/COSC 1530 3.0.

Degree credit exclusions: AK/COSC $2200 B$ 3.0, AK/COSC 2410 6.0, AK/COSC 2411 3.0, AS/AKIITEC 1020 3.0.

AK/AS/SC/COSC 1030 3.0 Introduction to Computer Science II. The main objective of the course is to provide the student with a rudimentary understanding of algorithms and data structures. (Same as AS/AK/ITEC 1030 3.0.) Three lecture hours, laboratory exercises. Prerequisite: AK/AS/SC/COSC 10203.0 or AK/COSC 24113.0 or AS/AKITEC 1020 3.0.
Degree credit exclusions: AK/COSC 2410 6.0, AK/COSC 2412 3.0, AS/AK/ITEC 1030 3.0.

AK/AS/SC/COSC 1520 3.0 Introduction to Computer Use I. An introduction to the use of computers focusing on concepts of computer technology and organization (hardware and software) and the use of applications such as spreadsheets, database, and information retrieval tools for problem solving. The course requires extensive laboratory work.
Note: This course is designed for students who are not Computer Science majors. Students who plan to major in Computer Science are advised to take AK/AS/SC/COSC 1020 3.0.
Degree credit exclusions: AK/COSC 1200 3.0, AK/COSC 1210 3.0. This course is not open to any student who has passed or is taking AK/ AS/SC/COSC 10203.0 or AK/COSC 2200B 3.0 or AK/COSC 24106.0 or AK/COSC 2411 3.0 or AS/AKITEC 1020 3.0.

AK/AS/SC/COSC 1530 3.0 Introduction to Computer Use II. Concepts of computer systems and technology - e.g., software engineering, algorithms, programming languages, theory of computation. Practical work focuses on problem solving using a high-level programming language. The course requires extensive laboratory work.
Note: This course is designed for students who are not Computer Science majors, but may be used as preparation by those who wish to major in Computer Science but lack programming background. Students who plan to major in Computer Science must also take AK/AS/SC/COSC 10203.0 and AK/AS/SC/ COSC 1030 3.0.
Degree credit exclusions: AK/AS/SC/COSC 1540 3.0. This course is not open to any student who has passed or is taking AK/AS/ SC/COSC 10203.0 or AK/COSC 2200B 3.0 or AK/COSC 24106.0 or AK/COSC 24113.0 or AS/AKITEC 1020 3.0.

AK/AS/SC/COSC 1540 3.0 Computer Use for the Natural Sciences. Introduction to problem solving using computers - top down and modular design; implementation in a procedural programming language - control structures, data structures, subprograms; application to simple numerical methods, modelling and simulation in the sciences; use of library subprograms.
Degree credit exclusions: AK/AS/SC/COSC 1530 3.0, SC/ACMS 1010 2.0. This course is not open to any student who has passed or is taking AK/AS/SC/COSC 10203.0 or AK/ COSC 2200B 3.0 or AK/COSC 24106.0 or AK/ COSC 24113.0 or AS/AK/ITEC 1020 3.0.

## 2000-Level Courses

General Prerequisites. All 2000-level Computer Science courses require the following general prerequisites:

- AK/AS/SC/COSC 10303.0 or AK/COSC 24106.0 or AK/COSC 24123.0 or AS/ AK/ITEC 1030 3.0;
- a cumulative grade-point average of 4.5 or better over all completed Computer Science courses;
- AS/SC/AK/MATH 10903.0 or AK/MATH 2441 3.0.

AK/AS/SC/COSC 2001 3.0 Introduction to Theory of Computation. Introduction to the theory of computing, including automata theory, formal languages and Turing machines; theoretical models and their applications in various fields of computer science. The emphasis is on practical applications of the theory and concepts rather than formal rigour.
Prerequisites: General prerequisites.
Degree credit exclusion: AK/COSC 3431 3.0.
AK/AS/SC/COSC 2011 3.0 Fundamentals of Data Structures. A study of fundamental data structures and their use in the efficient implementation of algorithms. Topics include abstract data types, lists, stacks, queues, trees and graphs. (Same as AS/AK/ITEC 2011 3.0.) Prerequisites: General prerequisites.
Degree credit exclusions: AK/COSC 3501 3.0, AS/AK/ITEC 2011 3.0.

AK/AS/SC/COSC 2021 3.0 Computer Organization. Computer structures, digital representation of data, machine languages, instruction execution and addressing techniques. The major functional blocks of a computer: main memory, control unit, arithmetic and logic unit, input/output bus structures, interrupt system, DMA channels, peripheral devices. (Same as AS/AK/ITEC 2021 3.0.)
Prerequisites: General prerequisites.
Degree credit exclusions: AK/COSC 3411 3.0, AK/COSC 3412 3.0, AK/COSC 3460 3.0, AS/ AKITEC 2021 3.0.

AK/AS/SC/COSC 2031 3.0 Fundamentals of Unix, C and $\mathrm{C}++$. An introduction to the rudiments of operating systems; an in-depth study of Unix and its software tools; an introduction to the programming languages C and $\mathrm{C}_{++}$
Prerequisites: General prerequisites.

## 3000-Level Courses

General Prerequisites. Most 3000 -level Computer Science courses require the following general prerequisites, in addition to or including any specifically stated in the course outlines below:

- AK/AS/SC/COSC 20113.0 or AK/COSC 35013.0 or AS/AK/ITEC 2011 3.0;
at least one of AK/AS/SC/COSC 2001 3.0, AK/AS/SC/COSC 2021 3.0, AK/ COSC 3411 3.0, AK/COSC 3431 3.0, AS/AK/ITEC 2021 3.0;
- a cumulative grade-point average of 4.5 or better over all completed Computer Science courses;
- AS/SC/AK/MATH 1300 3.0; AS/SC/AK/ MATH 1310 3.0;
- at least one of AS/SC/AK/MATH 2090 3.0, AS/SC/AK/MATH 2221 3.0, AS/SC/ AK/MATH 2320 3.0, AK/MATH 2442 3.0.

SC/COSC 3001 1.0 Organization and Management Seminar in Space and Communication Sciences. A seminar course taught by guest speakers from industry, government and the University. Content changes from year to year, but includes such topics as professional ethics, communications regulations, space law, space science policy, project management, privacy and security issues in computing. (Same as SC/EATS 3001 1.0 and SC/PHYS 3001 1.0.) One lecture hour in alternate weeks. Two terms. One credit.
Prerequisite: Eligibility to proceed in the Specialized Honours stream in Space and Communication Sciences beyond the 2000level requirements.
Degree credit exclusions: AS/SC/COSC 3002 1.0, SC/EATS 3001 1.0, SC/PHYS 3001 1.0.

AS/SC/COSC 3002 1.0 Organization and Management Seminar. A seminar course taught by guest speakers from industry, government and the University. Content changes from year to year, but includes such topics as professional ethics, communications regulations, project management, privacy and security, legal issues in computing. One lecture hour in alternate weeks. Two terms. One credit.
Prerequisites: General prerequisites.
Degree credit exclusions: SC/COSC 3001 1.0, SC/EATS 3001 1.0, SC/PHYS 3001 1.0.

AK/AS/SC/COSC 3010 3.0 Special Topics in Computer Science. Half courses or seminars on particular topics not otherwise available.
Prerequisites: Vary depending on the particular topic but include at least the general prerequisites.

AK/AS/SC/COSC 3101 3.0 Design and Analysis of Algorithms. Review of fundamental data structures. Analysis of algorithms: time and space complexity. Algorithm design paradigms: divide-andconquer, exploring graphs, greedy methods, local search, dynamic programming, probabilistic algorithms, computational geometry. NP-complete problems.
Prerequisites: General prerequisites, including AS/SC/AK/MATH 23203.0 or AK/MATH 2442 3.0.

Degree credit exclusion: AK/COSC 3432 3.0.
AK/AS/SC/COSC 3111 3.0 Introduction to Program Verification. Application of logic to programs; weakest precondition; semantics of a simple programming language; correctness; development of correctness proofs from specifications; application to software design; performance bounds; transformation and synthesis.

Prerequisites: General prerequisites, including AS/SC/AK/MATH 2090 3.0.

AK/AS/SC/COSC 3121 3.0 Introduction to Numerical Computations I. An introductory course in computational linear algebra. Topics include simple error analysis, linear systems of equations, non-linear equations, linear least squares and interpolation. (Same as AS/SC/ MATH 3241 3.0.)
Prerequisites: One of AK/AS/SC/COSC 1540 3.0, AK/AS/SC/COSC 2011 3.0, AK/AS/SC/ COSC 2031 3.0, AK/COSC 3501 3.0, AS/AK/ ITEC 2011 3.0; one of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0; one of AS/SC/MATH 1025 3.0, AS/ SC/MATH 2021 3.0, AS/SC/AK/MATH 2221 3.0 .

Degree credit exclusions: AK/COSC 3511 3.0, AS/SC/MATH 3241 3.0.

AK/AS/SC/COSC 3122 3.0 Introduction to Numerical Computations II. Algorithms and computer methods for solving problems of differentiation, integration, differential equations, and an introduction to systems of non-linear equations. (Same as AS/SC/MATH 3242 3.0.)
Prerequisites: AS/SC/AK/MATH 2270 3.0; AK/ AS/SC/COSC 31213.0 or AK/COSC 35113.0 or AS/SC/MATH 3241 3.0.
Degree credit exclusions: AK/COSC 3512 3.0, AS/SC/MATH 3242 3.0.

AK/AS/SC/COSC 3201 3.0 Digital Logic Design. Introduction to logic design. Analysis and design of combinatorial and sequential circuits. Standard MSI and LSI circuits, programmable logic device (PLD), and their use in the design of digital systems. Reliable design and fault detection. Laboratory experiments.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 20213.0 or AK/COSC 3411 3.0 or AS/AK/ITEC 2021 3.0.

AK/AS/SC/COSC 3211 3.0 Data Communication. This course covers, in some detail, the first three layers in the OSI computer communication model. It concentrates on the data link and network layers. Examples of local area networks and wide area networks are presented in detail.
Prerequisites: General prerequisites; including AS/SC/AK/MATH 2090 3.0, and AK/AS/SC/ COSC 20213.0 or AK/COSC 34113.0 or AS/ AKIITEC 2021 3.0.
Degree credit exclusion: AK/COSC 3409A 3.0.
AK/AS/SC/COSC 3212 3.0 Computer Networks. This course covers the top four layers in the OSI computer communication model; namely, the transport, session, presentation and application layers; example networks such as ARPANET, SNA and public networks. Finally, it introduces the concept of internetworking.
Prerequisite: AK/AS/SC/COSC 32113.0 or AK/COSC 3409A 3.0.
Degree credit exclusion: AK/COSC 3409B 3.0.

AK/AS/SC/COSC 3301 3.0 Programming Language Fundamentals. Formal syntax: Bachus-Naur form and extensions, syntax diagrams, grammars and parsing; elements of formal language theory; type theory and data structures of algorithmic languages; control structures and their composition. Subprograms: argument-parameter binding mechanisms.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 20013.0 or AK/COSC 3431 3.0.

Degree credit exclusion: AK/COSC 3420 6.0.
AK/AS/SC/COSC 3311 3.0 Software Design. A study of design methods and their use in the correct implementation, maintenance and evolution of software systems. Topics include design, implementation, testing, documentation needs and standards, support tools. Students design and implement components of a software system.
Prerequisites: General prerequisites; including AS/SC/AK/MATH 2090 3.0, and AK/AS/SC/ COSC 20013.0 or AK/COSC 3431 3.0; AK/ AS/SC/COSC 2031 3.0.

AK/AS/SC/COSC 3321 3.0 Operating System Fundamentals. Principles of operating systems. Concurrent processes, CPU scheduling, deadlocks, memory management, file systems, protection and security, and case studies.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 20213.0 or AK/COSC 3411 3.0 or AS/AK/ITEC 2021 3.0; AK/AS/SC/ COSC 2031 3.0.
Degree credit exclusion: AK/COSC 3470 3.0.
AK/AS/SC/COSC 3331 3.0 Object-Oriented Programming and Design. Introduction to the theoretical and practical methods of objectoriented software construction. Topics include single and multiple inheritance, type hierarchies, polymorphism, operator overloading, class library design, templates, constraint-based programming, and contract model of design.
Prerequisites: General prerequisites.
Degree credit exclusions: AS/SC/COSC 3010A 3.0, AK/COSC 3200B 3.0, AK/COSC 3650 3.0.

AK/AS/SC/COSC 3401 3.0 Introduction to Symbolic Computation. Focuses on the representation of knowledge - facts and rules in forms other than numbers or text, and on the construction of programs which can exploit such knowledge to solve problems. Functional programming, logic and object-oriented programming techniques are explored in depth.
Prerequisites: General prerequisites, including AS/SC/AK/MATH 2090 3.0.
Degree credit exclusions: AS/SC/COSC 3520 3.0, AK/COSC 3551 3.0.

AK/AS/SC/COSC 3402 3.0 Introduction to Concepts of Artificial Intelligence. The concept of artificial intelligence. Interpretation of learning and reasoning as computational
processes; simulation using logic and inference rules; analysis of the structure of visual scenes; game playing by computer; natural language analysis and synthesis; domain-independent planning and problem solving.
Prerequisites: AK/AS/SC/COSC 3401 3.0; AS/ SC/AK/MATH 23203.0 or AK/MATH 2442 3.0.

Degree credit exclusions: AS/SC/COSC 3520 3.0, AK/COSC 3551 3.0.

AK/AS/SC/COSC 3408 3.0 Simulation of Discrete Systems. Introduction to discreteevent systems and queuing problems. Random number generation, testing and use. Model building, simulation runs and validation of results. Special-purpose discrete simulation languages such as GPSS, their use and internal logic. Application to case studies.
Prerequisites: General prerequisites; AS/SC/ AK/MATH 2560 3.0.
Degree credit exclusions: AK/COSC 3451 3.0, AS/SC/MATH 4930B 3.0.

AK/AS/SC/COSC 3418 3.0 Simulation of Continuous Systems. Introduction to dynamic continuous systems. Mathematical representation, numerical solution; stability and error accumulation. Use of generalpurpose procedural languages and specialpurpose languages. Control systems and feedback loops. Applications to population studies, fluid systems, politico-economic models and other case studies.
Prerequisites: General prerequisites; AS/SC/ AK/MATH 2560 3.0.
Degree credit exclusion: AK/COSC 4071 3.0.
AK/AS/SC/COSC 3421 3.0 Introduction to Database Systems. Concepts, approaches and techniques in database management systems (DBMS). Logical model of relational databases. An introduction to relational database design. Other topics such as query languages, crash recovery and concurrency control. (Same as AS/AK/ITEC 3421 3.0.)
Prerequisite: AK/AS/SC/COSC 20113.0 or AK/ COSC 35013.0 or AS/AK/ITEC 2011 3.0.
Degree credit exclusions: AS/SC/COSC 3412 3.0, AK/COSC 3503 3.0, AS/AK/ITEC 3421 3.0.

AK/AS/SC/COSC 3461 3.0 Human-Computer Interaction. This course introduces the concepts and technology necessary to design, manage and implement interactive software. Students work in small groups and learn how to design user interfaces, how to realize them and how to evaluate the end result. (Same as AS/AK/ ITEC 3461 3.0.)
Prerequisite: AK/AS/SC/COSC 20113.0 or AK/ COSC 35013.0 or AS/AK/ITEC 2011 3.0.
Degree credit exclusions: AS/AK/ITEC 3461 3.0. Not open to students who successfully complete AK/AS/SC/COSC 43413.0 or AK/AS/SC/COSC 43613.0 before Fall, 2000.

AS/SC/COSC 3530 3.0 Technical and Professional Writing. This writing-intensive course is for upper-year students enrolled in Computer Science programmes. Students develop confidence and competence in
professional and technical writing. Focus is on communication of complex information in a clear, sensible style. (Same as SC/BC 3030 3.0.) Three hours. One term. Three credits.

Prerequisite: At least 6 non-science general education credits.
Corequisite: Concurrent enrolment in at least one 3000- or 4000-level course in Computer Science. Open only to students enrolled in Computer Science programmes.
Degree credit exclusions: SC/BC 3030 3.0, SC/BC 3050 3.0.
Note: This course counts as elective credits towards satisfying Faculty degree requirements but does not count as Computer Science credits. However, the course is recommended by the Computer Science Department for students who wish to pursue a professional career.

## 4000-Level Courses

General Prerequisites. All 4000-level Computer Science courses require the following general prerequisites, in addition to or including any specifically stated in the course outlines below:

- AK/AS/SC/COSC 20013.0 or AK/COSC 3431 3.0; AK/AS/SC/COSC 20113.0 or AK/COSC 35013.0 or AS/AK/ITEC 2011 3.0; AK/AS/SC/COSC 20213.0 or AK/ COSC 34113.0 or AS/AK/ITEC 2021 3.0;
- at least 12 credits in Computer Science at the 3000 level;
- a cumulative grade-point average of 4.5 or better over all completed Computer Science courses;
- AS/SC/AK/MATH 2090 3.0.

SC/COSC 4001 6.0 Space and Communication Sciences Workshop. This course is intended to allow the student to carry out the development of a specific space project, under the supervision of a faculty member, a government scientist or an industrial associate. The equivalent of nine laboratory hours per week for two terms. (Same as SC/EATS 40016.0 and SC/PHYS 4001 6.0.)
Prerequisite: Satisfactory completion of the 3000-level courses in the Space and Communication Sciences core.
Degree credit exclusions: AK/AS/SC/COSC 4080 3.0, SC/EATS 4001 6.0, SC/PHYS 4001 6.0.

AK/AS/SC/COSC 4010 3.0 Special Topics in Computer Science. Half courses or seminars on particular topics not otherwise available.
Prerequisites: Vary depending on the particular topic, but include at least the general prerequisites.

AK/AS/SC/COSC 4080 3.0 Computer Science Project. A project in computer science chosen in consultation with, and supervised by, a member of the department.

Prerequisites: General prerequisites; permission of the course director. Normally restricted to students who have taken 36 credits in Computer Science.
Degree credit exclusion: SC/COSC 4001 6.0.
AK/AS/SC/COSC 4101 3.0 Advanced Data Structures. Amortized and worst-case analysis of data structures. Data structuring paradigms: self-adjustment and persistence. Lists: self-adjustment with the move-to-front heuristic. Search trees: splay trees, finger search trees. Heaps: skew heaps, fibonacci heaps. Union-find trees. Link-and-cut trees. Multidimensional data structures and dynamization.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 31013.0 or AK/COSC 3432 3.0; AS/SC/AK/MATH 23203.0 or AK/MATH 2442 3.0.

AK/AS/SC/COSC 4111 3.0 Automata and Computability. Introduction to more advanced topics in theoretical foundations of computer science, including the study of formal languages and automata, formal models of computation, and computational complexity measures.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 31013.0 or AK/COSC 3432 3.0; AS/SC/AK/MATH 23203.0 or AK/MATH 2442 3.0.
Degree credit exclusion: AK/COSC 4021 3.0.
AK/AS/SC/COSC 4201 3.0 Computer Architecture. The internal structure and design ideas embodied in many computers and the techniques for evaluating them. Fast arithmetic algorithms, memory system designs, pipeline techniques, input-output subsystems and parallel computing structures. Future trends in computer architecture.
Prerequisites: General prerequisites; including AK/AS/SC/COSC 32013.0 or AK/COSC 3411 3.0, and AK/AS/SC/COSC 33213.0 or AK/ COSC 3470 3.0.

AK/AS/SC/COSC 4211 3.0 Performance Evaluation of Computer Systems. This course introduces the concept of modelling a computer system, using queuing theory techniques and simulation techniques, then it examines the practical applications of these concepts in some case studies. These case studies are chosen to have a practical impact.
Prerequisites: General prerequisites; including AK/AS/SC/COSC 32113.0 or AK/COSC 3409A 3.0, and AK/AS/SC/COSC 34083.0 or AK/COSC 3451 3.0.

AK/AS/SC/COSC 4242 3.0 Signals and Systems. An introduction to the mathematical background in signals and systems required for computer vision and robotics; signal and image processing: sampling, discrete Fourier transform, filtering; linear system theory; Kalman filtering; feedback.
Prerequisites: General prerequisites; AK/AS/ SC/COSC 31213.0 or AK/COSC 35113.0 or AS/SC/MATH 3241 3.0.

Degree credit exclusions: SC/EATS 4020 3.0, AS/SC/MATH $4130 B$ 3.0, AS/SC/MATH 4830 3.0, SC/PHYS 4060 3.0.

AK/AS/SC/COSC 4301 3.0 Programming Language Design. Advanced features of algorithmic languages: modules (packages), exceptions and tasks. A survey of nonalgorithmic languages: object-oriented languages, logic programming languages. Introduction to formal semantics. Recent developments in programming language design.
Prerequisites: General prerequisites, inc/uding AK/AS/SC/COSC 33013.0 or AK/COSC 3420 6.0.

AK/AS/SC/COSC 4302 3.0 Language Processors. Principles of design of algorithmic and non-algorithmic programming languages. Design and implementation of programming language translaters: compilers, cross-compilers, interpreters, assemblers and pre-processors. Theory and applications of programming linguistics. Students design and implement components of a language processor.
Prerequisites: General prerequisites, inc/uding AK/AS/SC/COSC 3301 3.0; AK/AS/SC/COSC 2031 3.0.
Degree credit exclusion: AK/COSC 3420 6.0.
AK/AS/SC/COSC 4311 3.0 System Development. A study of concurrency and communication in system development. Specification, design and implementation of computer systems which continuously interact with other systems. Topics may include objectoriented modelling, formal specification languages, CASE tools.
Prerequisites: General prerequisites; including AK/AS/SC/COSC 3311 3.0, and one of AK/AS/ SC/COSC 3111 3.0, AK/AS/SC/COSC 3321 3.0, AK/COSC 3470 3.0.

AK/AS/SC/COSC 4321 3.0 Operating System Design. An operating system has four major components: process management, input/output, memory management, file system. This project-oriented course puts OS principles into action: design and implementation of components of an OS, interaction with existing system software (using C under Unix).
Prerequisites: General prerequisites, including AK/AS/SC/COSC 33213.0 or AK/COSC 3470 3.0.

AK/AS/SC/COSC 4331 3.0 Computer Graphics. Algorithms for the creation, manipulation and display of objects in an interactive graphical environment.
Prerequisites: General prerequisites; AS/SC/ AK/MATH 2221 3.0.
Degree credit exclusion: AK/COSC 4409B 3.0.
AK/AS/SC/COSC 4341 3.0 Interactive System Design. A study of what makes an interactive system good or bad. The benefits of add-on user interfaces; the user's perceptual and cognitive requirements; an examination of
appropriate hardware and software. Students design and implement components of an interactive system.
Prerequisites: For 1999/2000: General prerequisites. For 2000/2001: General prerequisites, including AK/AS/SC/COSC 34613.0 or AS/AKIITEC 3461 3.0.

AK/AS/SC/COSC 4351 3.0 Real-Time Systems Theory. Specification and verification techniques for real-time systems with many interacting components. Formal design of real-time systems using (a) programming languages with unambiguous semantics of time-related behaviour and (b) scheduling algorithms.
Prerequisites: General prerequisites; inc/uding one of AK/AS/SC/COSC 3111 3.0, AK/AS/SC/ COSC 3311 3.0, AK/AS/SC/COSC 3321 3.0, AK/COSC 3470 3.0.

AK/AS/SC/COSC 4352 3.0 Real-Time Systems Practice. Introduction to the correct use and applications of real-time programming languages. Examples of realtime programming languages are studied in detail and applied to the solution of typical realtime programming problems (e.g., communication networks, avionic systems and process control).
Prerequisites: General prerequisites; inc/uding one of AK/AS/SC/COSC 3301 3.0, AK/AS/SC/ COSC 3311 3.0, AK/AS/SC/COSC 3321 3.0, AK/COSC 3420 6.0, AK/COSC 3470 3.0.

AK/AS/SC/COSC 4361 3.0 HumanComputer Communication. Design and application of computer systems which provide information resources for learning, online-help, conceptual exploration, visualization, and entertainment; e.g., hypertext/hypermedia, networked information-servers, systems for collaborative work, and "virtual reality". One or two topics are discussed in depth using current research literature. Normally offered in alternate years.
Prerequisites: General prerequisites, inc/uding AK/AS/SC/COSC 34613.0 or AS/AK/ITEC 3461 3.0.

AK/AS/SC/COSC 4401 3.0 Artificial Intelligence. Introduction to the main ideas of current machine learning research: induction, abduction, deduction; learning from examples and formal models, Bayes' rule, Solomonoff's idea, Gold paradigm, Valiant model of learning, Rissanen's minimum description length principle; distribution free and unsupervised learning.
Prerequisites: General prerequisites, inc/uding AK/AS/SC/COSC 34023.0 or AK/COSC 3551 3.0.

AK/AS/SC/COSC 4402 3.0 Logic Programming. This course is an introduction to fundamental concepts of logic programming and logic programming languages. In the course, the logic programming language PROLOG is discussed and programming techniques and applications are studied.

Prerequisites: General prerequisites; including AK/AS/SC/COSC 3401 3.0, and AK/AS/SC/ COSC 31013.0 or AK/AS/SC/COSC 31113.0 or AK/COSC 3432 3.0.
Degree credit exclusion: AS/SC/COSC 3520 3.0.

AK/AS/SC/COSC 4411 3.0 Database Management Systems. A study of principles of database management systems. A thorough analysis of theory of normal, relational algebra and calculus and query languages based on these concepts. Other topics: security and integrity issues, concurrency control, distributed systems, query optimization.
Prerequisites: General prerequisites; including one of AS/SC/COSC 3412 3.0, AK/AS/SC/ COSC 3421 3.0, AK/COSC 3503 3.0, AS/AK/ ITEC 3421 3.0.
Degree credit exclusions: AK/COSC 4441 3.0, AK/COSC 4442 3.0.

AK/AS/SC/COSC 4421 3.0 Introduction to
Robotics. An introduction to robot arms and autonomous vehicles. The course covers control and manipulator theory, robot sensors and navigation.
Prerequisites: General prerequisites; AS/SC/ AK/MATH 2221 3.0.

AK/AS/SC/COSC 4422 3.0 Computer Vision. An introductory course in computer vision: high- and low-level vision systems, the measurement and interpretation of visual data, static and dynamic scene analysis.
Prerequisites: General prerequisites, including AK/AS/SC/COSC 31213.0 or AK/COSC 3511 3.0.

Degree credit exclusion: AK/COSC 4409E 3.0.

## Creative Writing - Arts

Programme Office:
210 Vanier College, (416) 736-5910
Associate Professors:
M. Corrigan

Assistant Professors:
S. Swan, R. Teleky

The Creative Writing Programme is an honours programme offered by the Faculty of Arts. Students wishing to major in Creative Writing should apply for the Introductory course, AS/HUMA 2900 9.0, at the end of their first year by submitting a portfolio of 10-15 pages of prose-fiction and poetry to 210 Vanier College. Students must successfully complete this course (AS/HUMA 2900 9.0) or have the equivalency before applying for the major. Student may apply for admission to the Programme at the end of their second year of study, and before completion of their first 78 credits.
The primary objective of the programme is to give students who have the talent and the ambition for a writing career, the opportunity to develop that talent significantly and to make it the centre of a programme of university study. Two major assumptions inform this programme: the first, that the capabilities of talent can be increased through training, and
the second, that the necessary curriculum for aspiring writers consists of their native language and the writing idioms of past and contemporary writers. The programme therefore aims in its lower years to acquaint students with the various ways of writing which the leading writers of our time have made possible. Students begin to write in an expanding environment of literary and linguistic knowledge. In the upper years, the programme encourages specialization in one or two genres and aims to expose students to the history of formal experimentation and growth in particular genres.
Students may enrol in the Faculty of Arts in Honours and plan a course of studies with the approval of the Director of the Programme in Creative Writing. Students will normally take a 42 credit Honours Major in Creative Writing and select remaining courses in a pattern appropriate to their needs as writers. Arts students may pursue the 42 credit Honours programme jointly with any other 42 credit Honours programme or 30 credits Honours Minor in the Faculty of Arts. In selecting courses, students are strongly advised to develop a programme of study which will allow for transfer to another major subject in one of the departments of Arts or Fine Arts (e.g., English, Theatre).
Normally, the 42 credit Honours Major in Creative Writing will consist of AS/HUMA 2900 6.0 "Introduction to Creative Writing" (formerly AS/EN 2900 6.0) in the second year of university study, and at least 18 credits in Creative Writing workshops at the 3000 and 4000 levels in the third and fourth year. Normally, 12 of these credits must be at the 3000 level and 6 credits at the 4000 level. Except in special circumstances, no more than 12 credits in workshop courses should be taken in any one year. Students will complete a 42 credit Major by adding to these workshop courses from the list below. (Faculty of Arts legislation requires that, in order to obtain an Honours - 120 credits - BA, students must take a total of at least 18 credits at the 4000-level including at least 12 credits at the 4000-level in each Honours Major).

## 1. Admission to the Programme

a) Students who wish to enter the Creative Writing programme as Majors are strongly recommended to take one of the following among their first 30 credits.

AS/EN 1200 6.0 Introduction to Literary Genres. AS/EN 1300 6.0 Aspects of English Literature. AS/HUMA 1610 9.0 The Art of Writing.
b) Students in either the Faculty of Arts or the Faculty of Fine Arts may enrol in the Creative Writing Programme. Students may obtain conditional admission to the programme by enrolling in AS/HUMA 2900 6.0. (Portfolios of 10 to 15 pages of poetry and prose fiction are required for admission to this course.)
c) Students enrolled in AS/HUMA 29009.0 who wish to obtain full admission to the programme as Majors should submit to their HUMA 29009.0 instructor a 15- to 20-page portfolio (of original work in at least two genres) sometime during the second term (preferably before March). Acceptance of this portfolio by the programme

Major Committee constitutes full admission of the student as a Creative Writing major.
d) Students may also apply for admission to the programme after their first 48 credits (either at York or at another institution) and before completion of their first 78 credits by presenting a 15-20 page portfolio as evidence of equivalent writing experience to that provided by AS/HUMA 2900 9.0.
e) Deadlines: Students should submit their portfolios as early as possible when applying for full admission to the programme. Most admissions to the programme will be decided by June 1, although students may apply as late as September 1 .

## 2. Admission to Upper Level Workshop Courses as NonMajors

Students who wish to apply for admission to one or more of the third year workshops without becoming majors should submit to their AS/HUMA 29009.0 instructor a 15-20 page portfolio of work along with an application form (application forms are available from 261 Vanier College) in the appropriate genre sometime during the second term (preferably before March 19). Acceptance of this portfolio constitutes admission to the workshop when space is available, but does not guarantee admission.

## Departmental and Divisional Courses in Creative Writing

Note: Not all courses will necessarily be offered in any given year; for details of courses to be offered consult the Programme Office.
Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
Listed below are the workshop courses offered by the Creative Writing Programme. Students will normally (see above) take 24 credits in these workshop courses during their years in the programme (although additional workshops are permitted in certain circumstances).
AS/HUMA 2900 9.0 Introduction to Creative Writing (formerly AS/EN 2600 6.0).
(Portfolios of 10 to 15 pages of poetry and prose fiction are required for admission to this course.)
AS/EN 3240 6.0 Poetry Workshop.*
FA/FILM 2120 6.0 Introductory Screenwriting. FA/FILM 3120 6.0 Intermediate Screenwriting. FA/FILM 4120 6.0 Advanced Screenwriting. AS/HUMA 3640 6.0 Fiction Workshop.* AS/HUMA 3645 6.0 Poetry Workshop. AS/HUMA 4630 6.0 Senior Fiction Workshop.* AS/HUMA 4630C 6.0 Senior Prose Workshop: Non-Fiction.
AS/HUMA 4640 6.0 Senior Poetry Workshop.* FA/THEA 3290 6.0 Playwriting I.
FA/THEA 4290 6.0 Advanced Playwriting and New Play Dramaturgy.
*Portfolios are required for admission to these courses. Consult the programme office.
Listed below are those (non-workshop) approved courses from which Creative Writing
students may select their remaining courses; since the normal pattern is 24 credits in workshop and 18 non-workshop credits, students should study the list carefully and choose courses which they feel will most appropriately complement, text, illuminate, and focus their own writing.
Note: This list offers a sense of the spectrum of courses available; alternative courses may, with the approval of the Coordinator, be taken in fulfilment of the non-workshop quota.
AS/EN 1200 6.0 Introduction to Literature. AS/EN 1300 6.0 Literature and Theory: An Introduction.
AS/EN 2060 6.0 Grammatical Structure of English.
AS/EN 2110 6.0 Introduction to Poetry.
AS/EN 2120 6.0 Drama.
AS/EN 2330 6.0 Fiction of the U.S. since 1865. AS/EN 2370 6.0 Post-Colonial Literature. AS/EN 2450 6.0 Canadian Literature.
AS/EN 2470 6.0 Post Narrative: The Novel from Behn to James.
AS/EN 2510 6.0 British and American Poetry and Fiction 1900-1940.
AS/EN 2550 6.0 British Novel:1880-1930.
AS/EN 2690 6.0 Contemporary Literature.
AS/EN 2770 6.0 Modern and Contemporary Drama.
AS/EN 3010 6.0 Style and Stylistics.
AS/EN 3160 6.0 Special Topics: Modern Canadian Drama.
AS/EN 3320 6.0 Poetry of the United States.
AS/EN 3340 6.0 Modern Canadian Fiction.
AS/EN 3350 6.0 Modern Canadian Poetry. AS/EN 3430A 3.0 Canadian Women Writers. AS/EN 3430D 3.0 Studies in Women Writers: Recent Women Fiction Writers.
AS/EN 3440 6.0 Post-Colonial Writing in Canada.
AS/EN 4110 6.0 History and Description of the English Language.
AS/EN 4140 6.0 Studies in Modern Poetry.
AS/EN 4140A 6.0 Modern Poetry: Early Modernists.
AS/EN 4150A 6.0 Recent Irish Fiction.
AS/EN 4150B 6.0 Seamus Heaney.
AS/EN 4150D 6.0 From Fin-de-Siecle to Modernism.
AS/EN 4230D 3.0 Studies in Post-Colonial Literature: Derek Walcott.
AS/EN 4230E 3.0 Studies in Post-Colonial Literature: Wole Soyinka.
AS/EN 4260 6.0 Studies in the Novel.
AS/EN 4270 6.0 Studies in Canadian Literature.
AS/EN 4270C 6.0 Studies in Canadian Literature: Poetry.
AS/EN 4270E 6.0 Studies in Canadian Literature: Four Contemporary Canadian Writers.
AS/HUMA 2610 6.0 Interdisciplinary Perspectives on Literature.
AS/HUMA 2640 9.0 Modes of Fantasy (formerly AS/HUMA 2640 6.0).
AS/HUMA 2670 9.0 Film and Literature.
AS/HUMA 3120C 3.0 Re-Imagining History: The Novels of E.L. Doctorow.
AS/HUMA 3620 6.0 The Tragic Muse.
AS/HUMA 3660 6.0 The Oral Tradition.
AS/HUMA 3670 6.0 Fantasy in the Modern World.
AS/HUMA 3890 6.0 On Love.

AS/HUMA 4000M 6.0 Life Writing.
AS/HUMA 4050 6.0 Independent Studies. (Special approval required)
AS/HUMA 4610 6.0 Psychology and Literature (Cross-listed to AS/PSYC 4120 6.0).
AS/HUMA 4620 6.0 Works and Days: Writers on Their Art and Their Lives.
AS/HUMA 4650 6.0 Myth and Mythology.
AS/HUMA 4880D 3.0 The Works of Franz Kafka.
AS/LING 1000 6.0 Introduction to Linguistics. AS/PHIL 3040 6.0 Aesthetics.
Note: Language courses (French, German, Latin, and more) will normally also be accepted by the programme as fulfilling non-workshop requirements. Please consult with your programme advisor.
Note: For Fine Arts students registered in the Programme in Creative Writing, all workshop courses in Creative Writing will be credited as Fine Arts courses.
For Arts students registered in the programme, all Fine Arts courses in Creative Writing will be credited as Arts courses.
It should be noted that Glendon College offers, through its Department of English, a number of courses which are fully accredited by the Creative Writing Programme for its students on either campus. These are as follows:
GL/EN 2590 6.0 Poetry and Poetics.
GL/EN 3260 6.0 Media.
GL/EN 3510 6.0 Literary Stylistics (either this course or AS/EN 3010 6.0).
GL/EN 3950 6.0 English-Speaking Theatre in Canada.
GL/EN 4250 3.0 Studies in Genres: Canadian Women Playwrights.
GL/EN 4270 6.0 20th Century American.
GL/EN 4290 6.0 Children's Literature (either this course or AS/HUMA 3650 6.0).
GL/EN 4340 6.0 Contemporary Literature (either this course or AS/EN 2690 6.0).
GL/EN 4560 6.0 Advanced Writing.

## Dance - Fine Arts

## Department Office:

240 Centre for Fine Arts, (416) 736-5137
Associate Professor and Chair of the Department:
N.S. Fisher-Stitt

## Professor:

P. Reed-Doob

## Associate Professors:

A. Blewchamp, K. Bowes-Sewell, N. De Shane, D. Krasnow, M.E. Manley, S. Odom, H. Small, M. J. Warner

## Adjunct Professors:

D. Grossman, V. Tennant, M. Thakkar, A. Caverly-Lowery

## Programmes of Study

The Department of Dance offers a comprehensive education in dance as a performing art in a four-year liberal arts programme leading to a BFA Honours degree. Throughout the programme students participate intensively in studio courses involving ballet and modern technique,
conditioning for dancers, improvisation, music, composition/choreography, repertory, dance production, pedagogy, and body therapies. Special performance opportunities are available through the York Dance Ensemble. Critical, analytical, and writing skills are fully developed in the areas of dance studies and dance history, movement analysis, kinesiology and injury prevention, dance writing, dance ethnology and anthropology. The programme is enriched by distinguished guest lecturers, master teachers and choreographers, performances, films, workshops, and the integration of new technologies. The emphasis in the department is to prepare people for careers and graduate work in dance and other fields.
The 120 credits required for the degree are normally completed in four years. Second degree or transfer students may be able to complete requirements in three years. Students in the BFA Honours degree programme complete 84 credits in core dance courses. In addition, all students take 12 credits in Fine Arts outside Dance, 18 credits from general education courses, and 6 free elective credits, for courses in Dance or other disciplines in the University.
The first two years of Dance courses are common to all Dance majors. Students take courses in ballet and modern technique, production for dance, conditioning for dancers, improvisation, introduction to dance studies, dance composition, movement analysis, music for dancers, and dance kinesiology. In the third year, students take upper level ballet and modern technique, and courses in dance ethnology and prevention and care of dance injuries. Additionally, third year students choose either a course in repertory, or an upper level choreography course, and they choose between a course in dance pedagogy or in body therapy. Fourth year students continue studies in upper level ballet and modern technique, and they choose between dance writing, anthropology of dance, topics in historical and cultural dance styles or Canadian dance history. Fourth year students also select an intensive focus for this final year of study, either by participating in the York Dance Ensemble, or by selecting a Senior Project, and one of upper level choreography, repertory or upper level theory. They may also elect to substitute courses in jazz dance or dances of various cultures for the fourth year ballet and modern courses. All fourth year students participate in the mentoring program for first year students.
A placement evaluation is required of all entering students. All incoming students must have had some training in either ballet or modern dance. (See details in Faculty of Fine Arts Evaluations.) Advancement to second, third, and fourth level dance technique courses is by juried audition only.
Dance majors are eligible to apply for the concurrent program of the Faculty of Education at the end of the first year of study.
A Dance minor programme is available for students who are majoring in another discipline in the Faculties of Fine Arts, Arts or Environmental Studies. The minor requires the
equivalent of 30 credits in Dance theory and practice.

## Advanced Standing for the Professional Dancer

The Department of Dance offers professional dancers the opportunity to obtain an undergraduate degree by giving credit for experience gained in a performance career. If you are over 25 years of age and have been a professional dancer for more than five years, you are eligible to apply. Please contact the Dance Department for further information.

## Courses in Dance

Note: Not all courses will be offered in any given year

FA/DANC 1205 2.25 Ballet Technique. Introductory course in ballet. Emphasizes integrated movement, alignment, classical ballet vocabulary, artistic expression, as well as the creative process. Required of all Dance majors. Five hours.
Corequisite: FA/DANC 1215 2.25.
FA/DANC 1206 2.25 Ballet Technique. Introductory course in ballet. Emphasizes integrated movement, alignment, classical ballet vocabulary, artistic expression, as well as the creative process. Required of all Dance majors. Five hours.
Prerequisite: FA/DANC 1205 2.25.
Corequisite: FA/DANC 1216 2.25.
FA/DANC 1207 2.25 Ballet Technique. A
continuation of work begun in FA/DANC 1205 2.25 in ballet. Emphasizes integrated movement, alignment, classical ballet vocabulary, artistic expression, as well as the creative process. Five hours.
Note: Open by permission of the department only.

FA/DANC 1208 2.25 Ballet Technique. A
continuation of work begun in FA/DANC 1206 2.25 in ballet. Emphasizes integrated movement, alignment, classical ballet vocabulary, artistic expression as well as the creative process. Five hours.
Note: Open by permission of the department only.

FA/DANC 1215 2.25 Modern Technique. Introductory course in modern dance. Emphasizes integrated movement, alignment, modern dance vocabulary, artistic expression, as well as the creative process. Required of all Dance majors. Five hours.
Corequisite: FA/DANC 1205 2.25.
FA/DANC 1216 2.25 Modern Technique. Introductory course in modern dance. Emphasizes integrated movement, alignment, modern dance vocabulary, artistic expression, as well as the creative process. Required of all Dance majors. Five hours.
Prerequisite: FA/DANC 1215 2.25.
Corequisite: FA/DANC 1206 2.25.

FA/DANC 1217 2.25 Modern Technique. A continuation of work begun in FA/DANC 1215 2.25 in modern dance. Emphasizes integrated movement, alignment, modern dance vocabulary, artistic expression, as well as the creative process. Five hours.
Note: Open by permission of the department only.

FA/DANC 1218 2.25 Modern Technique. A
continuation of work begun in FA/DANC 1216 2.25 in modern dance. Emphasizes integrated movement, alignment, modern dance vocabulary, artistic expression, as well as the creative process. Five hours.
Note: Open by permission of the department only.

FA/DANC 1220 1.5 Improvisation. An
introduction to theory and practice in improvisation with a focus on the creative process in dance. Required of all Dance majors. Open only to Dance majors and minors. Three hours.

Corequisite: Enrolment in dance technique.
FA/DANC 1270 3.0 Dance Production. An introduction to the fundamentals of lighting design and stagecraft for dance, this course is taught with FA/THEA 1100 6.0 Stagecraft I. Lighting design, costume design, stage management, sound, front of house management, or publicity may be covered. Course includes crew work on department productions. Theatre majors and Dance majors attend the same lecture and separate labs. Required of all Dance majors. Open only to Dance majors and minors. Three hour lecture or lab each term.
Degree credit exclusions: FA/THEA 1100 3.0, FA/ THEA 1100 6.0, FA/THEA 1510 3.0.

FA/DANC 1320 1.5 Conditioning for Dancers.
A practical introduction to the fundamentals of physical conditioning for dancers. Injury prevention will be emphasized through applications of imagery, release, alignment, stretch and strength techniques, and movement re-education. Required of all first year Dance majors. Open only to Dance majors and minors. Three hours.
Corequisite: Enrolment in dance technique.
FA/DANC 1340 3.0 Introduction to Dance
Studies. An exploration of contemporary themes and issues in dance using current approaches to research and theory. Required of all Dance majors. Four hours.
Note: Open to non-majors with departmental permission.

FA/DANC 1500 6.0 The Dance Experience (Lecture/Studio). Studio and theoretical work in a variety of movement techniques especially designed for the non-major student. Not open to Dance majors. Two hours studio, one and one half hours lecture. Note: May include improvisations, presentation of individual or group projects, reading, films, guest speakers, and attendance at live performances. Audition not required.

FA/DANC 2205 2.25 Ballet Technique. Ballet technique for Dance majors. Ongoing training develops artistic expression, classical ballet vocabulary, musicality, and performance skills. Required of all Dance majors. Five hours. Prerequisite: FA/DANC 12062.25 and permission of the department. Admission is by juried audition.
Corequisite: FA/DANC 2215 2.25.
FA/DANC 2206 2.25 Ballet Technique. Ballet technique for Dance majors. Ongoing training develops artistic expression, classical ballet vocabulary, musicality, and performance skills. Required of all Dance majors. Five hours.
Prerequisite: FA/DANC 2205 2.25.
Corequisite: FA/DANC 2216 2.25.
FA/DANC 2207 2.25 Ballet Technique. A continuation of work begun in FA/DANC 2205 2.25. Ongoing training in ballet to develop artistic expression, classical ballet vocabulary, musicality and performance skills. Five hours.
Note: Open by permission of the department only.

FA/DANC 2208 2.25 Ballet Technique. A continuation of work begun in FA/DANC 2206 2.25. Ongoing training in ballet to develop artistic expression, classical ballet vocabulary, musicality, and performance skills. Five hours.
Note: Open by permission of the department only.

FA/DANC 2215 2.25 Modern Technique. Modern dance technique for Dance majors. Ongoing training develops artistic expression, modern dance vocabulary, musicality, and performance skills. Required of all Dance majors. Five hours.
Prerequisite: FA/DANC 12162.25 and permission of the department. Admission is by juried audition.
Corequisite: FA/DANC 2205 2.25.
FA/DANC 2216 2.25 Modern Technique. Modern dance technique for Dance majors. Ongoing training develops artistic expression, modern dance vocabulary, musicality, and performance skills. Required of all Dance majors. Five hours.
Prerequisite: FA/DANC 2215 2.25.
Corequisite: FA/DANC 2206 2.25.
FA/DANC 2217 2.25 Modern Technique. A continuation of work begun in FA/DANC 2215 2.25. Ongoing training in modern to develop artistic expression, modern dance vocabulary, musicality and performance skills. Five hours.
Note: Open by permission of the department only.

FA/DANC 2218 2.25 Modern Technique. A continuation of work begun in FA/DANC 2216 2.25. Ongoing training in modern to develop artistic expression, modern dance vocabulary, musicality, and performance skills. Five hours.
Note: Open by permission of the department only.

FA/DANC 2225 3.0 Dance Composition I. Introductory study of the basic principles of dance composition; both practical movement studies and analytic/critical work will be employed to explore the creative process, and to begin to develop the craft and skills of choreography. Required of all Dance majors. Four and one-half hours.
Prerequisite: FA/DANC 1205 2.25, FA/DANC 1206 2.25, FA/DANC 1215 2.25, and FA/ DANC 1216 2.25.
Corequisite: Current enrolment in dance technique.

FA/DANC 2226 3.0 Dance Composition II. Further study of the basic principles of dance composition; development of studies toward completed works, and examination of production and performance as it relates to choreography. Continued analytic/critical work of choreographed dances. Four and one-half hours.
Prerequisite: FA/DANC 2225 3.0.
Corequisite: Current enrolment in dance technique.

FA/DANC 2320 1.5 Dance Kinesiology. An introduction to the field of dance kinesiology, and the analysis of movement from a scientific perspective. Correct and efficient movement patterns for dance technique are discussed through the examination of the muscular/ skeletal system and its functions. Study includes identification of common muscle imbalances that impede good alignment, and the optimal execution of dance technique. Required of all Dance majors. Open only to Dance majors. One hour per week, both fall and winter.
Prerequisites: FA/DANC 1206 2.25, FA/DANC 1216 2.25, and FA/DANC 13201.5.
Corequisite: Enrolment in dance technique. Prerequisite or corequisite: SC/NATS 16206.0 or SC/NATS 1650 6.0.

FA/DANC 2340 3.0 Dance History. An
examination of the religious, social, cultural, political, and performative functions of dance in western and non-western history. Required of all Dance majors. Four hours.
Note: Open to non-majors with departmental permission.

FA/DANC 2355 3.0 Music for Dancers I. Combined theoretical studies and studio work which emphasize an integrated approach to music and dance. Development of skills relating to rhythm, music notation, musical form and style, through movement and library projects, and listening assignments. Required of all Dance majors. Open to non-Dance majors by permission of the course director. Three hours.

FA/DANC 2356 3.0 Music for Dancers II. Continuing theoretical studies and studio work in music for dancers, which emphasize an integrated approach to music and dance. The course works on the development of skills relating to complex rhythms, melody, vocalization and music notation. Lectures,
group exercises, demonstrations, and listening and movement assignments. Not open to Music majors. Three hours.
Prerequisite: FA/DANC 23553.0 or permission of the course director.

FA/DANC 2360 3.0 Movement Analysis I. A first course in the theory and practice of movement analysis focusing on the Laban Notation system and/or effort/shape analysis. Emphasis on developing reading and observation skills. Required of all Dance majors. Three hours.

## Pre/corequisite: FA/DANC 2355 3.0.

Degree credit exclusions: FA/DANC 33603.0 and FA/DANC 3365 3.0.

FA/DANC 2390 3.0, FA/DANC 23926.0 Special Options. A half- or full-year studies course at the second-year level, concentrating on dance activity of a specified period or genre. Topics are announced in the spring. This course may be offered in an intensive or standard format.

## FA/DANC 3205 1.5 Ballet Technique.

Ballet technique for Dance majors. Ongoing training develops artistic expression, classical ballet vocabulary, musicality, and athleticism. Required of all Dance majors. Four hours.
Prerequisite: FA/DANC 2206 2.25, and permission of the department. Admission is by juried audition.
Corequisite: FA/DANC 3215 3.0.

## FA/DANC 3206 1.5 Ballet Technique.

Ballet technique for Dance majors. Ongoing training develops artistic expression, classical ballet vocabulary, musicality, and athleticism. Required of all Dance majors. Four hours.
Prerequisite: FA/DANC 3205 1.5.
Corequisite: FA/DANC 3216 3.0.
FA/DANC 3207 1.5 Ballet Technique. A continuation of work begun in FA/DANC 3205 1.5. Ongoing training in ballet to develop artistic expression, classical ballet vocabulary, musicality, and athleticism. Four hours.
Note: Open by permission of the department only.

FA/DANC 3208 1.5 Ballet Technique. A continuation of work begun in FA/DANC 3206 1.5. Ongoing training in ballet to develop artistic expression, classical ballet vocabulary, musicality, and athleticism. Four hours.
Note: Open by permission of the department only.

FA/DANC 3215 3.0 Modern Technique. Modern dance technique for Dance majors. Ongoing training develops artistic expression, modern dance vocabulary, musicality, and athleticism. Required of all Dance majors. Six hours.
Prerequisite: FA/DANC 2216 2.25, and permission of the department. Admission is by juried audition.
Corequisite: FA/DANC 3205 1.5.

FA/DANC 3216 3.0 Modern Technique. Modern dance technique for Dance majors. Ongoing training develops artistic expression, modern dance vocabulary, musicality, and athleticism. Required of all Dance majors. Six hours.
Prerequisite: FA/DANC 3215 3.0.
Corequisite: FA/DANC 3206 1.5.
FA/DANC 3217 3.0 Modern Technique. A continuation of work begun in FA/DANC 3215 3.0. Ongoing training in modern to develop artistic expression, modern dance vocabulary, musicality and athleticism. Six hours.
Note: Open by permission of the department only.

FA/DANC 3218 3.0 Modern Technique. A continuation of work begun in FA/DANC 3216 3.0. Ongoing training in modern to develop artistic expression, modern dance vocabulary, musicality, and athleticism. Six hours.
Note: Open by permission of the department only.

## FA/DANC 3220 3.0 Choreography.

Selected projects in choreography with continued work in structure and forms, and an increased focus on development of individual interests and style. Continued work in production, performance, and criticism as related to choreography. Four and one half hours.
Prerequisite: FA/DANC 2226 3.0.
Corequisite: Current enrolment in dance technique.

FA/DANC 3235 3.0 Repertory/ Reconstruction I. The first course in the study and performance of original or reconstructed choreographic works in a rehearsal and presentation setting. Rehearsal time outside of the course meetings will be scheduled close to performance dates. Four and one-half hours.
Corequisite: Current enrolment in dance technique.

FA/DANC 3236 3.0 Repertory/ Reconstruction II. The second course in the study and performance of original or reconstructed choreographic works in a preprofessional rehearsal and presentation setting. The course provides opportunity to work closely with an experienced choreographer or recreator and to bring the work to a performance level. Rehearsals outside of the course meetings will be scheduled close to performance dates. Four and one-half hours.
Corequisite: Current enrolment in dance technique.

FA/DANC 3240 3.0 Dance Ensemble Apprenticeship. An enriched performance/ production experience for highly motivated third year Dance majors wishing to concentrate on the performance and/or production areas. Students are required to commit to an intensive schedule, including evening rehearsals and out-of-town performances. Ensemble apprentices will
focus on one or more aspects of dance company activity, which include performance, choreography, tour management, production support, and publicity. Students in FA/DANC 3240 are expected to continue with FA/DANC 4245/4246 Dance Ensemble in the following year. Admission is by juried audition. A minimum of six hours/week, both Fall and Winter terms.
Corequisites: Performers must be enrolled in FA/DANC 3205 1.5, FA/DANC 3206 1.5, FA/ DANC 3215 3.0, and FA/DANC 3216 3.0.

FA/DANC 3320 3.0 Body Therapy. Experiential and theoretical study of selected body therapies and approaches to movement re-education, such as Bartenieff Fundamentals, Alexander Technique, Feldenkrais Movement Awareness, Ideokinesis, and Pilates-based exercise. Lectures/studio, projects, demonstrations. Four hours.
Prerequisite: SC/NATS 16206.0 or SC/NATS 1650 6.0.

FA/DANC 3321 3.0 Prevention and Care of Dance Injuries. An examination of prevention, recognition and treatment of dance injuries. Specific study of proper vs. improper technique and its correlation to resultant injuries. Follow-up remedial procedures and therapeutic modalities to enhance healing are also studied. Required of all upper-level Dance majors. Two hours per week, both fall and winter.
Prerequisites: SC/NATS 16206.0 or SC/NATS 1650 6.0, and FA/DANC 2320 1.5.

FA/DANC 3330 3.0 Dance Mosaic (Lecture/ Studio). This course examines dance as a human phenomenon that both reflects and shapes culture. Through readings, films, lectures, discussions and guest artists, students are introduced to a variety of dance forms from different traditions. The course examines the place of dance in its own cultural setting as well as approaching issues facing dance in a multi-ethnic society. Required of all Dance majors. Open to non-majors. Two hours lecture, one hour lab.
Degree credit exclusions: FA/DANC 23903.0 taken in 1991/92 or 1993/94, FA/DANC 3390 3.0 taken in 1994/95, FA/DANC 23303.0 taken in 1995/96.

FA/DANC 3370 3.0 Dance Pedagogy. Methods and materials associated with teaching dance technique to the adolescent and the adult. The lecture/studio portion of the course is augmented by assisting or observing a series of dance classes. Four hours plus practicum.
Prerequisite: SC/NATS 16206.0 or SC/NATS 1650 6.0.

FA/DANC 3380 3.0 Dance Therapy. An
introduction for the upper-level student to the professional field of dance therapy. The intention is to develop a basic understanding of the interrelationship between psychological states and their body expression. Lecture/ demonstrations, in-class presentations, and a clinical tour. Three hours.

Prerequisites: AS/PSYC 1010 6.0, or AS/ PSYC 2110 3.0, or AS/PSYC 2130 3.0, or permission of the course director.

FA/DANC 4205 1.5 Ballet Technique. Ballet technique for Dance majors. Ongoing training refines artistic expression classical ballet vocabulary, musicality, and athleticism. Optional for all Dance majors. Four hours.
Prerequisite: FA/DANC 3206 1.5, and permission of the department. Admission is by juried audition.

FA/DANC 4206 1.5 Ballet Technique. Ballet technique for Dance majors. Ongoing training refines artistic expression, classical ballet vocabulary, musicality, and athleticism. Optional for all Dance majors. Four hours.
Prerequisite: FA/DANC 4205 1.5.
FA/DANC 4207 1.5 Ballet Technique. A
continuation of work begun in FA/DANC 4205 1.5. Ongoing training in ballet to refine artistic expression, classical ballet vocabulary, musicality, and athleticism. Four hours.
Note: Open by permission of the department only.

FA/DANC 4208 1.5 Ballet Technique. A
continuation of work begun in FA/DANC 4206 1.5. Ongoing training in ballet to refine artistic expression, classical ballet vocabulary, musicality, and athleticism. Four hours.

Note: Open by permission of the department only.

FA/DANC 4215 3.0 Modern Technique. Modern dance technique for Dance majors. Ongoing training refines artistic expression, modern dance vocabulary, musicality, and athleticism. Optional for all Dance majors. Six hours.
Prerequisites: FA/DANC 3216 3.0, and permission of the department. Admission is by juried audition.

FA/DANC 4216 3.0 Modern Technique. Modern dance technique for Dance majors. Ongoing training refines artistic expression, modern dance vocabulary, musicality, and athleticism. Optional for all Dance majors. Six hours.
Prerequisites: FA/DANC 4215 3.0.
FA/DANC 4217 3.0 Modern Technique. A continuation of work begun in FA/DANC 4215 3.0. Ongoing training in modern to refine artistic expression, modern dance vocabulary, musicality, and athleticism. Six hours.
Note: Open by permission of the department only.
FA/DANC 4218 3.0 Modern Technique. A continuation of work begun in FA/DANC 4216 3.0. Ongoing training in modern to refine artistic expression, modern dance vocabulary, musicality, and athleticism. Six hours.
Note: Open by permission of the department only.
FA/DANC 4220 3.0 Choreography. Selected projects in choreography with an emphasis on interdisciplinary productions, and continued work on structure and form. Increased focus on the development of individual interests and style in
choreography. Designed for highly motivated creative individuals. The course requires students to commit themselves to preperformance and performance schedules related to productions of their work. Lectures/ presentations/performances. Four and one half hours.

Prerequisite: FA/DANC 2225 3.0, FA/DANC 2226 3.0, and FA/DANC 32203.0 for Dance majors. This course is open to other qualified third or fourth year Fine Arts students by permission of the course director only.

Corequisite: For Dance majors, current enrolment in dance technique.

FA/DANC 4245 3.0 Dance Ensemble I. An enriched performance/production experience for highly motivated upper-level Dance majors wishing to concentrate on the performance and/or production areas. Students are required to commit to an intensive schedule, including evening rehearsals and out-of-town performances. Ensemble members will focus on one or more aspects of dance company activity, which include performance, choreography, tour management, production support, and publicity. This course may be repeated for credit by permission of the course director. Students in FA/DANC 42453.0 are expected to continue with FA/DANC 4246 3.0. Admission is by juried audition. Open to other Fine Arts majors by permission of the course director. Due to the heavy rehearsal schedule, there is a minimum of twelve hours/week.
Corequisite: Performers must be enrolled in FA/DANC 4205 1.5 Ballet Technique and FA/ DANC 4215 3.0 Modern Technique.

FA/DANC 4246 3.0 Dance Ensemble II. The continuation of FA/DANC 4245 3.0, an enriched performance/production experience for highly motivated upper-level Dance majors wishing to concentrate on the performance and/or production areas. Students are required to commit to an intensive schedule, including evening rehearsals and possible out-of-town performances. Ensemble members will focus on one or more aspects of dance company activity, which include performance, choreography, tour management, production support, and publicity. This course may be repeated for credit, by permission of the course director. Due to the heavy rehearsal schedule, there is a minimum of twelve hours/week.

## Prerequisite: FA/DANC 4245 3.0.

Corequisite: Performers must be enrolled in FA/DANC 4206 1.5 Ballet Technique and FA/ DANC 4216 3.0 Modern Technique.

FA/DANC 4250 3.0, FA/DANC 4251 3.0, FA/ DANC 4252 6.0 Special Projects. Fourthyear studio courses designed to provide students with an opportunity to reconstruct excerpts of established repertoire or to work on new compositions. Projects are announced in the spring. This course may be offered in an intensive or standard format.

Note: Open to qualified students by permission of the course director.

FA/DANC 4280 3.0 Jazz Dance. Introduction and practice of jazz dance technique which reflects North American culture. Styles of jazz dance that may be covered are Broadway, funk, street, lyrical, and theatre dance. A theoretical component will involve the study of historical and cultural aspects of the North American jazz dance vernacular. Open to nonmajors by permission of the instructor. Four hours.
Prerequisites: FA/DANC 1205 2.25, FA/DANC 1206 2.25, FA/DANC 1215 2.25, FA/DANC 1216 2.25, and FA/DANC 1340 3.0.
Degree credit exclusions: FA/DANC 43903.0 or FA/DANC 4390A 3.0 Special Options: Jazz Dance.

FA/DANC 4285 3.0 Indian Dance I. An introduction to the practice and theory of Classical East Indian dance with reference to various styles. The course presents an integrated approach to rhythmics and movements of Indian Dance for those with previous movement training. Open to nonmajors with permission of the course director. Four hours studio lab/lecture per week.
Prerequisites: FA/DANC 12062.25 and FA/ DANC 1216 2.25, or prior training in a classical Indian music or dance form and permission of the course director.

Degree credit exclusion: FA/DANC 4390C 3.0.
FA/DANC 4310 3.0 Dance Writing. This
seminar focuses on reading selected historical and contemporary writing about dance, and it provides practical experience in critical, journalistic, and promotional writing. Three hours.
Prerequisites: FA/DANC 1340 3.0, FA/DANC 23403.0 or equivalents.

Note: Open to non-majors with permission of the course director.

FA/DANC 4330 3.0 Anthropology of Dance in Canada. A survey of classical, folk, tribal and social dance traditions within the Canadian cultural context. Open to nonmajors. Four hours.
Prerequisite: FA/DANC 33303.0 or equivalent, and third or fourth year standing, or permission of the course director.

FA/DANC 4340 3.0 Topics in Historical or Cultural Dance Style. Practical and theoretical studies in historical or cultural dance style from a historical or ethnological perspective. The study of style in movement as it reflects a culture or a period of history is a central issue in dance scholarship. Methodologies of describing, recording, and interpreting movement patterns in context are emphasized. Topics are announced each year in the spring. Open to non-majors. Four hours.
Prerequisite: FA/DANC 33303.0 or equivalent, and third or fourth year standing, or permission of the course director.

FA/DANC 4345 3.0 Canadian Dance History. An investigation of selected periods, people, cultural, social and political events in the development of Canadian dance during the nineteenth and twentieth centuries.

Prerequisites: FA/DANC 2340 3.0, and third or fourth year standing, or permission of the course director.

FA/DANC 4360 3.0 Movement Analysis II. This course concentrates on developing a good reading knowledge and vocabulary expansion at intermediate and advanced levels. Readings are undertaken in various dance styles. Writing exercises emphasize analysis of movement. Three hours
Prerequisite: FA/DANC 23603.0 or FA/DANC 33603.0 or FA/DANC 3365 3.0.

FA/DANC 4370 1.5 Mentoring Practicum. A course for fourth year dance majors designed to develop practical teaching skills through mentoring and coaching entering students in the Department of Dance. Students create and implement individual programmes through observation, analysis, and communication. Required of all Dance majors. Open only to Dance majors. Two hours.
Prerequisites: FA/DANC 3205 1.5, FA/DANC 3206 1.5, FA/DANC 3215 3.0, FA/DANC 3216 3.0, FA/DANC 3321 3.0, and FA/DANC 3320 3.0 or FA/DANC 3370 3.0.

Corequisite: Current enrolment in dance technique.

FA/DANC 4375 3.0 Dance and the Child I. Theories, tools, and applications for teaching dance to children (ages 3-6). Three hours lecture/studio, two hours practicum.
Prerequisites: FA/DANC 2206 2.25, FA/DANC 2216 2.25, and AS/PSYC 21103.0 or AS/ PSYC 3410 3.0, or permission of the course director.

FA/DANC 4376 3.0 Dance and the Child II. Theories, tools and applications for teaching dance to children (ages 7-12). Three hours lecture/studio, two hours practicum.
Prerequisites: FA/DANC 2206 2.25, FA DANC 2216 2.25, and AS/PSYC 21103.0 or AS/ PSYC 3410 3.0, or permission of the course director.

FA/DANC 4390 3.0, FA/DANC 4391 3.0, FA/ DANC 4392 6.0 Special Options. Fourthyear studies or studio courses concentrating on dance activity of a specified period or genre. Topics are announced in the Lecture Schedule in the spring. May be offered in an intensive or standard format.

Note: Open to qualified students by permission of the course director.

FA/DANC 4400 3.0 Senior Projects. This course provides fourth-year students with the opportunity to pursue individual fields of study not provided by the regular curriculum. Projects may consist of research on a topic of interest (theoretical or creative), or an internship with an external organization.
Prerequisite: Fourth year standing.
FA/DANC 4401 3.0, FA/DANC 44026.0 Independent Studies. A study program for highly motivated students; this course gives the individual an opportunity to pursue a
specific and intensive personal study in an area in which regular courses are not available.
Note: Open by application to the Department of Dance.

## Design - Fine Arts at York, Sheridan College

Department of Design, York University:
283 Winters College, (416) 736-5885
Associate Professor and Chair of the Department:
D. Newgren

Professors:
A. Tomcik

Associate Professors:
D. Scadding

Assistant Professors:
C-K. J. Peng
Visiting Assistant Professor:
V. Janczak

Department of Design, Sheridan College: A100 Sheridan-Trafalgar, (905) 845-9430, ext. 2579
Chair of the Department: M. Large

Design Program Coordinator:
Li
Professors:
M. A. Maruska, E. Naus, B. Ross, B. Tsang

## Program of Study

The Honours Bachelor of Design Program, which provides a professional education in a humanistic context, is jointly run by the design departments of York University and Sheridan College. Students in the Bachelor of Design Honours program enrol in courses at both institutions. This new design degree (the first in Ontario) replaces the former Bachelor of Fine Arts - Design Stream offered by the Visual Arts department at York University and the Diploma in Graphic Design offered by Sheridan College. The joint program offers a comprehensive, intensive and professional education in communication design and a curriculum that reflects the distinct theoretical, research and practicum focus and needs of the design profession and the emerging standards of the Registered Graphic Designers of Ontario. Students in the program benefit from small studio/practicum classes, design studies classes and an internship program. The design practicum courses focus on three major areas of design: Communications, Information, and Interactive/Multimedia Design; the Design Studies courses provide an integrated approach to design history, research and theory, design management, and critical issues in design.
For information on supplementary evaluation requirements and programme requirements, please refer to the Faculty of Fine Arts section of this calendar.

## Courses in Design

FA/YSDN 1001 3.0 Visual Language. The elements and principles comprising a visual language are examined and explored on the twodimensional level through various projects. The visual language developed is equally applicable to design and studio oriented projects and investigations. Required course for foundation studies in Design. For students not in the BDes program, compulsory and voluntary supplementary fees apply. (Same as FA/VISA 2041 3.0.)

Note: Available to non-BDes students by permission of the course director. Students should have Basic Computer Literacy skills as defined by the Faculty of Fine Arts.

FA/YSDN 1002 3.0 Design and Image. The process of creating representational, graphic and abstract images in the context of visual communication design is examined. Different methods of generating and manipulating images are investigated. Consideration is given to form and content of images as well as to their potential for the communication of ideas. The skills developed are equally applicable to design and studio oriented projects. Required course for foundation studies in Design. For students not in the BDes program, compulsory and voluntary supplementary fees apply. (Same as FA/VISA 2044 3.0.)
Prerequisite: FA/YSDN 10013.0 or FA/VISA 20413.0 with a grade of $C+$ or better, or permission of the course director.
Note: Students should have basic computer literacy skills as defined by the Faculty of Fine Arts.

FA/YSDN 1003 3.0 3D Design. The
elements and principles of three-dimensional design are examined and applied through various projects. Communication of threedimensional concepts through drawn projections is introduced. These concepts are relevant to many studio areas. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Note: Students should have Basic Computer Literacy skills as defined by the Faculty of Fine Arts.

FA/YSDN 1004 3.0 Design \& Colour. Colour perception, systems of classification and the nature of light, pigment and colour materials are studied through a series of studio exercises. Students complete a number of projects emphasizing the creative use of colour in a variety of materials, and study the use of colour by designers and artists in various periods. For students not in the BDes program, compulsory and voluntary supplementary fees apply.

FA/YSDN 1101 3.0 Critical Issues in Design. An introduction to the cultural, practical, technological and contextual issues facing designers today by examining works and readings from our day in the various fields of Design. Required course for foundation studies in Design. (Same as FA/VISA 1040 3.0.)

Note: Also available to non-majors. Students should have Basic Computer Literacy skills as defined by the Faculty of Fine Arts.
Degree credit exclusions: FA/VISA 1000 3.0, FA/VISA 10403.0 and the former FA/VISA 2047 3.0.

FA/YSDN 2002 3.0 Typography 1. An
introduction to the history and development of the typographic system through the traditional procedures of hand-setting and proofing techniques. Contemporary techniques of computer-driven typesetting and production of visual communications are developed. For students not in the YSDN program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program.
Prerequisites: FA/YSDN 10013.0 or FA/VISA 2041 3.0, and FA/YSDN 10023.0 or FA/VISA 2044 3.0, with a C+ or better in each, or permission of the course director.
Degree credit exclusions: FA/VISA 2013 3.0, FA/VISA 3013 6.0.

FA/YSDN 2003 3.0 Typography 2. An
extended investigation into the history, principles and application of contemporary typographic problems, in printed and virtual environments. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program.
Prerequisite: A minimum of 12 credits in design practicum including FA/YSDN 20023.0 (formerly FA/VISA 2013 3.0), and a B average in all design practicum courses taken, or permission of the course director.
Degree credit exclusion: FA/VISA 3013 6.0.
FA/YSDN 2004 Design \& Behaviour 1. An
introduction into the multi-disciplined approach to solving design problems. Various communication and learning theories are integrated into the design process, assisting student development in a multi-disciplined approach to design. Design projects focus on two-dimensional problems. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program.
Prerequisites: FA/YSDN 10013.0 or FA/VISA 2041 3.0, and FA/YSDN 10023.0 or FA/VISA 2044 3.0, with a grade of C+ or better in each, or permission of the course director.
Degree credit exclusions: FA/VISA 2040 3.0, FA/ VISA 3040 6.0.

FA/YSDN 2005 3.0 Design \& Systems 1. The micro-computer is used to investigate various systems or ways of seeing and organizing visual information (mathematical models, natural phenomena, grid systems, etc.). Your knowledge, skill and understanding of how the computer as a tool fits into the larger process of design as a problem-solving activity is developed. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program.

Prerequisites: FA/YSDN 10013.0 or FA/VISA 2041 3.0, and FA/YSDN 10023.0 or FA/VISA 2044 3.0, with a grade of C+ or better in each, or permission of the course director.

FA/YSDN 2006 3.0 Design \& Perception.
An examination of the perception of visual information and communication on three distinct levels: representational, symbolic and abstract. Visual concepts of proximity, similarity, and figure/ground relationships are examined. Introduction to basic communication models, perception theories and symbiotic provide a theoretical foundation for the studio problems. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: FA/YSDN 10013.0 or FA/VISA 2041 3.0, and FA/YSDN 10023.0 or FA/VISA 2044 3.0, with a grade of C+ or better in each, or permission of the course director.

FA/YSDN 2102 6.0 History of Design. Functional objects, past and present, and their relationship to the process of design, conditions of the time, the problems met, important influences and the importance to our time are examined. The primary focus is from the industrial revolution to today with required reading and much critical looking at our own environment. Required course for students in the BDes program. (Same as FA/VISA 2910 6.0.)

Prerequisite: FA/YSDN 11013.0 or FA/VISA 10403.0 or FA/VISA 10003.0 or permission of the course director.
Degree credit exclusion: the former FA/VISA 3910 6.0.

FA/YSDN 2103 3.0 Research in Design. An identification and examination of the various aspects of conducting original survey research in support of the problem-solving process utilized in contemporary visual communication design. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program. This course is required as a partial prerequisite for students wishing to enter 4000-level design.
Prerequisite: FA/YSDN 11013.0 (or FA/VISA 1040 3.0) or FA/VISA 10003.0 with a grade of C+ or better, or permission of the course director.
Degree credit exclusion: the former FA/VISA 4041 3.0.

FA/YSDN 3001 3.0 Design Options: Practicum. In any given year, one or more courses involving traditional and nontraditional approaches to the practice of design may be offered by the Department of Design. Information on selected topics is available in the Department of Design Handbook. For students not in the BDes program, compulsory and voluntary supplementary fees may apply.
Prerequisite: Third or fourth year standing and permission of the course director.

FA/YSDN 3002 3.0 Typography 3. A
continued in-depth investigation into contemporary explorations and applications of typographic principles, information theories,
history and various approaches to solving visual communication problems. Print, digital and environmental/broadcast distribution processes are investigated. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisites: FA/YSDN 20023.0 (formerly FA/VISA 2013 3.0) and FA/YSDN 20033.0 (formerly FA/VISA 3013 3.0) with a B or better in each, or permission of the course director.

## FA/YSDN 3003 3.0 Typography 4. A

continued in-depth investigation into contemporary explorations and applications of typographic principles, information theories, history and various approaches to solving visual communication problems. This course focuses on computer and electronic broadband distribution processes. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisites: FA/YSDN 30023.0 with a B or better, or permission of the course director.

FA/YSDN 3004 3.0 Design \& Behaviour 2. A continued investigation into the multidisciplined approach to solving design problems. Various communication and learning theories are integrated into the design process, assisting student development in a multi-disciplined approach to design. Design projects focus on two-and three-dimensional problems. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: A minimum of 12 credits in design practicum courses at the 2000 level including FA/YSDN 20043.0 (formerly FA/VISA 2040 3.0) and a $B$ average in all design practicum courses taken, or permission of the course director.
Corequisite: FA/YSDN 31033.0 (formerly FA/ VISA 3921 1.5).

Degree credit exclusion: FA/VISA 3040 6.0.
FA/YSDN 3005 3.0 Design \& Systems 2. A continued investigation into complex problem solving which emphasizes the application of systematic design methods. Individual and team problem-solving techniques are utilized to identify and analyze problems, develop content, evaluate solutions and produce prototypes at the system level. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: A minimum of 12 credits in design practicum courses at the 2000 level including FA/YSDN 20053.0 (formerly FA/VISA 2045 3.0) and a $B$ average in all design practicum courses taken, or permission of the course director.

Corequisite: FA/YSDN 31033.0 (formerly FA/ VISA 3921 1.5).

FA/YSDN 3006 3.0 Design \& Information Architecture. Students broaden their knowledge and understanding of the conceptual principles of organizational structures and methodologies involved in the presentation of information in virtual environments. In a series of projects, students explore various types of data and structural
organization models of information. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: A minimum of 12 credits in design practicum courses at the 2000 level including FA/YSDN 20053.0 (formerly FA/VISA 2045 3.0) and a $B$ average in all design practicum courses taken, or permission of the course director.
Corequisite: FA/YSDN 31033.0 (formerly FA/ VISA 3921 1.5).

FA/YSDN 3007 3.0 Information Design 1. The relevant theories and methodologies which allow the designer to prioritize, simplify, and creatively visualize a wide range of complex textural and visual information are examined and applied. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: A minimum of 12 credits in design practicum courses at the 2000 level including FA/YSDN 20023.0 (formerly FA/VISA 2013 3.0) and a $B$ average in all design practicum courses taken, or permission of the course director.

Corequisite: FA/YSDN 31033.0 (formerly FA VISA 3921 1.5).

FA/YSDN 3008 3.0 Information Design 2. A further and extended investigation into the relevant theories and methodologies which allow the designer to prioritize, simplify, and creatively visualize a wide range of complex textual and visual information. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisites: FA/YSDN 30073.0 and a B average in all design practicum courses taken, or permission of the course director.

FA/YSDN 3102 3.0 Contemporary Problems in Design. An identification and examination of the development of the various roles that design and designers play in the solving of visual problems in today's rapidly changing society. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program. This course is required as a partial prerequisite for students wishing to enter 4000-level design.
Prerequisite: FA/YSDN 21033.0 (formerly FA/ VISA 2920 3.0) (formerly FA/VISA 4041 3.0) with a grade of $\mathrm{C}+$ or better or permission of the course director.
Corequisite: FA/YSDN 31033.0 (formerly FA/ VISA 3921 1.5).

Degree credit exclusion: FA/VISA 4042 3.0.
FA/YSDN 3103 3.0 Professional Aspects of Design. A detailed investigation and critical examination of the professional duties/ responsibilities, ethics and practices currently conducted by the design community. The areas of copyright, intellectual property rights, business practices, accountability, presentation techniques, portfolio interview etc. will be discussed in an involving and interactive seminar. For students not in the

BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program.
Corequisite: At least one 3000/4000 level practicum course in the Department of Design.

FA/YSDN 4002 3.0 Type Explorations. A continued in-depth investigation into contemporary explorations and applications of typographic principles, information theories, history and various approaches to solving visual communication problems. Print, digital and environmental/broadcast distribution processes are investigated. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: FA/YSDN 20023.0 (formerly FA/ VISA 2013 3.0) and FA/YSDN 20033.0 (formerly FA/VISA 3013 3.0) with a B or better in each or permission of the course director.

FA/YSDN 4003 3.0 Interactive System Design. An advanced investigation into systems - intuitive and learned - that support human activities via interactive communication and distribution networks. An understanding of these communication/distribution methods working in reciprocal fashion from users to the computer and back, is presented. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisite: 12 credits in design practicum at the 2000-level with a B average, including FA/ YSDN 20053.0 (formerly FA/VISA 2045 3.0), or permission of the course director.

FA/YSDN 4004 6.0, FA/YSDN 4004 9.0, FA/ YSDN 4004 12.0 Design Workshop.
Students develop a series of self-directed projects using a multidisciplined approach in solving two-dimensional, three-dimensional, and interactive digital design problems. The final weighting of course credit is assigned through adjudication by a departmental committee, based on the student's project proposal. For students not in the BDes program, compulsory and voluntary supplementary fees apply. Required course for students in the BDes program at a minimum of 6.0 credits.

Prerequisite: A minimum of 6 credits in design practicum at the 3000-level; FA/YSDN 2103 3.0 (formerly FA/VISA 2920 3.0) and FA/YSDN 31023.0 (formerly FA/VISA 3920 3.0), with a grade of $C+$ or better in each, or permission of the course director.

FA/YSDN 4005 3.0 Design Internship. This course provides students with an opportunity to experience the work environment in the design profession and facilitates the transition of design students to the profession. Full-time participation is required for three weeks at a design studio, design department of a corporation or agency approved by the Department of Design.
Prerequisites: A minimum of 15 credits in design practicum and FA/YSDN 31033.0 (formerly FA/VISA 3921 1.5) with a B or better in each, or permission of the course director.

FA/YSDN 4102 3.0 Design Management. This course examines the theories and practice of the management of the design process in contemporary organizations. Through the study of case histories and presentations by visiting speakers from industry, students acquire a grounding in the business context for design decision making. Projects require research, critical analysis and the creation of reports and presentations. For students not in the BDes program, compulsory and voluntary supplementary fees apply.
Prerequisites: FA/YSDN 31033.0 (formerly FA/VISA 3921 1.5).

FA/YSDN 4900 3.0, FA/YSDN 49006.0 Independent Studies: Design Practicum. An individualized study programme for highly motivated students in their final year of study who wish to pursue specific and intensive independent practicum projects under the supervision of a faculty member on topics not available in other courses in the department. No more than one independent study course may be taken in any given year. Compulsory and voluntary supplementary fees may apply.
Prerequisite: A 4000-level studio practicum in the media area being proposed, an overall major average of $B+$, and permission of the department.
Note: Applications are available in the spring for the following academic session. Applications must include written support of faculty supervisor prior to submission to the department for approval.

FA/YSDN 4901 3.0, FA/YSDN 49016.0 Independent Studies: Design Studies. An individualized study programme for highly motivated students in their final year of study who wish to pursue specific and intensive independent studies projects under the supervision of a faculty member on topics not available in other courses in the department. No more than one independent study course may be taken in any given year. Compulsory and voluntary supplementary fees may apply.
Prerequisite: Completion of at least 18 credits in design studies, an overall major average of $B_{+}$, and permission of the department.
Note: Applications are available in the spring for the following academic session. Applications must include written support of faculty supervisor prior to submission to the department for approval.
Note: Courses taught at Sheridan College are open only to students in the BDes program.

## Earth and Atmospheric Science - Pure and Applied Science

## Department Office:

101/102 Petrie, (416) 736-5245
Professor and Chair of the Department:
G.T. Jarvis

## Professors:

K.D. Aldridge, J.C. McConnell, J.R. Miller, G.G. Shepherd, D.E. Smylie, P.A. Taylor

## Associate Professors:

Q. Cheng, M.A. Jenkins, G.P. Klaassen, I.C. McDade, D.V. Michelangeli, A.M.K. Szeto

Adjunct Professor:
R. Stewart

Adjunct Professor Emeritus:
B.W. Boville

## Research Associates:

E. Griffioen, J. Kaminski, W. Weng

Project Scientists and Research Programmers:
S.R. Beagley, J. de Grandpré, V. Fomichev, W. Gault, A. Medvedev, B. Solheim, E. Templeton, R. Wiens

## Research Fellow:

P.Y. Li

The Department of Earth and Atmospheric Science offers interdisciplinary instruction in applied science areas dealing with the solid Earth and the atmosphere. Several distinct streams of instruction are offered.

In the Earth Science Stream, students obtain a strong background in the physics and chemistry of the solid Earth and the techniques of mineral and petroleum exploration. It is important for the Earth Science student planning a career in exploration to gain practical experience working in the area during summer periods prior to graduation.
In the Atmospheric Science Stream, students obtain solid grounding in the physics, chemistry and dynamics of the atmosphere.

The department offers a Specialized Honours applied science degree stream in Space and Communication Sciences, developed to meet the needs of rapidly expanding technologies in these fields.

In cooperation with the Chemistry Department, the department offers an Honours Double Major applied science degree stream in Atmospheric Chemistry that explores the interaction of chemistry and dynamics within the atmosphere and its impact on the global environment.

The course requirements of programmes in Earth and Atmospheric Science are given in Science section V (for the Atmospheric Chemistry and Space and Communication Sciences streams, see separate entries in Science section V).

The department also offers certificates in Geographic Information Systems and Remote Sensing, and in Meteorology, which are described in Science section I.

## Courses in Earth and Atmospheric Science

The prerequisites and corequisites stated indicate the standard of preparation with which admission is usually automatic. Admission to any course should otherwise be determined in consultation with a programme advisor.

SC/EATS 1010 6.0 Introductory Earth and Atmospheric Science. An introduction to the structure and dynamics of the Earth from the solid inner core to the ozone layer, encompassing an overview of modern geophysics and meteorology. Topics include geochronology,
seismology, geomagnetism, plate tectonics, atmospheric motions, climate changes and weather. (Same as SC/EATS 10103.0 plus SC/EATS 1011 3.0.) Two lecture hours and three laboratory hours, or three lecture hours (in weeks with no laboratories). Two terms. Six credits.
Prerequisites: OAC Calculus or AS/SC/MATH 15003.0 or AS/SC/MATH 15153.0 or OAC Algebra and Geometry or AS/SC/MATH 1525 3.0; OAC Chemistry or SC/CHEM 15004.0 or SC/CHEM 1520 4.0; OAC Physics or SC/ PHYS 1510 4.0.
Degree credit exclusions: SC/EATS 1010 3.0, SC/EATS 1011 3.0.

SC/EATS 1010 3.0 Earth's Structure and Dynamics. An introduction to the structure and dynamics of Earth's interior encompassing an overview of geophysics. Topics include geochronology, seismology, geomagnetism and plate tectonics. (Same as one half of SC/ EATS 1010 6.0.) Two lecture hours and three laboratory hours, or three lecture hours (in weeks with no laboratories). One term. Three credits.
Prerequisites: Same as for SC/EATS 1010 6.0. Degree credit exclusion: SC/EATS 1010 6.0.

SC/EATS 1011 3.0 Introduction to Atmospheric Science. The origin, composition and vertical structure of the Earth's atmosphere and those of other planets. The present global atmospheric circulation. Weather systems, measurements and weather maps; atmospheric chemistry: the ozone layer and atmospheric pollution. (Same as one half of SC/EATS 1010 6.0.) Two lecture hours and three laboratory hours, or three lecture hours (in weeks with no laboratories). One term. Three credits.

Prerequisites: Same as for SC/EATS 1010 6.0. Degree credit exclusion: SC/EATS 1010 6.0.

SC/EATS 20103.0 Introductory Meteorology. An introduction to atmospheric radiation and thermodynamics, clouds and precipitation. Vertical soundings and an introduction to the analysis and interpretation of tephigrams. Atmospheric motion on the global, synoptic, meso- and micro-scales. Two lecture hours and three laboratory hours, or three lecture hours per week; one tutorial hour in alternate weeks. One term. Three credits.
Prerequisites: AK/AS/SC/COSC 1540 3.0; AS/ SC/MATH 10133.0 and AS/SC/MATH 1014 3.0, or equivalents; SC/PHYS 10106.0 or SC/ PHYS 1410 6.0.

SC/EATS 2011 1.0 Introductory Meteorology Field School. The course deals primarily with weather observation and reporting and the acquisition of weather data with meteorological instruments (temperature and humidity sensors, barometers, anemometers, solar radiation sensors, cloud height sensors, etc.). The course is practical in nature. Lectures, laboratory and field work. One week. Summer Term. One credit.
Prerequisite: SC/EATS 20103.0 or permission of the course director.

Note: This is a one-week residential field school. In addition to the tuition fee levied by the University, each student must pay for transportation, room and board, as required.

SC/EATS 2030 3.0 Introductory Geophysics and Geology. Introduction to formation of the terrestrial planets, Earth's structure and rheology, plate tectonics on a sphere, distribution of seismicity, volcanism, ocean sediments. Geomagnetic evidence for plate motions, paleomagnetism, rock magnetism, fault-plane solutions for earthquakes, rock types, rock-forming minerals, stream processes, erosion and beach processes. Three lecture hours. One term. Three credits.

Prerequisites: AS/SC/MATH 1014 3.0; SC/ PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0.

SC/EATS 2050 4.0 Mineralogy and Petrology. Introduction to the study of geology, minerals, rocks and structural geology. Physical and chemical properties of commonly occurring rock-forming minerals. Origin of commonly occurring igneous rocks. Interpretation of textures and geneses of these rocks. Three lecture hours and a laboratory session. One term. Four credits.
Prerequisites: OAC Chemistry or SC/CHEM 15004.0 or SC/CHEM 1520 4.0, and OAC Physics or SC/PHYS 1510 4.0; or AS/SC/ GEOG 14006.0 or AK/GEOG 2510 6.0.

## Degree credit exclusion: SC/EATS 2050 3.0.

SC/EATS 2470 4.0 Introduction to the Mechanics of Fluids and Solids. Introductory tensor algebra and calculus. Stress and strain analysis. Symmetry of stress tensor, equilibrium conditions. Lagrangian and Eulerian descriptions of strain. Physical interpretation of stress, strain and strain rate tensors. Conservation laws in continua. Consistency and compatibility considerations. Constitutive relations. Three lecture hours, a tutorial or problems laboratory session. One term. Four credits.
Prerequisites: AK/AS/SC/COSC 1540 3.0; AS/ SC/MATH 1025 3.0; AS/SC/MATH 2015 3.0; SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0.

SC/EATS 3001 1.0 Organization and Management Seminar in Space and Communication Sciences. A seminar course taught by guest speakers from industry, government and the University. Content changes from year to year, but includes such topics as professional ethics, communications regulations, space law, space science policy, project management, privacy and security issues in computing. (Same as SC/COSC 30011.0 and SC/PHYS 3001 1.0.) One lecture hour in alternate weeks. Two terms. One credit.

Prerequisite: Eligibility to proceed in the Specialized Honours stream in Space and Communication Sciences beyond the 2000level requirements, or permission of the course director.

Degree credit exclusions: SC/COSC 3001 1.0, AS/SC/COSC 3002 1.0, SC/PHYS 3001 1.0.

SC/EATS 3010 2.0 Introductory Applied Geophysics. Students are introduced to the theory and operation of the instruments of applied geophysics. As well as the traditional applications to mineral and petroleum exploration, the use of geophysical instruments in engineering and environmental monitoring is described. Two lecture hours. Second term. Two credits.
Prerequisites: SC/EATS 2030 3.0; AK/AS/SC/ COSC 15403.0 or equivalent programming experience.
Corequisites: SC/EATS 3020 3.0; SC/EATS 3180 3.0.
Degree credit exclusion: SC/EATS 3000 3.0.
SC/EATS 3011 1.0 Applied Geophysics
Field School. A one-week field school is held on campus (usually in May) and includes instruction in field geology and mapping, orienteering and practical exercises in the infield use of geophysical instruments. Oneweek field school. One credit.
Prerequisites: SC/EATS 3010 2.0; SC/EATS 3020 3.0; SC/EATS 3180 3.0.
Degree credit exclusion: SC/EATS 3000 3.0.
SC/EATS 3020 3.0 Global Geophysics. Studies of isostatic equilibrium and glacial rebound; geochronology and age of the Earth; seismic tomography and spherical harmonic representation of gravity and the geoid; Earth rotation and geodesy; geothermal heat flow and mantle convection. Three lecture hours. One term. Three credits.
Prerequisites: SC/EATS 2030 3.0; SC/EATS 24704.0 or SC/PHYS 2010 3.0; AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0; SC/ PHYS 2020 3.0.

SC/EATS 3030 3.0 Atmospheric Radiation and Thermodynamics. Applications of basic thermodynamic principles to dry and moist atmospheric situations. Solar (short wave) and terrestrial (long wave) radiation with respect to absorption and scattering processes involving atmospheric atoms, molecules, aerosol particles and clouds. (Same as SC/PHYS 3080 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: AS/SC/MATH 2015 3.0; AS/SC/ AK/MATH 2270 3.0; SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0.
Degree credit exclusion: SC/PHYS 3080 3.0.
SC/EATS 3040 3.0 Atmospheric Dynamics
I. Dynamics of large-scale weather systems. Development of the equations of motion, geostrophy, thermal wind, vorticity and divergence, Ekman layers, and the quasigeostrophic theory. Three lecture hours. One term. Three credits.
Prerequisites: SC/EATS 2010 3.0; SC/EATS 24704.0 or SC/PHYS 2010 3.0; AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.

SC/EATS 3130 3.0 Introductory Atmospheric Chemistry. An introductory course linking chemistry and atmospheric science. Topics include atmospheric evolution; biogeochemical cycles; sources, transformations and sinks of atmospheric
species; human impacts such as acid rain, photochemical smog, and depletion of the ozone layer. (Same as SC/CHEM 3060 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: SC/CHEM 10006.0 or SC/ CHEM 1010 6.0; one of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0, AS/SC/MATH 1505 6.0.
Degree credit exclusions: SC/CHEM 3060 3.0, SC/CHEM 3160 3.0.

SC/EATS 3140 4.0 Sedimentology and Structural Geology. Weathering, clastic rocks, diagenesis, mudrocks, carbonates, evaporites, orthographic construction, structural contours, stereographic projection, faults, folds, fabric analysis. Normally offered in alternate years. Three lecture hours, three laboratory hours. One term. Four credits.
Prerequisites: SC/EATS 2030 3.0; SC/EATS 2050 4.0.
Degree credit exclusions: SC/EATS 3140 3.0, SC/EATS 3150 2.0.

SC/EATS 3180 3.0 Seismology. Theory and applications of the propagation of seismic waves in the Earth; laboratory and computer exercises where appropriate; practical exercises as required. Two lecture hours and a laboratory session. One term. Three credits.
Prerequisites: SC/EATS 2030 3.0; SC/EATS 24704.0 or SC/PHYS 2010 3.0; AK/AS/SC/ COSC 15403.0 or equivalent FORTRAN programming experience; AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.

SC/EATS 3280 3.0 Physics of the Space Environment. An introduction to the physical processes of the upper atmosphere, the ionosphere, the magnetosphere and the heliosphere, and the interactions that occur with space vehicles that traverse these regions of space. (Same as SC/PHYS 3280 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: SC/PHYS 2020 3.0; SC/PHYS 2040 3.0.
Degree credit exclusion: SC/PHYS 3280 3.0.
SC/EATS 3300 3.0 Geographical Information Systems (GIS) and Spatial Analysis of the Physical Environment.
The fundamental concepts and techniques of GIS are presented along with detailed discussion of computer implementation. The emphases include database management with SQL programming and map analysis/spatial modelling combined with 4GL programming. PC or UNIX raster and vector-based GIS programs are used for hand-on exercises. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisites: AK/AS/SC/COSC 15403.0 or AK/AS/SC/COSC 10303.0 or AK/AS/SC/ COSC 1520 3.0; AS/SC/AK/MATH 25603.0 or AS/SC/GEOG 24203.0 or AS/SC/AK/MATH 1131 3.0; AS/SC/MATH 10253.0 or AS/SC/ MATH 1013 3.0; one of SC/EATS 1010 6.0, SC/EATS 2030 3.0, AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, or permission of the instructor.

SC/EATS 40006.0 (4000 3.0) Research Project. A major written report or thesis on field measurements, laboratory research or computer modelling in the Earth or atmospheric sciences. Work is supervised by a faculty member. Open to exceptional students. Two terms. Six credits. One term. Three credits.
Prerequisite: Written permission of the department Chair.

SC/EATS 4001 6.0 Space and Communication Sciences Workshop. This course is intended to allow the student to carry out the development of a specific space project, under the supervision of a faculty member, a government scientist or an industrial associate. (Same as SC/COSC 4001 6.0 and SC/PHYS 4001 6.0.) The equivalent of nine laboratory hours per week for two terms.
Prerequisite: Satisfactory completion of the 3000-level courses in the Space and Communication Sciences core.
Degree credit exclusions: SC/COSC 4001 6.0, SC/PHYS 4001 6.0.

SC/EATS 4010 6.0 Applications of Geophysics and Interpretation Theory. Seismic, gravity and electromagnetic methods in applied geophysics and their interpretation. Mining and petroleum exploration, engineering, hydrological and environmental applications of geophysics are included. The laboratory involves instrumental surveys on campus and reduction and interpretation of previous field school measurements. Two lecture hours and a laboratory session. Two terms. Six credits.
Prerequisites: SC/EATS 3010 2.0; SC/EATS 3011 1.0; SC/EATS 3020 3.0; SC/EATS 3180 3.0.

SC/EATS 4020 3.0 Time Series and Spectral
Analysis. Treatment of discrete sampled data by linear optimum Wiener filtering, minimum error energy deconvolution, autocorrelation and spectral density estimation, discrete Fourier transforms and frequency domain filtering and the Fast Fourier Transform algorithm. (Same as AS/SC/MATH 48303.0 and SC/PHYS 4060 3.0.) Three lecture hours. One term. Three credits.
Prerequisites: AK/AS/SC/COSC 15403.0 or equivalent FORTRAN programming experience; AS/SC/MATH 2015 3.0; AS/SC/ AK/MATH 2270 3.0.
Degree credit exclusions: AK/AS/SC/COSC 4242 3.0, AS/SC/MATH $4130 B$ 3.0, AS/SC/ MATH 4830 3.0, AS/SC/MATH $4930 C$ 3.0, SC/ PHYS 4060 3.0.

SC/EATS 4040 3.0 Economic Geology and Ore Genesis. Deposits studied include gold, pegmatite, chromite, nickel/copper sulfide, platinum group elements, porphyry copper, Mississippi Valley type lead-zinc, stratiform sedimentary and volcanogenic massive sulfide deposits. Normally offered in alternate years. Three lecture hours. One term. Three credits.

Prerequisite: SC/EATS 3140 4.0.

SC/EATS 4050 6.0 Synoptic Meteorology. Mid-latitude weather systems: storm tracks, diagnostic analysis, development concepts, air masses and fronts; modification of air masses, frontal models, associated weather systems; jet streams; severe storms. Analysis and interpretation of surface weather maps and upper-air charts; dynamic and thermodynamic fields basic to weather forecasting. Two lecture hours, three laboratory hours. Two terms. Six credits.

Prerequisite or corequisite: SC/EATS 3040 3.0.

Degree credit exclusion: SC/EATS 4050 3.0.
SC/EATS 4050 3.0 Synoptic Meteorology I. Mid-latitude weather systems: storm tracks, diagnostic analysis, air masses and fronts, frontal models and associated weather systems. Analysis and interpretation of surface weather maps and upper-air charts. (Same as the first half of SC/EATS 4050 6.0.) Two lecture hours, three laboratory hours. Fall Term. Three credits.
Prerequisite or corequisite: SC/EATS 3040 3.0.

Degree credit exclusion: SC/EATS 4050 6.0.
SC/EATS 4120 3.0 Cloud Physics and Radar Meteorology. Thermodynamics of cloud processes. Buoyancy and convection. Weather radar. Storms and associated precipitation. Cloud droplet formation and growth of ice crystals. Snow, graupel and hail. Microphysical processes and climate. Three lecture hours. One term. Three credits.

Prerequisite or corequisite: SC/EATS 3030 3.0.

SC/EATS 4130 3.0 Atmospheric Dynamics
II. The theory and behaviour of Rossby, baroclinic and internal gravity waves in the atmosphere, including their origin, structure and propagation. Barotropic and baroclinic instability and the global circulation of the atmosphere. Not offered every year. Three lecture hours. One term. Three credits.
Prerequisite: SC/EATS 3040 3.0.
SC/EATS 4140 3.0 Numerical Weather Prediction. The development of computational techniques for the solution of problems in atmospheric dynamics. The construction of numerical models for the prediction of weather. Three lecture hours per week, eight three-hour laboratory sessions held in consecutive weeks (scheduled in the middle of term to coincide with lecture material). One term. Three credits.
Prerequisites: SC/EATS 3040 3.0; AK/AS/SC/ COSC 15403.0 or equivalent FORTRAN programming experience.
Prerequisite or corequisite: SC/EATS 41303.0 strongly recommended.

SC/EATS 4150 3.0 Turbulence and Diffusion in the Atmospheric Boundary Layer. Laminar and turbulent flows, hydrodynamic stability and transition. Wind and temperature profiles in the atmospheric boundary-layer, Monin-Obukhov and planetary boundary-layer similarity theories. Turbulence spectra, local isotropy, the inertial subrange and Kolmogoroff hypotheses.

Turbulent diffusion from atmospheric sources. Normally offered in alternate years. Three lecture hours. One term. Three credits.
Prerequisite or corequisite: SC/EATS 30403.0 or SC/PHYS 4120 3.0.

SC/EATS 4160 3.0 Climate and Climate Change. The Earth's climate and the general circulation of the atmosphere. Climate models. Long-term stability of the Earth's climate. Anthropogenic impact on the climate, carbon dioxide and other climate change issues. Normally offered in alternate years. Three lecture hours. One term. Three credits.
Prerequisite: SC/EATS 20103.0 or SC/EATS 30403.0 or permission of the instructor.

SC/EATS 4170 4.0 Transport and Chemistry of Atmospheric Trace Gases. A study of the processes that affect the composition of the atmosphere and the methods used to include these in numerical models. Included are sources, transport, deposition, photochemistry, biogeochemical cycles, onedimensional computer models and analysis of atmospheric data sets. (Same as SC/CHEM 4061 4.0.) Three lecture hours, two computer laboratory hours. One term. Four credits.
Prerequisites: SC/EATS 31303.0 or SC/ CHEM 30603.0 or SC/CHEM 3160 3.0; AK/ AS/SC/COSC 1540 3.0; AS/SC/AK/MATH 2270 3.0.
Degree credit exclusions: SC/EATS 4170 3.0, SC/CHEM 4061 4.0, SC/CHEM 4150 4.0, SC/ CHEM 4150 3.0.

SC/EATS 4220 3.0 Remote Sensing of the Earth's Surface. Principles used in extracting physical information about the Earth's surface using remote sensing. Remote sensing in the visible, short-wave infrared, thermal infrared, and microwave regions is discussed in terms of potential applicability to forestry, agriculture, water resources and geology. Two lecture hours, three laboratory hours. One term. Three credits.
Prerequisite(s): SC/PHYS 2020 3.0, or SC/ PHYS 2060 3.0, or both SC/PHYS 22111.0 and SC/PHYS 2212 1.0.

SC/EATS 4230 3.0 Remote Sensing of the Atmosphere. An introduction to and summary of the area of remote sensing of the atmosphere from space platforms and from the ground. Topics include atmospheric radiation, atmospheric spectroscopy, inversion theory, instrumentation, satellites, space platforms and future technology. Three lecture hours per week, occasional laboratory sessions. One term. Three credits.
Prerequisites: SC/EATS 20103.0 or SC/PHYS 2060 3.0; AS/SC/MATH 1025 3.0; AS/SC/ MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.
Prerequisite or corequisite: SC/EATS 30303.0 or permission of the course director.

SC/EATS 4240 3.0 Storms and Weather Systems. The study of mesoscale circulations and precipitating storm systems. Basic governing equations and instabilities. Nature and evolution of isolated convection, thunderstorms, mesoscale convective
systems, precipitation bands, extratropical cyclones, fronts and frontogenesis, hurricanes, blizzards, polar lows, and orographic storms. Normally offered in alternate years. Three lecture hours. One term. Three credits.
Prerequisites or corequisites: SC/EATS 3040 3.0; SC/EATS 4120 3.0.

SC/EATS 4250 3.0 Space Geodynamics. The dynamical behaviour of the Earth from space measurements. Included are the external gravity field of the Earth, orbital dynamics of artificial satellites, satellite geoid, internal figure of the Earth, rotation of the Earth and its measurement by space techniques. (Same as SC/PHYS 4410 3.0.) Normally offered in alternate years. Three lecture hours. One term. Three credits.
Prerequisites or corequisites: SC/EATS 3020 3.0; AS/SC/MATH 32413.0 or AK/AS/SC/ COSC 3121 3.0; AS/SC/MATH 3271 3.0.
Degree credit exclusion: SC/PHYS 4410 3.0.
SC/EATS 43006.0 (4300 3.0) Special Topics. A series of lectures and supervised study on special topics not ordinarily included in other courses in Earth and Atmospheric Science. Three lecture hours. Two terms. Six credits. One term. Three credits.

SC/EATS 4400 3.0 Geographical Information Systems (GIS) and Data Integration. Project-oriented geomatics course using GIS systems (Arc/Info and SPLus or SPSS for UNIX) and various techniques (map algebraic, statistical, fuzzy logic, AI, neural network and fractal/ multifractal) for integrating diverse dataset (geological, geophysical, geochemical, remote sensing and GPS). Two lecture hours, two laboratory hours. One term. Three credits.
Prerequisite: One of SC/EATS 3300 3.0, AS/ SC/GEOG 3180 3.0, AS/SC/GEOG 4340 3.0, EN/ENVS 3520 3.0, EN/ENVS 4520 3.0, ES/ ENVS 3520 3.0, ES/ENVS 4520 3.0, or permission of the instructor.

## East Asian Studies - Arts

Programme Office and Reading Room:
202B Founders College, (416) 736-5148
Coordinator of the Programme: TBA
Professors Emeriti:
J. Ch'en, History; D. Daly Administrative Studies (Atkinson); S. Endicott, History (Atkinson); D. Holoch, Languages; T. Sekine, Economics; D. Willmott, Sociology (Glendon)
Professors:
P.M. Evans, Political Science; M.B. Frolic, Political Science; C.J. McMillan, Administrative Studies; J.A. Nagata, Anthropology; B.T. Wakabayashi, History
Associate Professors:
B.N. Cham, Political Science (Glendon); T. Goossen, Humanities; M. Gewurtz, History/Humanities; D. Holoch, Languages, Literatures and Linguistics; G. Jordan, History; B. Luk, History; D.P. Lumsden, Anthropology; P.M. Mitchell, History/

Humanities; J.D. Paper, Humanities; R. Perry, Visual Arts (Fine Arts); A. Schlosser, Theatre (Fine Arts); S.Y. Tsau, Languages, Literatures and Linguistics; P. Van Esterik, Anthropology

## Sessional Associate Professor:

M. Bernard, Political Science; T. Hyun, Humanities; J. Van Esterik, Social Science

## Assistant Professor:

S. Otto, Music (Fine Arts)

## Associate Lecturer:

N. Ota, Languages, Literatures and Linguistics
Sessional Assistant Lecturer:
M. Handa, Languages, Literatures and Linguistics
The East Asian Studies Programme offers a varied approach to the study of China and Japan through degree programmes designed to meet a wide range of needs and interests. Without neglecting East Asia's rich cultural traditions, York's programme stresses the modern period. The programme's offerings fall generally into four concentrations: languages and literature, interdisciplinary streams in Humanities and Social Science, departmental courses on aspects of modern Chinese and Japanese societies, and Fine Arts studies in art history. Students may choose to pattern a regular sequence of such courses leading to a degree programme or to select only those courses which supplement their concentration in some other subject area. In either case, courses are designed to enrich the student's perspective by acquaintance with a cultural and economic region of major importance in the modern world.
Note: For the several programmes of study available in East Asian Studies, please consult the 'Programmes of Study' section, Faculty of Arts.

## Departmental and Divisional Courses in East Asian Studies

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
Descriptions of the content and format of these courses are contained in the appropriate departmental and divisional listings in this Calendar. Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the coordinator. Complete descriptions and reading lists are given in the East Asian Studies supplementary calendar, available each spring.

## Anthropology

AS/ANTH 3160 6.0 Family and Kinship in Comparative Perspective.
AS/ANTH 3250 3.0 China and the Chinese Diaspora. (Formerly AS/ANTH 3000M 3.0)
AS/ANTH 3320 6.0 Religious Ritual and Symbolism.
AS/ANTH 4200J 6.0 Religious Movements in Global Perspective.

## Chinese

AS/CH 1000 6.0 Elementary Modern Standard Chinese.

AS/CH 2000 6.0 Intermediate Modern Standard Chinese.
AS/CH 2010 6.0 Chinese for Beginners With Background.
AS/CH 2700 6.0 Introduction to Chinese Literature.
AS/CH 3000 6.0 Advanced Modern Standard Chinese.
AS/CH 3010 6.0 Modern Standard Chinese for Speakers of Cantonese or other Dialects.
AS/CH 3600 6.0 Lu Xun: Representative Works.
AS/CH 3610 6.0 Oral Literature in Contemporary China.
AS/CH 3710 6.0 Women Writers in Modern China.
AS/CH 3750 6.0 Order and Chaos in China and the West: Great Ideas of Two Civilizations. AS/CH 47106.0 Popular Fiction: The Heroic Novel.
AS/CH 4712 6.0 Confucian or Daoist? The Skeptical Novel and Its Women.
AS/CH 4800A 6.0 The Novel as Popular History: Three Kingdoms.
AS/CH 4800B 6.0 Tales of the Outside(rs).

## Film

FA/FILM 3710 6.0 Japanese Culture, Literature and Film. (Cross-listed to: AS/HUMA 34206.0 and AS/JP 3720 6.0)

## History

AS/HIST 1030 6.0 Imperialism and Nationalism in Modern Asia.
AS/HIST 2710 6.0 Traditional Societies of East Asia.
AS/HIST 3760 6.0 Modern Japan.
AS/HIST 3770 6.0 Modern China.
AS/HIST 3775 3.0 History of Hong Kong.
AS/HIST 3780 6.0 Asian Crossroads: SouthEast Asia Since the 17th Century. (Crosslisted to: AK/HIST 3109B 6.0)
AS/HIST 3785 6.0 Science, Technology and Society in Chinese History.
AS/HIST 3930B 6.0 History of Singapore.
AS/HIST 4050H 6.0 Education and Society in Modern China.
AS/HIST 4740 6.0 Chinese Rural Society.
AS/HIST 4760 6.0 War and Peace in East Asia: The Second World War.
AS/HIST 4930B 6.0 Migrations and Diasporas: The Modern Chinese Experience.

## Humanities

AS/HUMA 1400 9.0 Culture and Society in East Asia. (Degree credit exclusion: AK/HUMA 1700C 6.0)
AK/HUMA 1700C 6.0 Culture and Society in East Asia. (Degree credit exclusion: AS/HUMA 1400 9.0)
AS/HUMA 2410 6.0 Chinese Art, Poetry and Religion (formerly AS/HUMA 2000J 6.0).
AS/HUMA 2420 9.0 Introduction to Korean Culture.
AS/HUMA 3000D 6.0 Religion, Gender and Korean Culture.
AS/HUMA 3420 6.0 Japanese Culture, Literature and Film (Cross-listed to: AS/JP 3720 6.0, FA/FILM 3710 6.0).
AS/HUMA 3940 6.0 The Feminine in Chinese Culture: Ideal and Reality.
AS/HUMA 4000D 6.0 Changing Narratives of Family in Modern Korea.

AS/HUMA 4000G 6.0 Advanced Topics in East Asian Cultural History: Contemporary Japanese Literature, Film and Comics.
AS/HUMA 4400A 6.0 Asian Art: Zen Painting and Poetry. (Cross-listed to: FA/VISA 4340A 6.0)

AS/HUMA 4740 6.0 The Sacred and the Arts.

## Japanese

AS/JP 1000 6.0 Elementary Modern Standard Japanese.
AS/JP 2000 6.0 Intermediate Modern Standard Japanese.
AS/JP 3000 6.0 Advanced Modern Standard Japanese.
AS/JP 3720 6.0 Japanese Culture, Literature and Film (Cross-listed to: AS/HUMA 3420 6.0, FA/FILM 3710 6.0).
AS/JP 4000 6.0 Advanced Reading in Contemporary Japanese.
AS/JP 4100 6.0 Teaching of Japanese as a Foreign/Second Language.

## Political Science

AS/POLS 3220 3.0 Comparative Foreign Policy Analysis.
AS/POLS 3230 3.0 Global Issues in Foreign Policy.
GL/POLS 3290 6.0 Government and Politics of China.
AS/POLS 3510 3.0 Government and Politics in China.
AS/POLS 3515 3.0 China and the World.
AS/POLS 3590 3.0 Japan and the World Order.
AK/POLS 3650 6.0 Government and Politics in China.
GL/POLS 4012 6.0 Political Economy of the Asian-Pacific Region. (Cross-listed to: GL/ ILST 4012 6.0)
AS/POLS 4530 3.0 Crisis and Collapse of the Soviet Bloc.
AS/POLS 4595 3.0 Southeast Asia in the New Global Order.
AS/POLS 4700 3.0 Topics in International Political Economy of Eastern Asia.
AS/POLS 4735 3.0 After the Fall: International Relations of Collapsed Socialism.

## Social Science

AS/SOSC 2430 6.0 Peoples and Cultures of Southeast Asia.

## Theatre (Fine Arts)

FA/THEA 4220 6.0 Non-European Theatre.

## Visual Arts (Fine Arts)

FA/VISA 1340 6.0 The Art of Asia.
FA/VISA 3343 3.0 The Art of China.
FA/VISA 3344 3.0 The Art of Japan.
FA/VISA 4340A 6.0 Asian Art: Zen Painting and Poetry. (Cross-listed to: AS/HUMA 4400A 6.0)

Note: Additionally, there are available within the Departments of History and Political Science, and the Divisions of Humanities and Social Science, 4000-level thesis or independent reading courses open to East Asian Studies majors on an individual basis.
Registration in Atkinson College and Faculty of Fine Arts courses requires the approval of the instructor. Students are subject to Faculty of

Arts regulations governing out-of-Faculty courses, (please consult the Enrolment and Registration section, Faculty of Arts).

## Economics - Arts

Department Office:
1124 Vari Hall, (416) 736-5083
Undergraduate Office:
1144 Vari Hall, (416) 736-5322
Associate Professor and Chair of the Department:
S. Bucovetsky

Professors Emeriti:
M. Burstein, J.A. Buttrick, G.V. Doxey, H. Flakierski, F. Lefeber, P. Medow, A.J. Robinson, H. Schwartz, T. Sekine, R. Thakkar

## Professors:

E. Appelbaum, L. Danziger, S. Donnenfeld, E. Katz, J. Landa, C. Plourde, J. Smithin

## Associate Professors:

M. Anam, J. Beare, K. Carpenter, S.H. Chiang, A.J. Cohen, M.D.G. Copeland, G. Fallis, R. Grinspun, A. Haug, N. Jazairi, J. Landa, R. Latham, F. Lazar, A. Mansoorian, J. Ridpath, R. Rilstone, A.A. Shapiro, B. Smith

## Assistant Professors:

T. Crossley, R.K. House, J. Jasiak, T.J. Kim, K.C. Lo

Undergraduate training in economics is intended to familiarize students with the discipline of economic thinking, and so equip them for intelligent appraisal of contemporary economic problems. It is also intended to make students aware of the nature of economic science, and of directions in which economic theory is currently moving. The discipline of economic thinking has three related parts: identifying specifically economic problems; developing and applying economic theory to improve our understanding and ability to solve the problems; evaluating the adequacy of our theoretical understanding through the use of data and empirical testing.
Specifically, economic problems arise out of the conflict between apparently limitless human demand for goods and services and a limited supply of resources for satisfying those demands. Courses in Economics expose students both to the wide range of individual and social problems that arise from this conflict and to the distinctive economic approach to their solution. Economic theory provides students with the analytical framework necessary for understanding and solving economic problems. Empirical work provides a basis for improving existing theories and for distinguishing between competing theories.
An undergraduate degree in Economics prepares students for careers in business and government, for graduate training in economics, and for professional training in business, law, public administration, and other disciplines.

## Courses in Economics

Note: For specific requirements and course restrictions of programmes offered by this
department, please consult the 'Programmes of Study' section, Faculty of Arts.

1. Note: Students planning to Major or Minor in Economics must successfully complete AS/ ECON $10003.0 / 10103.0$ as well as the mathematics requirement with AS/ECON 1530 3.0/1540 3.0. Students who fail to satisfy the introductory economics and the mathematics (calculus/algebra) requirements will not be permitted to take AS/ECON 2300 3.0/2350 3.0 or AS/ECON 2400 3.0/2450 3.0, not even as electives. Admission to most 2000, 3000 and 4000 -level courses in Economics is conditional upon satisfactory completion of the Introduction to Microeconomics and the Introduction to Macroeconomics courses, AS/ ECON 10003.0 and AS/ECON 1010 3.0.
2. In limited enrolment courses, preference will be given to students who have received an average grade of $\mathrm{C}+$ or better.
3. Graduate courses: With the permission of the director of the graduate programme in Economics, students in an Honours Programme may take 5000-level courses in lieu of 4000-level courses.
4. Courses in Economics normally have three class hours a week. Some of the courses listed below are not offered every year or term.
Full information on the section format and course offerings in each year is announced, respectively, in the Undergraduate Lecture Schedule (obtainable from the Office of the Registrar) and the Economics mini-calendar, obtainable from the Economics Undergraduate Records Office.
Note: Detailed Economics and Business programme information is announced in the Programmes of Study section, Faculty of Arts, and in the Coordinated Programme in Business, Public Policy and Administrative Studies mini-calendar, obtainable in the Economics Undergraduate Records Office. A list of Economics and Business courses follows the Economics courses below.

Degree credit exclusions: The University offers some courses for which the content is similar to that presented in other courses. Such courses are termed degree credit exclusions and are so designated minimally in this calendar and more fully in the appropriate mini calendar(s) as well as an annual publication produced by the Office of the Registrar. When an Economics course is taken outside of the Faculty of Arts, the student will be given credit for that course - either as an Economics course or as an AS/ECON second-digit-5 equivalent, or a free choice course, as appropriate.

AS/ECON 1000 3.0 Introduction to Microeconomics. An introduction to the principles and methods of economics, with emphasis on microeconomic theory. Topics include the theory of markets, price determination, and the theory of the firm.
Degree credit exclusions: AK/ECON 1000 3.0, AS/ECON 1900 3.0.
Note: Successful completion of this course, together with AS/ECON 1010 3.0, is required for all students who intend to pursue additional courses in economics at the 2000, 3000 and

4000 level and in order to pursue degree studies in Economics.

AS/ECON 1010 3.0 Introduction to Macroeconomics. An introduction to the principles and methods of economics with emphasis on macroeconomic theory. Topics include the theory of money and banking, the theory of international trade and finance, and the economic analysis of such selected topics as unemployment, inflation, and government budget policy.
Degree credit exclusions: AK/ECON 1010 3.0, AS/ECON 1900 3.0.
Note: Successful completion of this course, together with AS/ECON 1000 3.0, is required for all students who intend to pursue additional courses in economics at the 2000, 3000 and 4000 level and in order to pursue degree studies in Economics.

AS/ECON 1530 3.0 Introductory Mathematics for Economists I. This course introduces and develops topics in differential calculus, integral calculus, and their applications in economics. This course is required for all Economics Majors and Minors; it also satisfies the Mathematics requirement for the Faculty of Administrative Studies.
Cross-listed to: AS/MATH 1530 3.0.
Corequisite or prerequisite: AS/ECON 1000 3.0 or AS/ECON 10103.0 or equivalents.

Degree credit exclusions: AS/MATH 1000 3.0, AS/MATH 1300 3.0, AK/MATH 1410 6.0, AS/ MATH 1550 6.0, SC/MATH 10133.0 (formerly SC/ACMS 1030 6.0), SC/MATH 15056.0 (formerly SC/ACMS 1050 6.0), or equivalent.

AS/ECON 1540 3.0 Introductory Mathematics for Economists II. This course introduces and develops topics including matrix algebra, optimization, comparative statics of general function models and their applications in economics. This course is required for all Economics majors and minors; it also satisfies the Mathematics requirements for the Faculty of Administrative Studies.
Cross-listed to: AS/MATH 1540 3.0.
Prerequisite: One of AS/ECON 1530 3.0, AS/ MATH 1530 3.0, or AS/MATH 1300 3.0, or equivalents.
Prerequisite or Corequisite: AS/ECON 1000 3.0 or AS/ECON 1010 3.0, or equivalents.

Degree credit exclusions: AS/MATH 1550 6.0, SC/MATH 15056.0 (formerly SC/ACMS 1050 6.0), SC/MATH 10253.0 (formerly SC/ACMS 1020 6.0).
Note: May not be taken by students who have taken or are taking AS/MATH 2220 6.0, AS/ MATH 2221 3.0, AS/MATH 2222 3.0, or equivalent.

Note: Admission to 2000, 3000 and 4000-level courses in Economics is conditional upon satisfactory completion of AS/ECON 10003.0 and AS/ECON 10103.0 and the additional prerequisites for each course. (Exception: AS/ ECON 2900 3.0/2910 3.0 which is degree credit exclusion with AS/ECON 1000 3.0/1010 3.0).

AS/ECON 1900 3.0 Introduction to Economics For Non-Majors. A onesemester introduction to both microeconomic and macroeconomic concepts, applied to public policy issues. Intended for students in other disciplines, the course provides concise fundamentals without the mathematical details of AS/ECON 1000 3.0/1010 3.0. This course serves as prerequisite for some 3000 -level Economics courses.
Degree credit exclusions: AS/ECON 10003.0 and AS/ECON 1010 3.0, or equivalents.

Note: Not open to Economics majors or students in Coordinated Business. Students who enrol in a degree programme in Economics will not receive credit for this course toward their Economics requirements.

AS/ECON 2300 3.0 Intermediate Microeconomic Theory I. Theory of the consumer, uncertainty, theory of the firm, competitive equilibrium.
Prerequisites: AS/ECON 1000 3.0/1010 3.0, and AS/ECON $15303.0 / 1540$ 3.0, or equivalents.
Degree credit exclusion: AS/ECON 2300 6.0.
AS/ECON 23503.0 Intermediate Microeconomic Theory II. Monopoly, factor markets, oligopoly, game theory, general equilibrium, welfare economics.
Prerequisite: AS/ECON 23003.0 or equivalent.
Degree credit exclusion: AS/ECON 2300 6.0.
AS/ECON 24003.0 Intermediate Macroeconomic Theory I. Preliminary development of models of the determination of national income in the short run and the long run, in closed and open economies. Keynsian and New Classical models are studied.
Prerequisites: AS/ECON 1000 3.0/1010 3.0, and AS/ECON $15303.0 / 1540$ 3.0, or equivalents.

Degree credit exclusion: AS/ECON 2400 6.0.
AS/ECON 2450 3.0 Intermediate Macroeconomic Theory II. Completion of the material studied in AS/ECON 2400 3.0.
Prerequisite: AS/ECON 24003.0 or equivalent.
Degree credit exclusion: AS/ECON 2400 6.0.
AS/ECON 2500 3.0 Introductory Statistics for Economists. This course provides an introduction to statistical techniques. Topics covered include: descriptive statistics, index numbers, frequency distributions, random variables, sampling distributions, introduction to probability theory, the normal distribution, correlation and the design and interpretation of hypothesis tests.
Degree credit exclusions: AK/ECON 3470 3.0, EN/ENVS 2010 3.0, AS/SC/GEOG 2420 3.0, AS/SC/GEOG 3421 3.0, AS/MATH 1131 3.0, AS/MATH 2560 3.0, AS/KINE 2050 3.0, AS/ PSYC 2020 6.0, AS/PSYC 2021 3.0, AS/SOCI 3030 6.0.

AS/ECON 3069 3.0 Canadian Economic Development Until the 1870s. Selected topics in the development of the Canadian economy to Confederation and the establishment of the National Policy.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or $A S / E C O N 19003.0$, or equivalents.

Degree credit exclusion: AS/HIST 3560 3.0, AK/ECON 3670 3.0/3680 3.0 and AK/ECON 3690 3.0/3700 3.0.

AS/ECON 3079 3.0 Canadian Economic Development After 1870. The changing structure of the Canadian economy after 1870. Emphasis is placed on competing explanations of the process of economic development in Canada.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 1900 3.0, or equivalents.
Degree credit exclusion: AS/HIST 3561 3.0, AK/ECON 3670 3.0/3680 3.0 and AK/ECON 3690 3.0/3700 3.0.

AS/ECON 3089 3.0 Economic History of the United States I 1640-1860. In analyzing the 1640-1860 period, this course illustrates both the role of economic theory in the interpretation of U.S. history and the contribution of the study of U.S. history to the development and evaluation of economic theory.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 1900 3.0, or equivalents.
Degree credit exclusion: AS/HIST 3660 3.0.
AS/ECON 3099 3.0 Economic History of the United States II: 1860-1940. In analyzing the 1860-1940 period, this course illustrates both the role of economic theory in the interpretation of U.S. history and the contribution of the study of U.S. history to the development and evaluation of economic theory.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 1900 3.0, or equivalents.
Degree credit exclusion: AS/HIST 3670 3.0.
AS/ECON 31203.0 or 3129 3.0 Economic Development in Europe before the Industrial Revolution. Selected topics in the economic development of Europe from the Black Death through the early-modern period. The emphasis is on the application of basic economic concepts to explain economic events and to evaluate economic policies of the period.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or $A S / E C O N 19003.0$, or equivalents.
Degree credit exclusion: AK/ECON 3710 6.0.
AS/ECON 31303.0 or 3139 3.0 Economic Development in Europe from the Industrial Revolution to the Present. Selected topics in the development of the European economy ranging from the causes of the Industrial Revolution in Britain to the consequences of the European Economic Community.

Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 19003.0 or equivalents.

Degree credit exclusion: AK/ECON 3710 6.0.
AS/ECON 3140 3.0 Monetary Economics. The demand for money, the money supply and the banking system, Canadian financial institutions, and the theory and practice of monetary policy.
Prerequisite: AS/ECON 10103.0 , or equivalent.
Degree credit exclusion: AK/ECON 3430 3.0.
AS/ECON 3150 3.0 International Trade I. International trade theories and policies; international flows of capital, labour and technology; economic growth and development in the international economy; international institutions.

Prerequisite: AS/ECON 1000 3.0, or equivalent.

AS/ECON 3200 3.0 Industrial Organization. Industrial organization; structure of modern industry; industrial policies; anti-restrictive practices and policies; control of industry; public utilities; government enterprise.
Prerequisite: AS/ECON 10003.0 , or equivalent.
Degree credit exclusion: AK/ECON 3750 3.0.
AS/ECON 3210 3.0 Use of Economic Data. This course introduces the theory and practice of empirical analysis of economic models. Linear regression analysis is developed and applied in the course. Use is made of Canadian data sets and statistical software packages for micro and/or mainframe computers.
Prerequisite: AS/ECON 25003.0 or equivalent.

AS/ECON 3230 3.0 Urban Economics. The urban area as an economic system. Topics include determinants of the demand for urban land, the economics of urban transportation, externalities and public policy, municipal public finance.
Prerequisite: AS/ECON 1000 3.0, or equivalent
Degree credit exclusions: AK/URST 3540 3.0, AK/ECON 3640 3.0.

AS/ECON 32403.0 or 32493.0 Labour Economics - Theory. Theory of labour supply and demand, wages, and employment.
Prerequisite: AS/ECON 1000 3.0, or equivalent.
Degree credit exclusions: AK/ECON 3610 3.0, AK/ECON 3620 3.0.

AS/ECON 32503.0 or 3259 3.0 Labour Economics - Institutions. The economic impact of trade unions, labour legislation and industrial organization of the market for labour.
Prerequisite: AS/ECON 1000 3.0, AS/ECON 3240 3.0, or equivalents.
Degree credit exclusion: AK/ECON 3600 6.0.

AS/ECON 32803.0 or 3289 3.0 Economics of Federal-Provincial Relations. The
economic theory of federalism. The assignment of economic functions among governments, in theory and in practice; the principles underlying redistribution of revenues by intergovernmental grants; differential effects of federal policies on provincial economies; proposals for improving coordination of federal and provincial financial policies.
Prerequisite: AS/ECON 10003.0 and AS/ ECON 1010 3.0.

AS/ECON 3310 3.0 Development Economics I. Studies the basic causes of economic retardation in the Third World. Covers: characteristics of economic underdevelopment; poverty, income and wealth distribution; rural vs. urban development; population growth, unemployment and migration; the role of capital, labour and technology in development.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 19003.0 , or equivalents.
Degree credit exclusions: AK/ECON 3550 3.0, AK/ECON 3560 3.0.

AS/ECON 3320 3.0 Development Economics II. Studies the policies and institutions for overcoming economic retardation in the Third world. Covers strategies of growth and development; government intervention, planning and private enterprise; fiscal and monetary policies; domestic market vs. export orientation; domestic vs. foreign investment; international trade and indebtedness.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 1900 3.0, AS/ECON 3310 3.0, or equivalents.
Degree credit exclusions: AK/ECON 3550 3.0, AK/ECON 3560 3.0.

AS/ECON 3350 3.0 Economic Theories of Entrepreneurship. This course covers materials on various economic theories of entrepreneurship, as well as sociological, psychological and cultural theories. Also included are case studies of entrepreneurship in various countries, including Asia Pacific countries, as well as Socialist economies in transition.
Prerequisite: AS/ECON 10003.0 or AS/ECON 10103.0 or AS/ECON 1900 3.0, or permission of the course director.

AS/ECON 3500 3.0 Introductory Mathematical Statistics for Economists. This course provides an introduction to mathematical statistical analysis. Includes distributions of random variables, conditional probability, independence, special distributions, distributions of functions of random variables, moment generating functions, the central limit theorem, estimation and hypothesis testing.
Prerequisites: AS/ECON 1530 3.0/1540 3.0, AS/ ECON 25003.0 or equivalents.

Degree credit exclusions: AS/MATH 2030 6.0, SC/ACMS 2020 6.0.

AS/ECON 3530 3.0 Intermediate Mathematics for Economists I. This course develops and demonstrates the mathematics commonly used in the analysis of static economic models. Topics range from concavity and convexity to constrained optimization and comparative static analysis including the implicit function and envelope theorems.
Prerequisites: AS/ECON 1530 3.0/1540 3.0 or equivalents.

AS/ECON 3580 3.0 Introductory Financial Accounting for Economists. An
introduction to financial accounting. Focus on financial accounting concepts, principles and practices, with emphasis on questions of asset valuation, income measurement, and other issues of particular concern to economists.
Prerequisites: AS/ECON 1000 3.0/1010 3.0 or equivalents.
Degree credit exclusions: AD/ACTG 2010 3.0, AD/ACTG 2011 3.0, AK/ADMS 2500 3.0, SB/ BFND 3200 3.0.

AS/ECON 3590 3.0 Introductory Managerial Accounting for Economists. An
introduction to managerial accounting. Focus on managerial accounting concepts, principles, and practices, with emphasis on behavioural aspects of accounting control, performance appraisal, and other issues of particular concern to economists.
Prerequisite: AS/ECON 3580 3.0.
Degree credit exclusion: AD/ACTG 3020 3.0, AK/ADMS 2510 3.0, SB/BFND 3200 3.0.

AS/ECON 3960 3.0 Selected Topics in Economics I. In any given year additional courses may be offered. Information concerning these will be available at the departmental office in March of the preceding year.

AS/ECON 3970 3.0 Selected Topics in Economics II. In any given year additional courses may be offered. Information concerning these will be available at the departmental office in March of the preceding year.

AS/ECON 4000 3.0 Advanced Microeconomic Analysis. An examination of important contributions to economic literature.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, AS/ECON 3530 3.0, or equivalents or permission of the instructor.
Degree credit exclusion: AK/ECON 4010 3.0.
AS/ECON 4010 3.0 Advanced Macroeconomic Analysis. An examination of important contributions to economic literature.

Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents or permission of the instructor.
Prerequisite/Co-requisite: AS/ECON 3530 3.0.
Degree credit exclusion: AK/ECON 4020 3.0.

AS/ECON 4059 3.0 History of Economic Thought I. After brief attention to the methodology of economic theory, the course focuses on the theoretical development of classical political economy up to 1870 in the works of the Physiocrats, Smith, Ricardo and Marx. Emphasis on the contrasts and similarities between classical and neoclassical theories.
Prerequisites or Corequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the course director.
Degree credit exclusion: AK/ECON 4050 3.0.
AS/ECON 4069 3.0 History of Economic Thought II. Primary focus on major developments in economic theory since 1870; the emergence of neoclassical general equilibrium theory (especially in the works of Jevons, Menger and Walras) and the development of Keynesian economics as a distinctive theory.
Prerequisite: AS/ECON 40593.0 or permission of the instructor.
Degree credit exclusion: AK/ECON 4060 3.0.
AS/ECON 4070 3.0 Public Finance I. Public Finance in Canada; the objectives of economic policy; theories of taxation; economic effects of taxation, with special reference to the Canadian economy.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the course instructor.
Degree credit exclusions: AK/ECON 3450 3.0/ 3460 3.0.

AS/ECON 4080 3.0 Public Finance II. Public finance in Canada theories of public expenditure; public expenditure policies in Canada; problems of multi-level governments including federal-provincial financial relations.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the course instructor.
Degree credit exclusions: AK/ECON 3450 3.0/ 34603.0 and AS/ECON 4089 3.0.

AS/ECON 4110 3.0 Regional Economics. An examination of the regional dimensions of economic activity; location theory, income determination theory, growth theory and their application to regional economic policy.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the course instructor.

AS/ECON 4129 3.0 International Trade Policy and Economic Integration. The course deals with current policy issues in international trade and economic integration, focusing on specific institutional settings such as NAFTA, the European Union, the World Trade Organization, "new" policy areas such as trade and the environment, trade, and labour rights.

Prerequisites: AS/ECON 31503.0 or equivalent.

AS/ECON 4130 3.0 Introduction to Game Theory in Economics. The course covers the idea of a game, of a solution, the extensive form, the concept of an equilibrium, games of incomplete information, backward and forward induction, repeated games, signaling and principal-agent models, and bargaining models.
Prerequisite: AS/ECON 1530 3.0/1540 3.0 or permission of the course director.

AS/ECON 4190 3.0 International Trade II. This course covers, at the advanced level, the theories of international trade specialization, gains from trade, commercial policies, and new approaches to trade theory.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0 or equivalents, and AS/ECON 31503.0 or equivalents, or permission of the instructor.

## AS/ECON 4200 3.0 International Monetary

 Economics. International monetary economics including exchange rates, balance of payments accounts, theories of the balance of payments, monetary policy under fixed and flexible exchange rates, international monetary problems and possible solutions.Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the instructor.
Degree credit exclusion: AK/ECON 3580 3.0.
AS/ECON 4210 3.0 Econometrics. This first course in econometrics develops the inner regression model. Least squares and maximum likelihood estimators are derived for classical and generalized cases. Hypothesis testing is simultaneously examined. The course stresses theorem proving, diagnostic analysis and careful applied work.

Prerequisite: AS/ECON 2500 3.0/3500 3.0 or equivalents, or permission of the course director.

Degree credit exclusions: AS/MATH 3033 3.0, AS/MATH 3330 3.0, AK/ECON 3490 3.0.

AS/ECON 4220 3.0 Econometric Theory. This course in econometrics examines multiple and simultaneous linear equations models. Time series analysis and other special topics are also considered. The course stresses theorem proving, diagnostic analysis, and careful applied work
Prerequisites: AS/ECON 42103.0 or equivalent or permission of the course director.
Degree credit exclusions: AS/MATH 3034 3.0, AK/ECON 3500 3.0.

AS/ECON 4239 3.0 Comparative Economic Systems. Comparative analysis of economic systems in terms of economic goals, organization of production and distribution, and economic performance.
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0 or equivalents, or permission of the course director.

Degree credit exclusion: AK/ECON 4100 3.0.
AS/ECON 42403.0 or 4249 3.0 Advanced Topics in Labour Economics. Trade unions and employers' organizations in the Canadian labour market; design and function of the institutions; worker and employer participation; the processes of conflict and agreement, the regulatory role of the state, the nature of collective agreements and their effect on the labour market and processes of production.

Prerequisite: AS/ECON 2300 3.0/2350 3.0, AS/ECON 2400 3.0/2450 3.0, AS/ECON 3240 3.0 (or AS/ECON 3249 3.0) or equivalents, or permission of the instructor.

AS/ECON 4259 3.0 Health Economics. Addresses major issues regarding the cost and quality of health care, using theoretical and quantitative techniques drawn from welfare economics, project evaluation, microeconomics and financial analysis.
Prerequisites: AS/ECON 2300 3.0/2350 3.0, AS/ECON 2400 3.0/2450 3.0, AS/ECON 2500 3.0 and AS/ECON 3500 3.0.

Degree credit exclusion: AS/ECON 4960A 3.0, AK/ECON 3240 3.0.

AS/ECON 4269 3.0 Marxian Political Economy. A study of the pure theory of Capitalism based on Marx's "Capital."
Prerequisites: AS/ECON 2300 3.0/2350 3.0 and AS/ECON 2400 3.0/2450 3.0, or equivalents, or permission of the course director.

AS/ECON 4279 3.0 Housing Economics. The course examines housing markets and housing policy. Models of demand, supply, and housing market equilibrium are developed emphasizing the special characteristics of housing. Welfare economics is used to study the design of optimal policies.

Prerequisites: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the instructor.

AS/ECON 4309 3.0 Law and Economics. This is a course in the interrelationship of law and economics emphasizing the institutional setting of the economic system and the concepts of property rights and transaction costs.

Prerequisite: AS/ECON 2300 3.0/2350 3.0 or equivalents, or permission of the instructor.
Degree credit exclusion: AK/ECON 3800 3.0.
AS/ECON 4350 3.0 Advanced Topics in Industrial Organization. This course examines theories pertaining to Industrial Organization, and covers oligopoly, entry, vertical integration, product differentiation, advertising, innovation and market structure, and industrial organization in an open economy. Public policy is discussed where appropriate.
Prerequisite: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the course director.

AS/ECON 43703.0 or 4379 3.0 Regulatory Economics. This course is an introduction to regulatory economics. While it uses problems common to Canadian public utilities for illustrative purposes, it is primarily theoretical in nature. Major areas of concentration are: determination of rate base; determination of rate of return; optimal tariff structure and problems of peak loadpricing.

Prerequisites: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the course director.

AS/ECON 4380 3.0 Public Choice Theory: The Economics of Politics. Public choice theory (the economics of politics) applies basic tools of microeconomics to answer questions central to political science. Special emphasis will be given to analyzing public choice in a direct democracy and in a representative democracy.
Prerequisite: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the instructor.

AS/ECON 4399 3.0 Topics in Law and Economics. Explores in detail such topics as damages vs. specific performance, liquidation damages vs. penalty clauses, the choice between strict liability and negligence in tort law, the different way different societies have solved the problem of law and order.
Prerequisites: AS/ECON 4309 3.0, or permission of the instructor.

AS/ECON 4400 3.0 Corporate Finance I. This course provides an introduction to the principles of finance and an examination of the financing and investment decisions of a business firm. Major topics are net present value, capital budgeting, efficiency of capital markets, treatment of risk, valuation of debt, dividend policy, short-term financing and financial strategy.
Prerequisites: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the course director.
Prerequisites or Corequisites: AS/ECON 3580 3.0.

Degree credit exclusion: AK/ADMS 35303.0 and AK/ADMS 4540 3.0.

AS/ECON 4410 3.0 Corporate Finance II. A continuation of AS/ECON 4400 3.0, this course examines topics like dividend policy; capital structure; the valuation corporate debt, other corporate liabilities (including leases) and options; merges, international finance and financial planning.
Prerequisites: AS/ECON 4400 3.0.
AS/ECON 4420 3.0 Topics in Corporate Finance. Selected topics in the economic analysis of financial markets, including choicetheoretic and statistical aspects of financial models. Possible topics include: intertemporal choice, economics of uncertainty, equilibrium models of money and risky assets, corporate financial policy, and the effects of inflation and taxation.
Prerequisite: AS/ECON 2300 3.0/2350 3.0, or equivalents, or permission of the instructor.

Recommended prior completion: AS/ECON 44003.0 and AS/ECON 35003.0 or equivalents.

AS/ECON 4500 3.0 Canadian Business Law I. An introduction to business law for Economics students.
Prerequisites: AS/ECON 10003.0 and AS/ ECON 10103.0 or equivalents.

Recommended prior completion: AS/ECON 4400 3.0.
Degree credit exclusions: AS/POLS 31656.0 and AS/SOSC 3165 6.0, AK/ADMS 3610 3.0.

AS/ECON 4510 3.0 Canadian Business Law II. Advanced Canadian Business Law for Economics students.

Prerequisite: AS/ECON 4500 3.0, or permission of the course director.
Degree credit exclusions: AS/POLS 31656.0 and AS/SOSC 3165 6.0, AK/ADMS 3620 3.0.

AS/ECON 4619 3.0 Economic Planning and Development in India. Examines India's economic development under national planning since the fifties. The treatment is historical and analytical in terms of the underlying planning models and methodologies, sectoral goals, strategies and performance. Economic issues are explored in the larger socio-political context.

Prerequisites: AS/ECON 2300 3.0/2350 3.0, AS/ECON 2400 3.0/2450 3.0, AS/ECON 3310 $3.0 / 33203.0$ or equivalents, or instructor's permission

AS/ECON 4629 3.0 Distribution and Growth in an Evolving Socialist Economy. Effective demand in socialist economy is analyzed in conjunction with systemic difficulties. Acceleration of growth and the low efficiency of factors of production an obstacle to maximization of consumption. Technical progress, its difficulties and constraints. Inflations in socialism, its systemic causes.
Prerequisite: AS/ECON 2300 3.0/2350 3.0 or equivalent.

AS/ECON 49603.0 or 4969 3.0 Selected Topics in Economics I. In any given year, additional courses may be offered. Information concerning these will be available at the departmental office in March of the preceding year.

AS/ECON 4970 3.0 Selected Topics in Economics II. In any given year additional courses may be offered. Information concerning these will be available at the departmental office in March of the preceding year.

AS/ECON 49803.0 or 4989 3.0 Guided Research I. This course permits students to undertake special programmes of private studies under the guidance of any instructor.
Prerequisites: AS/ECON 2300 3.0/2350 3.0, AS/ ECON 2400 3.0/2450 3.0, or equivalents.

Note: Consult the Enrolment and Registration section, Faculty of Arts for regulations on independent reading courses.

AS/ECON 49903.0 or 4999 3.0 Guided Research II. This course permits students to undertake special programmes of private studies under the guidance of any instructor.
Prerequisites: AS/ECON 2300 3.0/2350 3.0, AS/ECON 2400 3.0/2450 3.0, or equivalents.
Note: Consult the Enrolment and Registration section, Faculty of Arts; for regulations on independent reading courses.

## Economics and Business Arts

Programme Office:
(Department of Economics)
1144 Vari Hall, (416) 736-5322
Associate Professor and Co-Director of the Programme:
G.H. McKechnie

## Professors Emeriti:

M. Burstein, J.A. Buttrick, G.V. Doxey, H. Flakierski, F. Lefeber, P. Medow, A.J. Robinson, H. Schwartz, T. Sekine, R. Thakkar

Professors:
E. Appelbaum, L. Danziger, S. Donnenfeld, E. Katz, J. Landa, C. Plourde, J. Smithin

Associate Professors:
M. Anam, J. Beare, S. Bucovetsky, K. Carpenter, S.H. Chiang, A. Cohen,
G. Fallis, R. Grinspun, A. Haug, N. Jazairi, R. Latham, F. Lazar, A. Mansoorian, J. Ridpath, R. Rilstone, A.A. Shapiro, B. Smith

## Assistant Professors:

M.D.G. Copeland, T. Crossley, R.K. House, J. Jasiak, T.J. Kim, K.C. Lo

Note: For specific requirements of this programme, consult the 'Programmes of Study' section, Faculty of Arts.

## Departmental and Divisional Courses in Economics and Business

Note: Not all courses will be offered in any given year. For details of courses to be offered refer to the current Faculty of Arts Lecture Schedule, the Programme Office, or the supplemental calendar for the Coordinated Programme in Business, Public Policy and Administrative Studies, available in the Economics Undergraduate Records Office.

## Prerequisite Courses

AS/ECON 10003.0 Introduction to Microeconomics, or equivalent.
AS/ECON 10103.0 Introduction to Macroeconomics, or equivalent.
AS/ECON 15303.0 Introductory Mathematics for Economists I, or equivalent.
AS/ECON 1540 3.0 Introductory Mathematics for Economists II, or equivalent.

## Core Courses

AS/COSC 1520 3.0/1530 3.0 Introduction to Computer Use I and II;
or

AK/COSC 1200 3.0/1210 3.0 Introduction to Computing I and II;
or
AS/COSC 1020 3.0/1030 3.0 Introduction to Computer Science I and II.
AS/ECON 3580 3.0 Introductory Financial Accounting for Economists.
AS/ECON 3590 3.0 Introductory Managerial Accounting for Economists.
AS/ECON 2300 3.0 Intermediate Microeconomics Theory I.
AS/ECON 2350 3.0 Intermediate Microeconomics Theory II.
AS/ECON 24003.0 Intermediate Macroeconomics Theory I.
AS/ECON 24503.0 Intermediate Macroeconomics Theory II.
AS/ECON 2500 3.0 Introductory Statistics for Economists (or approved equivalent courses). AS/ECON 3140 3.0 Monetary Economics.
AS/ECON 3500 3.0 Introductory Mathematical Statistics for Economists (or approved equivalent courses).
AS/ECON 4200 3.0 International Monetary Economics.
AS/ECON 4400 3.0 Corporate Finance I.
AS/ECON 4500 3.0 Canadian Business Law I. AS/MATH 2580 6.0 Mathematics of Investment and Actuarial Science.

## Areas of Concentration

Students will select at least 18 credits from one of the following areas of concentration:

## 1. Business Mathematics

## Computer Science Option

Prerequisites for AS/SC/COSC 2001 3.0, AS/ SC/COSC 20113.0 and AS/SC/COSC 2021 3.0 are AS/SC/COSC 1020 3.0/1030 3.0 and AS/MATH 1090 3.0. AS/MATH 1300 3.0/1310 3.0 or an equivalent calculus course is also required and should normally be completed in the first year.
Prerequisites for 3000-level COSC courses vary but include AS/COSC 20113.0 and one of AS/SC/COSC 20013.0 and AS/SC/COSC 20213.0 as well as additional mathematics courses in some cases. Prerequisites for 4000-level COSC courses vary, but normally include one or two 3000-level COSC courses.

Note: To satisfy the prerequisites for courses in Operations Research and Actuarial Mathematics students may, with the permission of the Director of the Programme, substitute AS/MATH 1300 3.0/1310 3.0 plus AS/MATH 22213.0 for AS/ECON 1530 3.0/ 15403.0 as part of their Programme prerequisite course requirements.
AS/COSC 2001 3.0 Introduction to Theory of Computation.
AS/COSC 2011 3.0 Fundamentals of Data Structures.
AS/COSC 2021 3.0 Computer Organization. AS/COSC 3101 3.0 Design and Analysis of Algorithms.
AS/COSC 3111 3.0 Introduction to Programme Verification.
AS/COSC 3121 3.0 Introduction to Numerical Computations I.
AS/COSC 31223.0 Introduction to Numerical Computations II.

AS/COSC 3211 3.0 Data Communication. AS/COSC 3212 3.0 Computer Networks.
AS/COSC 3311 3.0 Software Design.
AS/COSC 3331 3.0 Object-Oriented Programming Design.
AS/COSC 3402 3.0 Introduction to Concepts of Artificial Intelligence.
AS/COSC 3408 3.0 Simulation of Discrete Systems.
AS/COSC 3411 3.0 File Structures and Data Management.
AS/COSC 3412 3.0 Introduction to Data Management Systems.
AS/COSC 3418 3.0 Simulation of Continuous Systems.
AS/COSC 4111 3.0 Automata and Computability.
AS/COSC 4331 3.0 Computer Graphics.
AS/COSC 4341 3.0 Interactive System Design.
AS/COSC 4401 3.0 Artificial Intelligence.
AS/COSC 4411 3.0 Database Management Systems.

## Econometrics/Mathematics Option

AS/ECON 4210 3.0 Econometrics. AS/ECON 4220 3.0 Econometric Theory. AS/MATH 3170 6.0 Operations Research I. AS/MATH 3280 6.0 Actuarial Mathematics. AS/MATH 4170 6.0 Operations Research II.

## 2. Financial Analysis

AS/ECON 3200 3.0 Industrial Organization. AS/ECON 32403.0 or 3249 3.0 Labour Economics - Theory.
AS/ECON 32503.0 or 3259 3.0 Labour Economics - Institutions.
AS/ECON 4070 3.0 Public Finance I.
AS/ECON 4080 3.0 Public Finance II.
AS/ECON 4210 3.0 Econometrics.
AS/ECON 4410 3.0 Corporate Finance II.
AS/ECON 4420 3.0 Topics in Corporate Finance.
AS/ECON 4510 3.0 Canadian Business Law II.
Notes concerning Atkinson College Administrative Studies courses: The prerequisite for most Atkinson Administrative Studies courses listed below (AK/ADMS) is AK/ADMS 2000 6.0, or AK/ADMS 1000 3.0, or AK/ADMS 2000 3.0.
AK/ADMS 3510 3.0 Managerial Cost Accounting and Analysis.
AK/ADMS 3585 3.0/3595 3.0 Intermediate Financial Accounting I and II.
AK/ADMS 4510 3.0 Contemporary Issues in Accounting.
AK/ADMS 4520 3.0/4530 3.0 Advanced Financial Accounting I and II.
AK/ADMS 4551 3.0 The Audit Process.
AK/ADMS 4552 3.0 The External Audit.
AK/ADMS 4553 3.0 Auditing: Advanced Topics.
AK/ADMS 4561 3.0 Taxation of Personal Income in Canada.
AK/ADMS 4562 3.0 Corporate Income Taxation in Canada.
AK/ADMS 4570 3.0 Management Planning and Control Systems.

## 3. International Economics and Business

AS/ECON 3310 3.0 Development Economics I.

AS/ECON 3320 3.0 Development Economics II.

AS/ECON 3089 3.0 Economic History of the U.S.: 1640-1860.

AS/ECON 3099 3.0 Economic History of the U.S.: 1860-1940.

AS/ECON 3150 3.0 International Trade I.
AS/ECON 4190 3.0 International Trade II.
AS/ECON 4210 3.0 Econometrics.
AS/ECON 4239 3.0 Comparative Economic Systems.
AS/ECON 4619 3.0 Economic Planning and Development in India.
AS/ECON 4629 3.0 Distribution and Growth in an Evolving Socialist Economy.
AS/POLS 2210 6.0 Introduction to International Relations.
AS/POLS 3270 3.0 Global Political Economy I. AS/POLS 3275 3.0 Global Political Economy II.

AS/POLS 4290 3.0 Topics in International Political Economy.
Language Option: 6 credits above the 1000 level in French Studies or in Languages, Literatures and Linguistics from an approved list published each year by the programme.
History Option: 6 credits above the 2000 level in modern history from an approved list published each year by the programme.

## 4. Labour Relations

AS/ECON 32403.0 or 3249 3.0 Labour Economics - Theory.
AS/ECON 32503.0 or 32593.0 Labour Economics - Institutions.
And 12 credits selected from:
AS/ECON 4210 3.0 Econometrics.
AS/ECON 4240 3.0 Advanced Topics in Labour Economics.
AS/HIST 3531 6.0 Working Class in Canadian Society (Cross-listed to: AS/SOSC 3210 6.0). AS/HIST 4500 6.0 Canadian and American Labour Movements.
AS/SOSC 2210 9.0 Labour Relations in Canada.
AS/SOSC 3130 6.0 Women and Work: Production and Reproduction (Cross-listed to: AS/AK/GL/WMST 3510 6.0, AK/SOSC 3380 6.0).

AS/SOSC 3311 6.0 Communication in Organizations.
AS/SOSC 3380 6.0 Law, Labour and the State. AS/SOSC 4210 6.0 Collective Bargaining Simulation.
AS/SOCI 3600 3.0 The Sociology of Work and Industry.
AS/SOCI 3610 3.0 Sociology of Occupations and Professions.
AS/SOCI 3620 6.0 Formal Organizations.

## 5. Public Policy

AS/ECON 3069 3.0 Canadian Economic Development Until the 1870s.
Degree credit exclusion: AS/HIST 3560 3.0, AK/ECON 3670 6.0.
AS/ECON 3079 3.0 Canadian Economic Development After 1870.
Degree credit exclusion:AS/HIST 3561 3.0, AK/ECON 3670 6.0.
AS/ECON 3200 3.0 Industrial Organization. AS/ECON 3230 3.0 Urban Economics.

AS/ECON 4070 3.0 Public Finance I.
AS/ECON 4080 3.0 Public Finance II.
AS/ECON 4110 3.0 Regional Economics.
AS/ECON 4210 3.0 Econometrics.
AS/ECON 4220 3.0 Econometric Theory.
AS/ECON 4259 3.0 Health Economics.
AS/ECON 4279 3.0 Housing Economics.
AS/ECON 4309 3.0 Law and Economics.
AS/ECON 4350 3.0 Advanced Topics in Industrial Organization.
AS/ECON 4380 3.0 Public Choice Theory: The Economics of Politics.
AS/ECON 4399 3.0 Topics in Law and Economics.
AS/ECON 4510 3.0 Canadian Business Law II.
AS/HIST 3510 6.0 Canada: The Making of a Nation.
AS/HIST 3561 3.0 Canadian Economic Development: 1870-1985.
Degree credit exclusion: AS/ECON 3069 3.0/ 3079 3.0.
AS/HIST 3591 6.0 Politics, Law and the Constitution in Modern Canada.
AS/HIST 4520 6.0 The Persistence of Nationalism in Quebec.
AS/HIST 4550 6.0 Ontario in the Twentieth Century.
AS/HIST 4530 6.0 The Development of Toronto.
AS/POLS 2610 6.0 Public Policy and Administration.
AS/POLS 3110 3.0 Process of Urban Politics I.
AS/POLS 3115 3.0 Process of Urban Politics II.

AS/POLS 3140 3.0 Political Economy of Labour in Canada.
AS/POLS 3175 3.0 Provincial Politics.
AS/POLS 4120 3.0 Ontario and Quebec.
AS/POLS 4130 3.0 Federalism in Canada.
AS/POLS 4160 6.0 Political Economy of Regionalism.
AS/POLS 4290 3.0 Topics in International Political Economy.
With the approval of the Coordinator of the programme, students may design their own area of concentration; such courses may be drawn from the offerings of any of the undergraduate Faculties.

## Education

## General Information:

York Campus, S835 Ross, (416) 736-5001
Administrative Officers:
J. Bell, Acting Dean; D. Dippo, Associate Dean (Pre-service); A. Griffith, Associate Dean (Field Development); t.b.a., Director, Graduate Programme in Education; B. Denman, Coordinator, Education of Deaf and Hard-of-Hearing Students; M. Perry, Director of Student Programmes

## Professors:

D. Britzman, G. Bunch, C. Ewoldt, L. Heshusius, M. McCarthy, R. Owston, S. Robbins, P. Rogers, S. Shapson

## Associate Professors:

S. Alsop, J. Bell, D. Cook, W. Crichlow, D. Dippo, S. Eden, E. Fine, A. Griffith, C. Haig-Brown, M. Hughes, N. Israelite, C. James, D. Khayatt, H. Lotherington, J. Mannette, S. Murphy, G. Orpwood,
R. Sanoui, S. Schecter, H. Smaller, P. Solomon, D. Sumara, C.A. Wien

## Assistant Professors:

B. Davis, D. Mason, N. Norquay, A. Pitt, A. Pomson, J. Sheridan, K. Stanworth, S. Todd, D. Yon

## Host School Boards

Dufferin-Peel Catholic District School Board
Durham District School Board
Durham Catholic District School Board
Halton District School Board
Halton Catholic District School Board
Peel District School Board
Simcoe District School Board
Simcoe Catholic District School Board
Toronto Catholic District School Board
Toronto District School Board
York Region District School Board
York Catholic District School Board
Board of Jewish Education

## Course Numbering

Letter prefixes are used in each course to identify the Faculty of Education (ED) and the subject area of the course (PRJM - PrimaryJunior Math; VISA - Visual Arts). A typical course number reads as follows ED/PRJM 30303.0 - Primary-Junior Math practicum/ seminar.
The majority of courses offered by the Faculty of Education are practicum/seminars. They involve teaching experience in schools as well as a weekly seminar on campus. For all practicum/seminars, the third digit of the course number denotes the school division level of the practicum:

```
3020 - Junior and Intermediate Divisions
3030 - Primary and Junior Divisions
3040 - Intermediate Division
3050-Senior Division
```

All courses are numbered at the 3000 level other than the Education I Common Year courses and ED/HEB 2030 3.0.
(Note: The Faculty reserves the right not to offer courses in particular sessions without advance notice.)

## Course Descriptions

ED/BIOL 3050 6.0 Teaching Biology in the Senior Division. A theoretical and practical introduction to instruction in biology including a consideration of methods and materials in a laboratory or field setting.

ED/CHEM 3050 6.0 Teaching Chemistry in the Senior Division. Methods and materials suited to the teaching of science in the Intermediate Division are emphasized in the first half of the practicum seminar while Senior Division issues related to the chemistry curriculum are discussed more fully in the second half.

ED/CMYR 2000 6.0 Common Year Practicum/ Seminar. This practicum/seminar, an introduction to education, gives an overview of school curricula with particular emphasis on the integration of various subjects. Investigation and observation of child development and teaching and learning styles are integral components. The
practicum provides opportunities for candidates to apply and experience teaching techniques in classroom situations. Seminars include opportunities for discussion and application of both educational theory and practice.

ED/CMYR 2400 3.0 Communication and the Education Process. This course focuses on the nature of communication in pluralistic societies, that is, in societal contexts characterized by linguistic and cultural diversity. Emphasis is on the social uses of speaking and writing and interpreting what is being communicated in school and classroom settings. Course content and organization are premised on a developmental and sociolinguistic viewpoint toward communication that recognizes the interdependence of language with cultural and social structures.

ED/CMYR 2500 3.0 Socialization and Human Development. This course reviews modern theories of child development and developmentalism more generally as an approach to understanding thinking, learning, and identity formation. Curricular and pedagogical implications for students and teachers as learners are explored. Complementary and/or alternative perspectives and critiques of developmentalism including those originating in sociology, feminism, indigenous and ecological world views, psychoanalysis, and postmodernism may also be considered.

ED/COST 3040 3.0 Teaching Computer Studies in the Intermediate Division. An examination of the computer studies curriculum of the Intermediate Division and of the methods, hardware and software used to teach it. Course design and evaluation are also considered.

ED/COST 3050 3.0 Teaching Computer Studies in the Senior Division. Building upon the knowledge and experience gained in ED/COST 30403.0 and the Intermediate practicum, this course examines methods and materials suitable for teaching Computer Studies in the Senior Division.

ED/DEVO 2500 6.0 Human Development through Fine Arts. The stages of human development in respect to the several intelligences, with emphasis on imaginal development through the fine arts. A theoretical and practical study of how precepts and concepts of self and other are developed in adolescence through poetry, drama, dance, music, and the visual arts.

ED/EDUC 3000 3.0 Teaching Religious Education in the Catholic Schools. Using a combination of theology and appropriate teaching processes, this course prepares candidates in the elementary and secondary levels to teach religious education in the Catholic Schools. Candidates study and reflect theologically on the basic phenomenon of religion as a human search for the absolute and for meaning in life. An examination of Catholicism as revelation in history which replies to, challenges, criticizes and deepens
one's own basic search involves candidates in a study of the core content of the Christian mystery which they are to teach in the classroom. Confluent educational methods and curriculum programmes are examined and practised in seminars.
Note: No tuition fees for those candidates for whom this course constitutes an Education credit beyond the 30 credit minimum requirement.

ED/EDUC 3310 3.0 The Adolescent and the Teacher. This course addresses a range of issues related to teaching and learning in a secondary school environment. Theories of adolescent development, identity formation, social and cultural production and reproduction are examined with specific reference to high school curriculum and pedagogy. Of particular interest are contemporary perspectives on the relationship between identity formation and popular culture and the implications of these perspectives for high school teachers.

ED/EDUC 3400 3.0 Models of Education. This interdisciplinary course explores the interrelationships among theories of knowledge, theories of learning, conceptions of curriculum, and approaches to pedagogy in the context of a broad inquiry into the aims and purposes of schooling. Emphasis is placed on the analysis and critique of fundamental commitments and underlying assumptions of various approaches to education.

ED/ENGL 3040 3.0 Teaching English in the Intermediate Division. The emphasis in this course includes methods and techniques for the improvement of reading, writing, listening, and speaking skills and the teaching of literature, creative writing, theatre arts, and grammar. Candidates also study the evaluation of student writing at the Intermediate level.

## ED/ENGL 3050 3.0 Teaching English in the

 Senior Division. This course continues in more depth genre studies outlined in ED/ ENGL 3040 3.0, focusing on poetry, fiction, drama, and expressive writing. There is further emphasis on pedagogic techniques especially suitable for teaching literature. Candidates also consider methods of teaching grammar and composition, the evaluation of student writing at the secondary school level, and the design of aspects of curriculum.ED/FINA 3330 6.0 Social Foundations of Fine Arts Education. An historical, philosophical, sociological, and comparative context for understanding the theory and practice of fine arts education at the elementary and secondary levels. Emphasized are concepts and principles relevant to the fine arts within the current Ontario system as well as classroom practice of education in the fine arts: in particular, issues of equity in education, the role of the arts in broadening conceptions of culture relevant to student, teacher, and community. Requisite materials on Ontario school law and administration as well as rights and responsibilities are included.

ED/FINA 3400 6.0 The Arts and Ideas in Education. This course covers models of integration in the arts, ideas and education. Through critical examination and individual experience of historical and contemporary approaches to the arts in a variety of social and cultural contexts, candidates will articulate and further develop their understanding of the role of the arts in culture and the goals of fine arts education.

ED/FNDS 33303.0 Aspects of the Foundations of Education. This interdisciplinary course examines the social, historical and political context of education in general with specific reference to the development of systems of compulsory public schooling in Canada. The relationships among formal education, economic inequality, and social reform are explored. Requisite materials on Ontario school law, school organization and administration, professional rights and responsibilities, and the role of teachers' federations are included.

ED/FREN 3040 3.0 Teaching French in the Intermediate Division. A theoretical and practical introduction to second language pedagogy with special emphasis on the methods and materials used to teach and test the four language skills. Performance and application are stressed through microteaching and instructional materials preparation.

ED/FREN 3050 3.0 Teaching French in the Senior Division. Theoretical and practical work in second language pedagogy at the secondary school level, with special emphasis on testing, evaluation and the integration of culture into the language programme. Familiarization with Ministry-approved texts.

ED/GEOG 3040 3.0 Teaching Geography in the Intermediate Division. Methods and materials suited to the teaching of geography at the Intermediate level are examined along with study topics such as lesson and unit planning, evaluation and field trips.

ED/GEOG 3050 3.0 Teaching Geography in the Senior Division. Building upon ED/ GEOG 30403.0 and the Intermediate practicum, this course examines methods and materials suitable for Senior Division Geography.

ED/HEB 2030 3.0 Teaching Hebrew and Jewish Studies I. An introduction to the Jewish community of Canada and its school system, as well as to methods of teaching Hebrew as a second language, Hebrew reading, customs and ceremonies.
Note: Open to candidates in Judaic Studies Option.

ED/HEB 3030 3.0 Teaching Hebrew and Jewish Studies II. A seminar in the teaching of Hebrew as a second language, Hebrew literature, Bible and Biblical Hebrew, and prayers in the Jewish schools, and in individualizing of instruction and small group activities.

Note: Open to candidates in the Judaic Studies Option.

ED/HIST 3040 3.0 Teaching History in the Intermediate Division. Candidates analyze the history curriculum of the Intermediate Division and study the resources and methods needed to implement it imaginatively in units and in individual lessons.

ED/HIST 3050 3.0 Teaching History in the Senior Division. An examination of the history curriculum of the Senior Division and of the methods and materials that could be used to teach it. Curriculum design and evaluation are also considered.

ED/IMST 3040 6.0 Teaching Mathematics, Science and Technology in the Intermediate Division. This course provides a practical and conceptual introduction to the teaching of mathematics, science and technology to students in grades 7 through 10. It is designed to assist teacher candidates to develop their knowledge and skills as reflective teachers, as well as familiarize them with issues of equity

ED/INDS 39003.0 (or 6.0) Independent Study. This course provides supervised study for candidates with a special interest. The course should be arranged with one's advisor and an appropriate course director, and is subject to the approval of the Curriculum Committee of the Faculty. Submissions of Independent Study course approval requests must be made to the Curriculum Committee by February 28 of the academic year preceding the intended year of enrolment.

ED/INSO 3050 6.0 Teaching Individual and Society in the Senior Division. Methods and materials suited to teaching Individual and Society at the Senior Division level are examined along with the study of lesson and unit planning and evaluation.

ED/INTG 3020 3.0 Integration Through the Arts in the Junior/Intermediate Divisions. This course provides a study of the pedagogy, theory and practice related to the teaching of integrated fine arts in the classroom. Candidates will study and apply in their practicum settings the teaching of a range of core subjects at the grades 4-8 level, with special emphasis on the role of arts as a resource for integrating and teaching a range of subject matter.

ED/ITAL 3050 6.0 Teaching Italian in the Intermediate/Senior Divisions. This course deals with the teaching of the four language skills at a beginner's level, with emphasis on developing communicative competence. Different theoretical and practical aspects of second language pedagogy are covered: various methods of language teaching, preparation of diversified teaching material, classroom techniques, integration of culture into the language programme, testing and evaluation. Special attention is given to the problem of teaching standard Italian to dialect speakers. Candidates become familiar with Ministry approved texts.

ED/JICO 3020 3.0 Teaching and Curriculum in the Junior/Intermediate Divisions. Candidates study and apply in their practicum settings the teaching of a range of core subjects at the Grades 4 to 8 level, with special emphasis on Grades 7 and 8. Attention is given to the highlights of curriculum and pedagogy in various subject areas, with emphasis on the integration of subjects within the Intermediate curriculum Attention is also given to socio-emotional and cognitive issues in early adolescence.

ED/JILA 3020 3.0 Teaching Language in the Junior/Intermediate Divisions. This course is intended to develop an understanding of how students in the Junior and Intermediate divisions gain facility in reading, writing speaking and listening. The focus is on exploring current thinking about the language processes and the implications of these insights for instructional practice.

ED/JIMA 3020 3.0 Teaching Mathematics in the Junior/Intermediate Divisions. A study of methods for teaching mathematics in the Junior and Intermediate divisions. Emphasis is placed on the use of materials, relating mathematics to the rest of the curriculum and developmental stages of students.

ED/JMST 3020 3.0 Teaching Mathematics, Science and Technology in the Junior Division. This course provides a practical and conceptual introduction to the teaching of mathematics, science and technology to students in grades 4 through 6. Emphasis is placed on the importance of students mathematical and scientific understanding.

ED/MATH 3040 3.0 Teaching Mathematics in the Intermediate Division. The practicum is concerned with assessing students' needs, creating and implementing projects to satisfy these needs, and evaluating their success. The seminar supplements the practicum by discussing materials, resources and methods suited to mathematics teaching.

ED/MATH 3050 3.0 Teaching Mathematics in the Senior Division. This course builds upon and extends knowledge and experience gained in ED/MATH 3040 3.0. In addition, various themes (e.g., applications, cultural aspects of mathematics) and their relation to the classroom experience may be discussed.

ED/MUSI 3040 3.0 Teaching Music in the Intermediate Division. This course examines the philosophy and methods of music education in relation to students in the Intermediate Division.

ED/MUSI 3050 3.0 Teaching Music in the Senior Division. Building upon ED/MUSI 30403.0 and the Intermediate practicum, this course examines methods suitable for Senior Division music.

ED/PHED 3040 3.0 Teaching Physical Education in the Intermediate Division. This course develops a point of view about the teaching of physical education by considering ways in which children learn, and stages in
their growth and development. It relates these to the Intermediate Division curriculum and to programme content and lesson planning.

ED/PHED 3050 3.0 Teaching Physical Education in the Senior Division. This course extends the philosophy developed in the Intermediate practicum to the Senior Division. In addition, it emphasizes psychological aspects of learning, the teaching of health, administration of classes, and the use of a variety of teaching styles.

ED/PHYS 3050 6.0 Teaching Physics in the Senior Division. A survey of modern physics curriculum, selection of teaching aids, materials and resources in physics instruction, design of modern physics laboratory programme, and discussion of current research in teaching high school physics.

ED/PJEP 3400 6.0 Teaching as Reflective Practice: Research Project. This course provides an opportunity for candidates with Early Childhood Education diplomas within the Faculty of Education to generate a research project focussed on teaching and learning. Using qualitative methods, the project will promote close examination of classroom practices as well as address issues of equity in the classroom as a route to expanding understanding and performance in teaching.

ED/PJFA 3500 3.0 Integrated Fine Arts. This course is designed to provide Teacher Candidates with a basic understanding of, and appreciation for, the components of an integrated fine arts programme, that is, visual art, music, drama and dance. The main focus will be integration of the arts into the curriculum as a central and essential element of education for all children and will include issues of equity. Candidates will have the opportunity to develop personal as well as professional skills in fine arts.

ED/PJIE 3500 3.0 Inclusive Education in the Primary/Junior Divisions. An introduction to the policy and practice of inclusive education as it is presented in Ontario schools will be provided in this course. Candidates will have an opportunity to select a focus for inquiry and work directly with students to explore inclusive education in a broad sense.

ED/PJLC 3500 3.0 Literacy and Culture. This course investigates how children become literate and addresses issues of second language learning and culture in literacy development. It will pursue successful practices for literacy development while exploring issues of diversity.

ED/PJMS 3500 3.0 Mathematics, Science and Technology. This course will examine how to incorporate mathematics, science and technology as basic dimensions of a balanced, equitable curriculum. The relationship of these disciplines to ecological literacy will be a major emphasis throughout the course.

ED/PRIJ 3030 6.0 Teaching and Curriculum in the Primary/Junior Divisions. Building upon the extensive practicum experience of the preceding practicum courses, candidates study and practice the teaching of subjects in the elementary curriculum, such as music, physical
education, science, social studies, and visual arts. Integration of different subjects within the curriculum is emphasized. Further emphasis is placed on the improvement of the candidate's observation and enquiry skills.

ED/PRJL 3030 3.0 Teaching Language in the Primary/Junior Divisions. This course is intended to develop an understanding of how children in the Primary and Junior divisions gain facility in reading, writing, speaking and listening. The focus is on exploring current thinking about the language processes and the implications of these insights for instructional practice.

ED/PRJM 3030 3.0 Teaching Mathematics in the Primary/Junior Divisions. A study of methods for teaching mathematics in the elementary school. Emphasis is placed on the use of materials, relating mathematics to the rest of the curriculum and developmental stages of students.

ED/SCIE 3040 3.0 Teaching Science in the Intermediate Division. An introduction to the philosophy, methods and materials of science instruction, with attention to the science curriculum, laboratory instruction and safe laboratory practices.

ED/SCIE 3050 3.0 Teaching Science in the Senior Division. This course extends the philosophy, methods and materials of science instruction developed in the Intermediate practicum to the Senior Division.

ED/VISA 3040 3.0 Teaching the Visual Arts in the Intermediate Division. This course examines the philosophy and methods of art education in relation to students in the Intermediate Division. Curriculum development, the organization and evaluation of lessons, learning resources and materials, problems in art education, and strategies of art teaching are among the pertinent areas studied. Other areas of concern are determined by the interaction of the instructors, adjunct professors, and candidates. Faculty lectures, candidate presentation, assigned readings, class discussions, and visiting artists and educators contribute to the exchange of knowledge.

ED/VISA 3050 3.0 Teaching the Visual Arts in the Senior Division. This course examines the philosophy and methods of art education in relation to students in the Senior Division. Curriculum development, the organization and evaluation of lessons, learning resources and materials, problems in art education, and strategies of art teaching are among the pertinent areas studied. Other areas of concern are determined by the interaction of the instructors, adjunct professors, and candidates. Faculty lectures, candidate presentations, assigned readings, class discussions and visiting artists and educators contribute to the exchange of knowledge.

## English - Arts

Department Office: 208 Stong College, (416) 736-5166 Chair of the Department:
K. Michasiw

## Professors:

F. Birbalsingh, J. Carley, D.Cohen, C. Innes, J. Lennox

Associate Professors:
I. Balfour, H. Campbell, M. Cummings,
L. Early, M.S. Elliott, B. Flattery, D. Freake,
B. Godard, T. Goldie, R. Grogan, P. Head,
L. Higgins, E. Hopkins, A.C. Koretsky, R. Kuin, M-C. Leps, J. Lewis, K. Michasiw, A. Mukherjee, A. Pilgrim, E. Sabiston, J. Willoughby, H. Zeifman

Associate Professors Emeriti:
D.R. Ewen, M. Rehner, H. Rinehart, H. Ross, D. Summerhayes

Assistant Professors:
J. Creet, K. Gibson, A. Klinger, T. Loebel, S. McCaffery, P. Sinnema, K. Valihora

The English Department offers a variety of courses in the literature of the English language. There are courses in historical periods from medieval to modern, in the literature of several nations (Canadian and Post-Colonial as well as English and American), and in the various literary genres such as poetry, fiction, drama, non-fictional prose, and criticism. In addition, during their final 36 credits, Honours English majors may propose their own thesis (AS/EN 4160 6.0).
Note: For specific requirements of programmes offered by this department, consult the 'Programmes of Study' section, Faculty of Arts.

## Courses in English

All courses meet for three hours of lectures or seminars each week throughout the year.
Note: The following list of courses is not intended to be complete or final. Courses may be deleted from or added to it. See the Department's annual supplementary calendar for a complete list of courses to be offered, as well as for reading lists and detailed course descriptions. These supplementary calendars are available from the Undergraduate Office, 208 Stong College.
The following regulations apply only to incoming students as of September 1993, transfer students and new majors. Students who began before September 1993 should consult previous calendars for a description of requirements.
Eligibility Requirements: Students may enrol in English courses at various levels according to their year of study based on the number of credits they have completed. Year of study equivalent are found in the Faculty of Arts Programmes of Study section of this calendar.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## I. 1000-Level Courses

Note: Open to all students who have passed fewer than 48 credits. Students who have passed 48 or more credits may enrol in 1000level courses only if they have submitted an authorization form signed by the Director of Undergraduate Studies in English to the Undergraduate Office.

AS/EN 1100 6.0 Major Authors in English Literature. A historical introduction to English literature, concentrating on major authors. The objective is not merely to impart information, but to give practice in useful ways of reading texts, thinking about them, and writing about them.

AS/EN 1200 6.0 An Introduction to Literary Genres. An introduction to English literature through the concept of genre, that is, the grouping of literary works according to their form. Four principal genres will be discussed: poetry, drama, fiction and non-fictional prose.

AS/EN 1300 6.0 Literature and Theory: An Introduction. This course introduces students to literary studies in English through several systems of interpreting literature. By examining various possible relations among the text, the reader, the author, and the world, the student will become familiar with differing strategies of interpretation.

AS/EN 1400 6.0 Introduction to English Literary History. This course is an introduction to the materials and methods of historically oriented approaches to literature in English, with emphasis on such concepts as period, tradition, influence, development, canon and criticism.

## II. 2000-Level Courses

## a. AS/EN 2000-2499

Note: Open to all students who have passed fewer than 84 credits, including entry-level students. Students who have passed 84 or more credits may enrol in 2000-level courses only if they have submitted an authorization form signed by the Director of Undergraduate Studies in English to the Undergraduate Office.

AS/EN 2060 6.0 The Grammatical Structure of English. An investigation of the grammatical structure of modern English, including phonology, morphology, syntax and semantics, within a linguistic framework.
Cross-listed to: AS/LING 2060 6.0.
AS/EN 2070 6.0 Approaches to Grammar. This course presents traditional, prescriptive, and functional grammar. Traditional grammar developed in classical times and was later adapted to English. Prescriptive grammar describes accepted English usage. Functional grammar refers language structures to the meanings which they have in their human context.

AS/EN 2100 6.0 History and Principles of Literary Criticism. A study of major contributions to critical theory both past and present.

AS/EN 2110 6.0 Introduction to Poetry. Through the close study of poems and relevant critical material, the course aims to develop in the student the ability to read poetry with discernment and pleasure.

AS/EN 2120 6.0 Drama. An introduction to the study of drama, presented from a theatrical as well as a literary point of view, with the emphasis on the changing nature of dramatic convention and the relation of plays to their historical background.

AS/EN 2130 6.0 Introduction to Poetics. An introduction to the key issues in theoretical poetics including the social function of the poet, the nature of poetic language, and the function of the image; together with surveys of avant-garde, feminist, ethno- and bio-poetics.

AS/EN 2160 3.0/2160 6.0 Special Topics. The department will offer courses or seminars on particular topics not ordinarily available. Details will be provided in the department's supplemental calendar.

AS/EN 2210 3.0 Horror and Terror: Variations on Gothic. The course addresses Gothic as a popular genre eliciting and managing fear, whether accompanied by anticipation and dread (terror) or confrontation and disgust (horror). Attention is paid to Gothic's eighteenth-century origins, but the focus is on more recent texts.

AS/EN 2220 3.0 Coming of Age in Fiction: Novels of Maturation and Initiation. This course examines the sub-genre of prose fiction known as the Bildungsroman or novel of maturation and the variety of forms and approaches evident in examples from the nineteenth and twentieth centuries.

AS/EN 2330 6.0 Literature of the United States Since 1865. A study of representative works by major American writers from the nineteenth century to the present.

AS/EN 2370 6.0 Post-Colonial Literature. A study of poetry, drama, and fiction by writers of English expression from various Commonwealth countries, with the main emphasis on critical examination of these works as literature, but with some attention to their historical and cultural contexts.

AS/EN 2450 6.0 Canadian Literature. A critical and historical study of the literature of Canada. When relevant, material for the course will be drawn from other literatures.

AS/EN 2470 6.0 Introduction to Prose Narrative. An introduction to the formal techniques and generic patterns that have governed the production of prose narrative in English from the sixteenth century to the present. Primary emphasis is on fiction but non-fictional narrative is addressed as well.
Degree credit exclusion: AS/EN 24706.0 taken previously.

AS/EN 2480 6.0 Satire. A broad and incisive examination of works in poetry, prose, and drama as examples of one of the four major kinds of literature - satire.

## b. AS/EN 2500-2999

Note: Open only to those students who have successfully completed at least 24 credits or at least 6 credits in English.

AS/EN 2510 6.0 British and American Poetry and Fiction: 1900 to 1940. Representative and influential works by British and American authors, including Eliot, Lawrence, Joyce, Hemingway, and Faulkner.

AS/EN 2550 6.0 The European and British Novel 1880-1930. A study of tradition and innovation in the theory and practice of the novel, with special attention to the influence of continental fiction.
Degree credit exclusion: AS/EN 3150 6.0.
AS/EN 2600 6.0 Medieval English. An
introduction to a representative selection of medieval English literature from Beowulf to Malory's Morte d'Arthur; designed for students, whatever their specialty, who would like to acquire some familiarity with Old and Middle English literature.
Degree credit exclusion: AS/EN 2460 6.0.
AS/EN 2660 6.0 An Introduction to Victorian Culture and Literature. This course serves as an introduction to nineteenth century English culture and literature through its representations in a broad range of writings in six genres.

Degree credit exclusion: AS/EN $2160 B$ 6.0.
AS/EN 2690 6.0 Contemporary Literature. A study of British and North American literature published since 1950.

Degree credit exclusion: AS/EN 3360 6.0.
AS/EN 2770 6.0 Modern Drama. A survey of European, British, and North American dramatists from Ibsen, Chekhov, and Shaw to Brecht and Osborne.

Degree credit exclusion: AS/EN 3200 6.0.
AS/EN 2850 6.0 Introduction to Gender Studies. An examination of how gender mediates the creation, reception and interpretation of literary/cultural texts. It provides students with critical tools for understanding gender in contemporary theory, and reading and writing about gender in literary texts.

AS/EN 2860 6.0 Women in Literature: A Comparative Analysis. The course examines the changing social and familial roles of women as they have been reflected and popularized in fiction from the eighteenth century to the present. The approach is comparative and historical, drawing on documents to complement the fiction.

## III. 3000-Level Courses

Note 1: Open to all students who have passed at least 48 credits. Students who have passed at least 24 but fewer than 48 credits may enrol in 3000-level courses only if they have submitted an authorization form signed by the course director to the Undergraduate Office.

Note 2: For 3000-level courses that satisfy the pre-1832 requirement please consult the Area lists in the 'Programmes of Study' section, Faculty of Arts.

AS/EN 3010 6.0 Style and Stylistics. An introduction to the description and history of the written language, designed to help students become more articulate critics of literature. Problems will include the question of style, structure, and specific English stylists since 1600.

AS/EN 3100 6.0 Literary Interpretation and Analysis. An introduction to the linguistic and structural analysis of literary texts.

AS/EN 3110 6.0 Old English Language and Literature. An introduction to the language and literature of the Anglo-Saxon period. The greater part of the course is devoted to selections of prose and poetry, read in the original Old English, with some reference to their historical and cultural context.

AS/EN 3120 6.0 English Drama to 1642: Shakespeare's Predecessors and Contemporaries. A study of the development of English drama from its origins to the Renaissance and an introduction to major Renaissance playwrights including Marlowe, Kyd, Jonson, Middleton, Webster and Ford.

AS/EN 3130 6.0 Poetry of the Early Modern Period: 1500-1660. This course examines the English lyric from Sidney to Marvell, concentrating on the Elizabethan sonnet in fall term and on the school of Donne in winter term. Attention will also be paid to social and aesthetic contexts.

AS/EN 3160 3.0/3160 6.0 Special Topics. The department will offer courses or seminars on particular topics not ordinarily available. Details will be provided in the department's supplemental calendar.

AS/EN 3170 6.0 Modern British Poetry. A critical and historical study of works by British poets of the Modernist period.

AS/EN 3180 3.0/3180 6.0 Literature of the United States since the Civil War. A study of poetry, fiction, drama and criticism representing a conflict between the old and the new in aesthetic, cultural and social values.

AS/EN 3190 6.0 Shakespeare. An introduction to the study of Shakespeare's plays.

AS/EN 3210 6.0 Shakespeare's Contemporaries. A survey to familiarize students with the work of Shakespeare and his Elizabethan and Jacobean contemporaries with emphasis on the dramatic language of the periods.

AS/EN 3230 6.0 The English Romantics. A study of the period 1780-1830 in English poetry and prose, that is, of the Romantics and some of their contemporaries.

AS/EN 3240 6.0 Poetry Workshop. A course intended for students who show talent in the composition of poems and who wish to develop
their talent by studying the practice of recognized poets and by submitting their own work to criticism and discussion.
Note: Admission to this course is based upon approval of a portfolio of 15 to 20 pages of poetry submitted by the student to the Coordinator of the Creative Writing programme.

AS/EN 3260 3.0/3260 6.0 Chaucer. A critical reading of Chaucer's works, with special reference to The Canterbury Tales.

AS/EN 3270 6.0 Seventeenth Century Perspectives. A critical and historical study of seventeenth-century literature from the death of Elizabeth I to the death of Milton.

AS/EN 3280 6.0 Victorian Poetry. An
introductory study of Victorian poetry with a roughly equal emphasis on Tennyson and other major poets and on various late nineteenth-century literary movements.

AS/EN 3300 6.0 Victorian Fiction and its Reading Public. A study of some significant novels from the period 1840-1900 (Eliot, Dickens, Thackeray, and others), together with some useful fictions by less demanding writers of the time.

AS/EN 3310 6.0 Literature of the United States 1800-1865. A reading of selected works by Cooper, Poe, Emerson, Thoreau, Hawthorne, Melville, and others.

AS/EN 3320 6.0 Poetry of the United States. A critical examination of the major achievements of American poets writing in the twentieth century against the background of earlier poets who may be said to have established the foundations of an American poetic tradition.

AS/EN 3330 6.0 Modern Canadian Drama. This course focuses on the wide range of English-language drama written and performed in Canada since 1967.

Degree credit exclusion: AS/EN 3160A 6.0.
AS/EN 3340 6.0 Modern Canadian Fiction. A study of selected Canadian novelists, anglophone and francophone. Contemporary and comparative themes and techniques are considered, using translations for the francophone works.

AS/EN 3350 6.0 Modern Canadian Poetry. An intensive study of the modern movement in Canadian poetry.

AS/EN 3400 3.0 Ballads and Folksongs. A study of the ballads and folksongs of the English-speaking world.

AS/EN 3420 6.0 Psychoanalysis and Approaches to Literature. An introduction to the fundamental concepts of psychoanalysis and their application to the study of literature. The course's primary theorist is Freud but the contributions of such figures as Jung, Klein and Lacan are also considered.

AS/EN 3430 3.0/3430 6.0 Studies in Women Writers.

Note: Details in the English department's supplemental calendar.

AS/EN 3440 6.0 Post-Colonial Writing in Canada. An examination of the meaning of post-coloniality in the Canadian context by focusing on the work of writers of Native, Caribbean and South Asian backgrounds. It would be fruitful to study them together as their work provides a foreground to the experience of colonialism.

AS/EN 3540 3.0/6.0 Eighteenth Century Genres. An examination of the developments and transformations in one or more of the four principal literary genres - poetry, drama, prose fiction, non-fictional prose - in the period from 1660-1800, and of the relations of these to concurrent social change.

AS/EN 3721 6.0 Mapping the Italian Experience in Canada. The study of the Italian experience in Canada as expressed in representative works from various genres: narrative, poetry, theatre and film. The significance of these works is examined in the social an political context.
Prerequisite: None.
Cross-listed to: AS/IT 3721 6.0.

## IV. 4000-Level Courses

Note: Open to all Honours students who have passed at least 84 credits. Honours students who have passed at least 48 but fewer than 84 credits may enrol in 4000-level courses only if they have submitted an authorization form signed by the course director to the Undergraduate Office.

AS/EN 4100 3.0/4100 6.0 Studies in Literary Theory. An advanced seminar allowing students with an informed interest in the history and principles of literary theory to focus on specific issues. Different theoretical approaches and areas of concern are explored from year to year.

AS/EN 4110 6.0 History and Description of the English Language. The development of the English language to the present time, and a description of Modern English.

AS/EN 4130 6.0 Milton. A study of the major poetry and selected prose of John Milton: "Lycidas," "Comus," Paradise Lost, Paradise Regained, and Samson Agonistes.

AS/EN 4140 6.0 Studies in Modern Poetry. English and American poetry of the twentieth century, with attention being paid to the work of contemporary poets, as well as to that of established writers.

AS/EN 4150 3.0/4150 6.0 Special Topics. To be announced in the English department's supplemental calendar.

AS/EN 4160 6.0 Independent Research. This course provides an opportunity for sustained research under the direction of a member of the department on topics not covered in the English curriculum. The
research must take the form of a thesis. Open only to honours English students who have passed at least 84 credits, with the permission of the Director of Undergraduate Studies in English.
Note: Consult the Enrolment and Registration section, Faculty of Arts for regulations on independent reading courses.

AS/EN 4180 3.0/4180 6.0 Studies in Renaissance Literature. To be announced in the English department's supplemental calendar.

AS/EN 4190 3.0/4190 6.0 Studies in Eighteenth Century Literature. To be announced in the English department's supplemental calendar.

AS/EN 4200 6.0 Studies in Nineteenth Century Literature. To be announced in the English department's supplemental calendar.

AS/EN 4210 3.0/4210 6.0 Studies in the Literature of the United States. To be announced in the English department's supplemental calendar.

AS/EN 4220 3.0/4220 6.0 Studies in Old English Literature. A study of selected texts in the literature of Anglo-Saxon England.

AS/EN 4230 6.0 Studies in Post-Colonial Literature. To be announced in the English department's supplemental calendar.

AS/EN 4250 6.0 Studies in the English Romantics. To be announced in the English department's supplemental calendar.

AS/EN 4260 3.0/4260 6.0 Studies in Prose Fiction. To be announced in the English department's supplemental calendar.

AS/EN 4270 6.0 Studies in Canadian Literature. To be announced in the English department's supplemental calendar.

AS/EN 4280 6.0 Studies in Middle English Literature. To be announced in the English department's supplemental calendar.

AS/EN 4290 6.0 Studies in the History of Women's Writing. To be announced in the English department's supplemental calendar.

AS/EN 4320 6.0 Studies in Contemporary Drama. To be announced in the English department's supplemental calendar.

## Environmental Science - Pure and Applied Science

Programme Office:
N417 Ross, (416) 736-5107
Professor and Coordinator of the Programme:
A.R. Hill

Professors:
M.B. Fenton, M.C. Kellman, L.E. Licht, J.C. McConnell, D.J. McQueen, L.D.M. Packer, G.G. Shepherd,
M.B. Sokolowski, P.A. Taylor

## Associate Professors

D.R. Bazely, R.L. Bello, Q. Cheng, M.A. Jenkins, G.P. Klaassen, A. Robert, J.S. Shore, B.J. Stutchbury

## Assistant Professors:

## P. Treitz, K.L. Young

Environmental science encompasses the study of the major natural interacting systems of climate, water, biota and landforms and the effects of human activities on these systems. The programme provides students with a broad interdisciplinary education which is organized around the field of environmental science rather than being focused on a single academic discipline. It equips students with scientific knowledge and understanding of several environmental systems so that they can effectively analyze and deal with complex environmental problems.
Students are required to focus their studies on one of two streams (Physical Sciences and Life Sciences) and complete a set of core courses which provide a minimum breadth in both the physical and life sciences. In addition the student's perspective is enriched by a requirement to take courses on the social, economic, political, and policy aspects of environmental issues.
For specific requirements of the Specialized Honours BSc programme in Environmental Science, see Science section V.

## Departmental Courses in Environmental Science

The following list includes required and elective courses in the Specialized Honours BSc Programme in Environmental Science.

## Geography

SC/GEOG 2400 6.0 The Hydrosphere.
SC/GEOG 2500 3.0 Introduction to Vegetation and Soils.
SC/GEOG 2700 3.0 Introduction to Geomorphology.
SC/GEOG 3200 3.0 Terrestrial Ecosystems.
SC/GEOG 3400 3.0 Glacial Geomorphology. SC/GEOG 3500 3.0 Plant Geography (Same as SC/BIOL 3500 3.0.).
SC/GEOG 3600 3.0 Process Geomorphology. SC/GEOG 3700 3.0 Global Geoscience and Global Change.
SC/GEOG 4100 3.0 Regional Geomorphology of Canada.
SC/GEOG 4180 4.0 Laboratory Analysis of Ecological Materials.
SC/GEOG 4200 3.0 Water Quality and Stream Ecosystems.
SC/GEOG 4205 3.0 Climatology of High Latitudes.
SC/GEOG 4210 3.0 Hydrometeorology.
SC/GEOG 4280 3.0 Tropical Environments.
SC/GEOG 4310 3.0 Dynamics of Snow and Ice.
SC/GEOG 4400 3.0 Physical Hydrology and Water Resources.
SC/GEOG 4600 3.0 Fluvial Geomorphology.

## Biology

SC/BIOL 2010 4.0 Plants.
SC/BIOL 2030 5.0 Animals.
SC/BIOL 2031 4.0 Animals.

SC/BIOL 2050 3.0 Ecology.
SC/BIOL 3001 3.0 Field Course (ecology sections).
SC/BIOL 3001 2.0 Field Course (ecology sections).
SC/BIOL 3002 3.0 Field Course (ecology sections).
SC/BIOL 3002 2.0 Field Course (ecology sections).
SC/BIOL 3090 3.0 Science Statistics.
SC/BIOL 3170 3.0 Concepts in Animal Ecology.
SC/BIOL 4000 8.0 Honours Thesis.
SC/BIOL 4020 3.0 Mycology.
SC/BIOL 4070 3.0 Behavioural Ecology.
SC/BIOL 4080 3.0 Methods in Aquatic Ecology.
SC/BIOL 4090 4.0 Plant Ecology.
SC/BIOL 4095 3.0 Applied Plant Ecology.
SC/BIOL 4100 3.0 Natural History.
SC/BIOL 4120 3.0 Phycology.
SC/BIOL 4130 3.0 Plant Evolution.
SC/BIOL 4230 4.0 General Entomology.
SC/BIOL 4240 4.0 Mammalian Systematics and Ecology (Mammalogy).
SC/BIOL 4245 3.0 Conservation Biology (Same as ES/ENVS 4110 3.0.).
SC/BIOL 4250 3.0 Ornithology.
SC/BIOL 4255 3.0 Biodiversity (Same as ES/ ENVS 4111 3.0.).
SC/BIOL 4340 3.0 Fish Biology.
SC/BIOL 4400 3.0 Behavioural Genetics.
SC/BIOL 4420 3.0 Herpetology.

## Earth and Atmospheric Science

SC/EATS 2010 3.0 Introductory Meteorology. SC/EATS 2470 4.0 Introduction to the Mechanics of Fluids and Solids.
SC/EATS 3030 3.0 Atmospheric Radiation and Thermodynamics (Same as SC/PHYS 3080 3.0.).

SC/EATS 3040 3.0 Atmospheric Dynamics I.
SC/EATS 3130 3.0 Introductory Atmospheric Chemistry (Same as SC/CHEM 3060 3.0.).
SC/EATS 4050 6.0 Synoptic Meteorology.
SC/EATS 4050 3.0 Synoptic Meteorology I.
SC/EATS 4120 3.0 Cloud Physics and Radar Meteorology.
SC/EATS 4130 3.0 Atmospheric Dynamics II.
SC/EATS 4140 3.0 Numerical Weather Prediction.
SC/EATS 4150 3.0 Turbulence and Diffusion in the Atmospheric Boundary Layer.
SC/EATS 4160 3.0 Climate and Climate Change.
SC/EATS 4170 4.0 Transport and Chemistry of Atmospheric Trace Gases (Same as SC/ CHEM 4061 4.0.).
SC/EATS 4220 3.0 Remote Sensing of the Earth's Surface.
SC/EATS 4230 3.0 Remote Sensing of the Atmosphere.
SC/EATS 4240 3.0 Storms and Weather Systems.

## Environmental Studies

Faculty Office:
355 Lumbers, (416) 736-5252
Dean:
P. Victor

Associate Deans:
B. Kettel and L.Molot

## Undergraduate Program Director:

R. Rogers

University Professors:
W.C. Found

Professors Emeriti:
J. B. Ellis, C. D. Morely, A.L. Murray, R. Lang, R.D. Schwass

Professors:
D.V.J. Bell, G.P. Daly, M.B. Fenton,
B. Greer-Wootten, H.P.M. Homenuck,
L. Salter, E.S. Spence, P. Victor, G.R. Wekerle, P.F. Wilkinson

## Associate Professors:

A. Armour, M. Campbell, H.E. Daugherty, G. Desfor, R. Keil, B. Kettel, R.G. Macdonald, L. Molot, G.P. Penz, P.E. Perkins, R. Peterson, B. Rahder, B.M. Rutherford, L. A. Sandberg

Associate Professors Emeriti:
J.G. Craig, L.L.N. Evernden

## Assistant Professors:

D. Barndt, C. Canzonieri, P. Cole, L. Fawcett, F. Handy, I. Kapoor, R. Rogers, C.A.H. Sandilands, G. Sheng, J.W. Sheridan, J. Steigerwald

York's Faculty of Environmental Studies has offered an undergraduate degree programme, the Bachelor in Environmental Studies (BES Specialized Honours degree), since the fall of 1991. The BES degree programme is committed to the broadest possible definition of environment, offering undergraduates the opportunity to study social, organizational, and built environments, as well as natural environments. This breadth of approach distinguishes York's Environmental Studies programme from most others in the environmental field. Each student develops a concentration in one of the four theme areas outlined in the Faculty programme section of the calendar. The objective of the BES programme is to produce graduates who are environmental generalists grounded in a theme specialty. The BES programme is designed for those who have a strong interest in understanding the difficult human and environmental problems facing our world - and are serious about wanting to play a part in finding sustainable solutions. It is designed to equip its students with knowledge and understanding to be better able to deal enthusiastically yet sensitively with complex environmental and social problems arising at the local, national or global level.
Note: A BES programme supplementary calendar is available each spring in the FES Undergraduate Student Programmes Office (Room 352, Lumbers Bldg.) or on the York Web site at: www.yorku.ca/faculty/fes.

## Courses in Environmental Studies

For specific requirements of the BES Specialized Honours degree programme, please consult the Faculty of Environmental Studies section of this calendar.
A proportion of the places in most BES courses is available to students in other Faculties. Please consult the BES Supplementary Calendar for details.
The following are the descriptions of the courses for the BES Specialized Honours programme as approved by the Senate of York University.

Outlines of the courses are available in the BES programme supplementary calendar.

ES/ENVS 1000 6.0 Approaches to Environmental Studies. The special nature of environmental studies is explored through integrative perspectives emphasizing socioenvironmental problems and solutions; actors, actions and ethics; contextualization of problems and phenomena; holistic perspectives; critical and creative thinking and communication.

ES/ENVS 1200 6.0 BES Workshop. Special topics in environmental studies will be explored through small group research. Each year a new research focus will be identified by the students and faculty involved in the workshop. Once a research focus has been selected, a range of perspectives and substantive areas will be identified and students will engage in research in these areas. The course culminates with a miniconference where student groups present their research and integrate the group presentations.

ES/ENVS 1500 6.0 Introduction to Science for Environmental Studies. The course provides an introduction to the elements of physics, chemistry, biology and ecology that are necessary for the study of environmental problems. It also acquaints students with techniques (including computer techniques) for the description, organization and display of quantitative data.

ES/ENVS 2000 3.0 Paradigms in Environmental Studies. The course maps the theoretical perspectives, theories and approaches encountered in environmental studies. The basic paradigms of the natural and the social sciences are considered, along with integrating paradigms. The relationships of concepts to theories and to methods of inquiry are explored.

ES/ENVS 2010 6.0 Methods in Environmental Studies I. Implications of paradigms for methods of inquiry. Theory and method of quantitative description, probability and statistics. Induction, deduction, the relation of theories to observations, and the role of chance in human and environmental processes are introduced. Exercises requiring familiarity with microcomputer spreadsheet and database packages are assigned. Remedial computer literacy modules are made available for those needing them.

ES/ENVS 2100 3.0 Foundations of Nature, Technology and Society. The goal of this course is to introduce students to the study of some central issues at the boundaries between nature and technology studies and contemporary social controversies surrounding the environment. The lectures focus on case studies, such as the Canadian fishery, biotechnology, agribusiness, and animal tools, in order to illustrate and explore the complex relationships between natural environments, technologies and humans.

ES/ENVS 2200 3.0 Foundations of Human Settlements and Population. The course first develops understanding of the basic processes of demography and the dynamics of human populations. The relationship of populations to their environments and to cultural development is explored. The formation of settlements and their role in human affairs is explored, along with their local and global environmental impacts.

ES/ENVS 2300 3.0 Foundations of Global Development, Peace and Justice. The
purpose of this course is to provide students with a critical overview of key issues related to global development, peace, and justice. The objectives of the course include: an exploration of the broader North-South context of development, including history, actors, and theoretical perspectives; consideration of contemporary issues related to global development, peace, and justice; a critical examination of current Northern and Southern state and non-state based agendas for global development.

ES/ENVS 2400 3.0 Foundations of Environmental Policy and Action. The course explores the nature and process of, and constraints on, policy-making in the public and private sector, with special emphasis on environmental policies. The effect on the environment of policies in different sectors is explored, and the policies of environmental interest groups and social movements are reviewed. Case studies are used to expose students to policy formulation, the linkage of policy to action, and the effect on policies of interest groups and social movements.

## ES/ENVS 2500 6.0 Applied Environmental

Sciences. The course introduces students to the concepts and practices in the main areas of environmental sciences that bear on environmental issues and problems. Topics include water quality studies, toxicology, air pollution and air quality, forest ecology and management, energy impacts, and ecological restoration.
Prerequisite: ES/ENVS 15006.0 or 6 approved credits in a science discipline or permission of the instructor.

ES/ENVS 3000 3.0 Environmental Ethics. The course identifies, compares and evaluates ethical principles and theories that apply to environmental and related social issues and their relationship to underlying value components. Implications for public action and for the practice of individuals and organizations are developed.
Prerequisite: Third-year BES Honours standing; or permission of the instructor.

## ES/ENVS 30113.0 Methods in

 Environmental Studies II. This course examines the use of quantitative and qualitative approaches in the context of research design. The course, which is a prerequisite for ENVS 4000 6.0 Senior Honours Work, has as its final assignment the completion of the research design andnomination of a faculty supervisor for the Senior Honours Work to be undertaken beginning in the following Fall-Winter session.
Prerequisite: Third year ENST specialty and ENVS 2010 3.0 Methods in Environmental Studies I.

ES/ENVS 3110 3.0 Science and the Environment. The course explores links between the state of environmental knowledge, environmental science, and its application to environmental issues and policy. It starts with an historical perspective of how public perceptions and attitudes have changed with respect to scientific findings about the environment. Case studies critically examine controversies and conflicts in how scientific knowledge has or has not changed and affected policy and the state of the environment.
Prerequisite: ES/ENVS 25006.0 or permission of the instructor.

ES/ENVS 3120 3.0 Environmental History. The course examines the culture-environment relationship in historical perspective. The focus is on ways in which social change is triggered by environmental change and vice-versa. Case studies illustrate general patterns of change, such as those associated with the introduction of alien species, new modes of agricultural production.
Prerequisite: ES/ENVS 21003.0 or permission of the instructor.

ES/ENVS 3130 3.0 Energy and the Environment. The course focuses on relationships between socio-economic development, energy use, and the environment in Canada. Energy sources, energy end use, energy technology, and energy institutions as well as the social and ecological impacts of energy use are examined. Energy systems supportive of sustainable development are explored.
Prerequisite: ES/ENVS 21003.0 or permission of the instructor.

ES/ENVS 3140 3.0 Environmental Education. The course explores concepts and practices in environmental education in the widest sense, comprising formal, informal and global education ideas. The course takes a critical and historical approach to environmental education with an emphasis on developing and practising alternative perspectives on how people learn about the natural environment.
Prerequisite: ES/ENVS 21003.0 or permission of the instructor.

ES/ENVS 3151 3.0 Environmental Politics and Advocacy I. This course introduces students to a range of approaches and issues in environmental politics and advocacy. Themes include: political dimensions of contemporary environmental problems; main currents in environmental political thought; and relations between governmental and nongovernmental organizations in environmental advocacy.
Prerequisite: Third year ENST specialty or permission of the instructor.

ES/ENVS 3220 3.0 Urban Sustainability. The course takes a conceptual approach to defining "sustainability" for urban areas, considering patterns of land use, human activities, natural systems and needed rehabilitation. Case studies explore ways of making urban areas more sustainable.
Prerequisite: ES/ENVS 22003.0 or permission of the instructor.

ES/ENVS 3310 3.0 Environment and Development. An historical perspective on development concepts and practices is the initial focus, considering economic, social, political, and environmental ideas in development. Case studies then illustrate how different approaches have lead to different results and lead to discussion of alternatives.
Prerequisite: ES/ENVS 23003.0 or permission of the instructor.

ES/ENVS 3340 3.0 Global Environmental Politics. The course reviews the emergence of environmental issues in international relations and the body of environmental law that has been produced. Case studies of issues such as global warming, the ozone layer, and the destruction of tropical rainforests are used to analyze the social, economic and political pressures that raised them and the effectiveness of solutions. International forums on environment and development are studied.
Prerequisite: ES/ENVS 23003.0 or permission of the instructor.

ES/ENVS 3410 3.0 Environmental Policy I. The formulation of environmental policy is the focus: its underlying scope, concepts, legal bases, methodologies. Case studies illustrate the interaction of environmental policy with other policy areas: foreign and trade policy, economic and social policy. Critical review of how policy is created.
Prerequisite: ES/ENVS 24003.0 or permission of the instructor.

ES/ENVS 3420 3.0 Environmental Law. Introduction to basic legal concepts: sources of law, legal remedies, common law, and administrative law. An examination of planning acts, environmental protection acts and environmental assessment acts is followed by a review of litigation processes, hearing boards, and their operations. The course will critically review environmental legal concepts and their social, economic and environmental effects.
Prerequisite: ES/ENVS 24003.0 or permission of the instructor.

ES/ENVS 3430 3.0 Environmental Assessment. The course explores concepts of impact assessment, origins and rationale of the EIA process, current legislation and practices, including a discussion of EIA legislation and methodologies. Case studies provide a critical review of current EIA methodologies, including participation and consultation, and the use of impact study information for environmental planning and decision-making.
Prerequisite: ES/ENVS 24003.0 or permission of the instructor.

ES/ENVS 3440 3.0 Resource Management. Current theories of resource management, methods, information and decision-making are reviewed critically. Ethical, cultural, social, and economic perspectives on resource management are explored through case studies.
Prerequisite: Third year ENST specialty or permission of the instructor.

ES/ENVS 3510 3.0 Environmental Economics I. The application of economic principles to environmental issues is introduced and critically reviewed. Linkages between economic factors, social processes and natural environments are explored. The use of economic principles in deriving solutions to issues of pollution control, resource depletion, and environmental regulation is explored.
Prerequisite: ES/ENVS 24003.0 or permission of the instructor.

ES/ENVS 3520 3.0 Geographical Information Systems in Environmental Studies. This course provides students with an introduction to the application of Geographical Information Systems to environmental problems. A broad conceptual overview of GIS approaches and their strengths and limitations is presented. Students gain hands-on experience in the use of raster based GIS technology with particular reference to resource management and planning topics.
Prerequisite: Third year ENST specialty or permission of the instructor.
Cross-listed course: also offered as AS/SC/ GEOG 3180 3.0.

ES/ENVS 3521 3.0 Environmental Remote Sensing. This course represents an introduction to the methods in which remote sensing data are collected, processed and analysed. An emphasis is placed on environmental applications. The synergy between the technologies of remote sensing and geographic information systems (GIS) is also stressed.
Prerequisite: ES/ENVS 20106.0 and one 2000 level Theme Foundation course or written permission of the course director.
Cross-listed course: also offered as AS/SC/ GEOG 3440 3.0.

ES/ENVS 4000 6.0 Senior Honours Work. All BES honours students participate in an advanced seminar on topics in environmental studies, which runs concurrently with their own production of a thesis, synthesis paper or major project report done in conjunction with a supervisor.
Prerequisite: Fourth-year BES Honours standing.

ES/ENVS 4110 3.0 Conservation Biology. The course explores the biological concepts upon which environmental conservation is established and practices developed. Case studies explore the ecological basis for and implications of conservation practices. Critical discussion in the form of prepared debates occurs on selected topics.

Prerequisite: EN/ENVS 25006.0 and EN/ ENVS 21003.0 or permission of the instructor.
Cross-listed course: also offered as SC/BIOL 4170G 3.0.

ES/ENVS 4111 3.0 Biodiversity. The
purpose of this course is to provide a broadlybased understanding of the diversity of life on this planet and the processes whereby this diversity has arisen. Patterns in variation in the levels of biodiversity will be analyzed which occur in both space and time. The roots of the current "biodiversity crisis" will be investigated and some of the consequences addressed. Some of the specific objectives included are: to provide an understanding of the various meanings of the term "biodiversity"; to provide an appreciation of the diversity of life on this planet, and an understanding of how this diversity has arisen and how it used to be maintained; to investigate patterns of variation in biodiversity; and to asses the likely future loss of biodiversity and the effects of this loss on planetary and societal functioning.

Prerequisite: ES/ENVS 25006.0 or equivalent Biology courses or permission of the instructor.
Cross-listed course: also offered as SC/BIOL 4255 3.0 Biodiversity.

## ES/ENVS 4120 3.0 Natural History. The

course explores the beliefs, writings and practices of North American naturalists. The goal is for students to develop an intimate knowledge of local natural history through readings, research and field trips. The underlying assumptions of natural history knowledge and scientific knowledge are examined in order to compare and contrast them, with implications.
Prerequisite: ES/ENVS 25006.0 and ES/ENVS 21003.0 or permission of the instructor.

## ES/ENVS 4140 3.0 Environmental Thought

The course is an introduction to diverse ways of seeing and understanding nature. An historical perspective on the development of environmental thought leads to an exploration of various perspectives and critiques of the standard scientific and technological approaches to understanding nature, as offered by alternative schools of thought such as humanists, deep ecologists and ecofeminists.
Prerequisite: ES/ENVS 21003.0 or permission of the instructor.

ES/ENVS 4151 3.0 Environmental Politics and Advocacy II. This course focuses on current developments in politics and advocacy on environmental issues. Topics may include: recent trends in political theory; the impact of globalization on environmental advocacy; and the rise of "new" social and environmental movements.
Prerequisite: ES/ENVS 31513.0 or permission of the instructor.

ES/ENVS 4161 3.0 New Social Movements. This course examines new social movements that have arisen in response to the crisis of industrial culture, economic restructuring, shifting political formations, and ecological disasters. The course focuses on current theories of social movements, contested issues, and case studies
of social movements in action and is intended to provide opportunities for students to gain first hand experience with social movement organizations through participatory research projects.
Prerequisite: Fourth-year standing or permission of the instructor.

ES/ENVS 4210 3.0 World Population Issues and Problems. The course examines the causes and consequences of the current growth in world population. Case studies explore existing and alternative population policies such as family planning, enhancing the status of women, and improving education. Possibilities for a global strategy are considered
Prerequisite: ES/ENVS 32103.0 or permission of the instructor.

ES/ENVS 4220 3.0 Urbanization in Developing Countries. The special problems of urban areas in the third world are addressed, including industrialization and growth in the formal economy, migration and informal settlement, land use and urban food production, transportation, energy, and services. Case studies show linkages to national development policies and to social and environmental problems.
Prerequisite: Fourth-year standing or permission of the instructor.

ES/ENVS 4311 3.0 Global Justice and the Environment. The course provides a general introduction to socio-environmental ethics and, in particular, social justice, as applied to global development, the global environment, international relations. It will cover the humanrights approach, theoretical schools of thought and particular public controversies.
Prerequisite: ES/ENVS 23003.0 and ES/ ENVS 30003.0 or permission of the instructor.

ES/ENVS 4320 3.0 Gender and Development. The course presents an overview of gender and development analysis as a framework for considering the role of women in third world development. Consideration of theories and concepts leads to case studies illustrating issues and practices.
Prerequisite: Fourth-year standing or permission of the instructor.

ES/ENVS 4410 3.0 Environmental Policy II. The analysis and evaluation of environmental policy are presented through concepts, methods, and processes. A critical exploration of the basis and results of current methods of policy evaluation, exploration of alternatives, ethics and equity of environmental policy is accomplished through case studies.
Prerequisite: ES/ENVS 34103.0 or permission of the instructor.

ES/ENVS 4420 3.0 Environmental Attitudes and Communication. The bases for sociallyheld environmental attitudes are explored: perceptions, social and cultural differences. The influence of the media on communicating perceptions of environmental issues and
affecting attitudes and behaviour with respect to the environment is critically reviewed through case studies.
Prerequisite: Fourth-year standing or permission of the instructor.

ES/ENVS 4430 3.0 Impact Assessment Processes and Practice. The current processes and practices of environmental and social impact assessment are critically reviewed through case studies. Emerging conceptual and methodological issues in the field are explored in the context of actual practice situations.
Prerequisite: ES/ENVS 34303.0 or permission of the instructor.

ES/ENVS 4442 3.0 Environmental Monitoring and Auditing. Concepts and practices in environmental monitoring are discussed and illustrated through case studies. Emerging theory and practice in environmental auditing are explored through an on-site auditing exercise.
Prerequisite: ES/ENVS 34303.0 or permission of the instructor.

ES/ENVS 4510 3.0 Environmental Economics II. This course provides an introduction to the emerging new field of ecological economics. Areas of focus include the appropriate scale of the economy in relation to the environment, the role of discount rates in mediating intergenerational and interspecies equity, environmental valuation, full-cost accounting, environmental risk assessment, and the application of thermodynamic and ecological principles in economic analysis.
Prerequisite: ES/ENVS 35103.0 or permission of the instructor.

ES/ENVS 4520 3.0 Geographical Information Systems Applications in Environmental Studies. This course focuses on advanced applications of Geographic Information Systems to topics related to planning and resource management. The technical aspects of GIS applications will be explored along with considerations related to database development. Students will gain hands-on experience with data input through scanners and digitizers, and with GIS analyses using both vector and raster data models. A significant part of the course will involve the development of a GIS database for analysis through group projects.
Prerequisite: ES/ENVS 35203.0 or the permission of the instructor.

ES/ENVS 4521 3.0 Remote Sensing and Image Processing for Geographical Analysis and Environmental Monitoring. Sophisticated methods and techniques for collecting, processing and analysing remote sensing data are examined. Special topics include image enhancement techniques (e.g. texture transforms), non-traditional image classification and data products into geographic information systems (GIS).
Prerequisite: ES/ENVS 35213.0 or written permission of the course director.

Cross-listed course: also offered as AS/SC/ GEOG 4440 3.0.

ES/ENVS 4530 3.0 Risk Assessment in Resource Management. Theories and concepts of "risk" are discussed and evaluated critically with respect to public policy for the resources sector. The analytical framework employed distinguishes between risk estimation, risk evaluation and risk management and communication activities. Resource management issues are analyzed with a focus on energy policy in Canada, in the context of environment-energy interactions.
Prerequisite: Fourth year ENST specialty or permission of the instructor.
Cross-listed course: also offered as AS/SC/ GEOG 4160 3.0-Risk Assessment in Resource Management.

ES/ENVS 4800Q 3.0 Urban Development Processes. Critical investigation of approaches to, and topics in, processes of urban growth, decline, development, and redevelopment. Twentieth century theories of urbanization are examined and their relevancy for understanding selected recent urban problems are studied.
Integrated Course: same as ES/ENVS 5021.

## Film \& Video - Fine Arts

## Department Office:

224 Centre for Film and Theatre, (416) 7365149
Associate Professor and Chair of the Department:
S. Forsyth

Professor:
P. Morris

Associate Professors:
E. W. Cameron, B. Evans, S. Feldman, J. Fisher, A. Lhotsky

Associate Professors Emeriti:
D. Davidson, V. Vaitiekunas

## Assistant Professors:

T. Barta, A. Buchbinder, J. Marchessault, M. Rickard

Adjunct Professor: P. Hoffert

## Programmes of Study

York University's Department of Film \& Video enables students to explore the media of film and video through a programme of production, screenwriting, historical and theoretical studies. An undergraduate can specialize in any one of the previously mentioned areas, but must take some courses in each area. All Film \& Video majors must complete 12 credits in historical and theoretical studies, FA/FILM 14006.0 and FA/FILM 24006.0 , and at least 24 credits at the 3000 level or above, of which at least half are within the student's area of concentration. Students concentrating in critical, historical, or theoretical studies will receive an Honours BA degree. They are required to complete a minimum of 48 credits in the department, and must include among their upper-level requirements FA/FILM 3410
3.0, FA/FILM 4800 3.0, and at least 3 further credits at the 4000 level. They must also complete at least 6 credits in production, either FA/FILM 10103.0 and FA/FILM 1020 3.0, or FA/FILM 2040 6.0. Students concentrating in production or screenwriting will receive an Honours BFA degree. They are required to complete a minimum of 60 credits within the department, and must include among their upper-level requirements one of FA/FILM 4100 6.0 (formerly FA/FILM 4010 6.0, FA/FILM 4020 6.0) or FA/FILM 4120 6.0.

For production students, the Film \& Video Programme encourages a blend of the conceptual areas of writing, directing and producing, while providing a professionally oriented background in the creative crafts of cinematography, editing and sound. Our intention is to provide each student with a marketable skill in addition to a broad education in film and video. Production students should be aware that the department does not provide a full subsidy for the sometimes heavy cost of film and video production. Some courses have additional fees which cover part of the general cost of the courses but in most film production courses students will be required to purchase additional supplies at their own expense and to pay damage deposits. Due to facilities available, spaces in upper-year courses are limited.

## York-Sheridan Joint Programme in Film \& Video and Media Arts

Film \& Video students concentrating in production may study towards an Honours BFA degree and a diploma in one of five areas of study in the Media Arts Programme at Sheridan College. The joint programme allows a full-time student to complete an Honours BFA degree in Film \& Video at York and a three-year diploma in Sheridan's Media Arts programme, normally in five years of study. Participants must successfully complete 90 credits (fifteen full course equivalents) at York University comprising years 1,2 and 3 of the Film \& Video production stream before enrolling at Sheridan College. During years 4 and 5 , students take the equivalent of years 2 and 3 of Sheridan's Media Arts Programme. Sheridan Media Arts offers specialization in audio, multi-media, television and film. In addition, York students will participate in Sheridan's twelve week field placement programme.

## Admission Requirements and Procedures

Students who wish to enter the joint degree/ diploma programme must apply to the Department Programme Office by March 31 of their third academic year at York. Minimum academic standing for applicants is a 6.0 cumulative grade point average. Applicants must have successfully completed:

- the Faculty of Fine Arts General Education requirements
- 12 Fine Arts elective credits outside Film \& Video
- 6 non-Fine Arts elective credits
- a minimum of 42 Film \& Video credits including FA/FILM 1010 3.0, FA/FILM 1020 3.0, FA/FILM 1400 6.0, FA/FILM 2010 6.0, FA/FILM 2020 3.0, FA/FILM 2400 6.0, FA/ FILM 3010 6.0, FA/FILM 3020 6.0, and FA/ FILM 3170 3.0.
Information and application materials may be obtained from Room 224 Centre for Film and Theatre, (416) 736-5149. Applications must include two letters of reference to be sent directly to the York Coordinator by the referees. Prospective candidates will be interviewed by the York and Sheridan Selection Committees. Programmes will be tailored to each student through discussion with the Coordinators.


## Courses in Film \& Video

Some upper-year courses are not offered on an annual basis; some courses listed below may not be offered during the current academic session. Consult the Film \& Video Department office for further information.

FA/FILM 1010 3.0 Introduction to Filmmaking I. This course introduces the student to the concepts, formats, and visual elements of the film as it progresses from the script to the screen. The emphasis for this course are the primary scripting techniques used in both documentary and dramatic screenwriting and devices for translating ideas into moving images on the screen.
Note: Required of all first year Film \& Video majors specializing in production and/or screenwriting. Enrolment is limited to Film \& Video majors.

FA/FILM 1020 3.0 Introduction to Filmmaking II. This course offers instruction in the fundamental concepts, procedures and techniques of visual and audio production as an idea is taken from the script to the screen. Course work includes the production of several short projects in various formats. Students are required to purchase production materials.
Prerequisite or corequisite: FA/FILM 1010 3.0.
Note: Required of all first year Film \& Video majors specializing in production and/or screenwriting. Enrolment is limited to Film \& Video majors.

FA/FILM 1400 6.0 Film Art: An Introduction. An introduction to the aesthetics, theory and history of film. Lectures concentrate on the elements of film, including narrative structure, visual composition and the uses of sound and editing. Documentary, experimental and feature films are encompassed.
Note: Required of all Film \& Video majors and minors. Open to non-majors. Four hours.

FA/FILM 2010 6.0 Film \& Video Production. The second-year course offers an intensive exploration of the techniques basic to film and electronic production. The emphasis is on producing several short subjects in both media for the widest possible experience and exploration of different forms in both media. Four hours.

Prerequisites: FA/FILM 1010 3.0, FA/FILM 1020 3.0, FA/FILM 14006.0 and permission of the production committee.
Corequisite: FA/FILM 2020 3.0.
FA/FILM 2020 3.0 Post-Production. Step-by-step practical experience in creative and technical aspects of editing from the receipt of rushes to the final sound mix. Procedures and processes under discussion will including synching, cataloguing, picture and sound editing, music and sound effects lay-up and rerecording. Three hours. Additional fee required.
Prerequisite: FA/FILM 1010 3.0, FA/FILM 10203.0 and permission of the production committee.

## Corequisite: FA/FILM 2010 6.0.

FA/FILM 2040 6.0 Video and Filmmaking. Theoretical and practical familiarization with small format video and filmmaking through lecture-demonstration and studio exercises. Working in groups, students will produce short projects in both media. Four hours.
Note: Not intended for students concentrating in film and video production.
Prerequisite: Permission of the production committee.

FA/FILM 2120 6.0 Screenwriting II. Visual literacy, film genres, formats, and stages of screenwriting are explained. The course includes both non-fiction and fiction. Students also make presentations on their work in progress. Series of assignments complement the lectures, screenings and seminars. Three hours.

Note: Recommended for second-year Film \& Video students.
Prerequisite: Film \& Video majors: FA/FILM 1010 3.0 and FA/FILM 10203.0 and permission of the course director. Non-majors: Permission of the course director.

FA/FILM 2400 6.0 Theories of Filmmaking. An intensive study of the theories of film, with particular attention to montage, mise-en-scène, auteur, genre and other classical and contemporary conceptions; relevant readings and screenings of key films. Four hours.
Note: Required of Film \& Video majors. Open to non-majors.

Prerequisite: FA/FILM 1400 6.0, and permission of the course director for non-Film \& Video majors and minors.

FA/FILM 2401 6.0 Film, Television and Society. An examination of the interrelationship between film and television and the societies in which they operate. Issues discussed include the ideological and political ramifications of film and television, as well as their relevance in relation to individual and social identity. Four hours. (Same as AS/HUMA 2740 6.0.)
Note: Open to non-majors. Not open to first-year students.

FA/FILM 2500 6.0 Stage and Screen. Drawing on dramatic texts and film and video resources, this interdisciplinary course explores and celebrates the relationship between theatre and
film, including the stylistic and structural principles of live theatre and motion pictures as distinctive media, and theatre reconceived and adapted for cinema and television. The course includes outstanding plays, films and attendance at live theatre performance. Note: Not open to Theatre or Film \& Video majors except by special permission. (Same as FA/ THEA 2500 6.0)

FA/FILM 3010 6.0 Film Production. Practical studies in all aspects of filmmaking through small group production of short 16 mm films. Emphasis is placed on the creative aspects of film production and the achievement of professional standards in the course work. Three hours.
Prerequisites: FA/FILM 2010 6.0, FA/FILM 20203.0 and permission of the production committee.
Corequisites: FA/FILM 30206.0 and FA/FILM 3170 3.0.

FA/FILM 3020 6.0 Video Production. Practical studies in all aspects of video through small group production of short video projects. Emphasis will be placed on the achievement of professional standards in the course work. Three hours. Additional fee required.
Prerequisites: FA/FILM 2010 6.0, FA/FILM 20203.0 and permission of the production committee.
Corequisites: FA/FILM 30106.0 and FA/FILM 3170 3.0.

FA/FILM 3120 6.0 Screenwriting III. A
detailed investigation of writing fictional and non-fictional scripts. Analysis of structure and characters in fictional genres: horror, musical, comedy, western, thriller, etc. Students make presentations on their work in progress. Assignments in screenwriting complement the lectures, screenings and seminars. Three hours.
Prerequisites: FA/FILM 21206.0 with a final grade of $B$ or higher, and permission of the course director.

FA/FILM 3130 3.0 Film Editing: Practical Technique. Step-by-step practical experience in the editing of a synchronized dialogue sequence from the receipt of "rushes" to final mix including synching, edge-coding, cataloguing, picture and sound editing, music and sound effects recording and transfer, and re-recording. Four hours. Additional fee required.
Prerequisites: FA/FILM 20106.0 or equivalent and permission of the production committee.

FA/FILM 3140 3.0 Film Editing: Theory and Analysis. Through readings, screenings, detailed analysis and discussion students thoroughly review the principles of pictorial continuity and study the function of editing in outstanding films of various countries, periods and styles. Three hours.
Prerequisites: FA/FILM 20106.0 or equivalent and permission of the production committee.

FA/FILM 3150 3.0 Sound for Film and Video. An intensive exploration of sound for film and video productions, including instruction and practice in the processes of recording and the editing, interlocking, and mixing of sound and music. Three hours. Additional fee required.
Prerequisites: FA/FILM 20106.0 and FA/FILM 20203.0 and permission of the production committee.

FA/FILM 3170 3.0 Production Planning and Management. A practical course in film and video production planning including: script breakdown, scheduling, budgeting, financing, legal issues, collective agreements and administrative procedures. Three hours.
Prerequisites: FA/FILM 20106.0 and FA/FILM 20203.0 and permission of the production committee.
Corequisite: FA/FILM 30106.0 and FA/FILM 3020 6.0.

FA/FILM 3201 6.0 Directing/Acting Workshop. This course explores the complex interaction between the director and the actor. By developing an awareness of and a sensitivity to the nuances of acting for the camera, the aspiring director will acquire the skills necessary to guide the actor towards achieving the quality most essential to an effective performance - believability.
Prerequisites: FA/FILM 2010 6.0, FA/FILM 2020 3.0, FA/FILM 24006.0 and permission of/ interview by the course director.

FA/FILM 3210 3.0 The American Film. A survey of the major events and significant trends involved in the development of American fiction and documentary film from its beginnings through the classical studies period. Four hours. (Same as AS/HUMA 3430 3.0)

Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3211 3.0 The American Film. The development of American cinema since the Second World War including the break-up of the studio system, the changing styles of American feature films and of documentary since the advent of network television. Four hours. (Same as AS/HUMA 3431 3.0)
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3320 3.0 Studies in European Cinema. Courses examining the cultural background and filmic achievements of selected European cinemas from 1895 to the present day. Selected topics vary from year to year. Four hours.
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3250 3.0 The Director's Cinema. Intensive critical examination of stylistic and thematic elements in the work of selected filmmakers in order to understand both their contributions to cinema and their individual perceptions. These courses also explore various theories of authorship. Four hours.

Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3300 3.0 Television/Video: Theory and Criticism. An application of contemporary theory and criticism to the varied products of electronic imagemaking including broadcast television entertainment, news, sports and special features; video art; video documentary; video installations; computer generated electronic imagery. Also considered are the history and social impact of these productions. Three hours.
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3310 3.0 Studies in The Documentary. The creative interpretation of actuality in film, from Flaherty to direct cinema and television. A study of changing forms, techniques and theories of documentary; its role in public information, propaganda, and social analysis. Four hours.

Prerequisites: FA/FILM 14006.0 or FA/FILM 24016.0 or permission of the course director.

FA/FILM 3320 3.0 The Experimental Tradition. An examination of the experimental impulse in film and video from the European "avant garde" cinema of the 1920s to the present. Four hours.
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3321 3.0 Alternative Cinema. An examination of movements within the cinema whose work have traditionally been less publicly accessible. Personal cinema and political films may be included. Four hours.

Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3401 3.0 Canadian Film and Television. Selected aspects of Canadian film and television from its beginnings to the present day. Topics examined may include the film and television industries; the role of state media institutions; the development of mainstream Canadian cinema; alternative film practices; regional filmmaking; the critical analysis of Canadian film and the work of particular filmmakers. Four hours.

Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3410 3.0 Readings in Film and Television Theory. An intensive reading and discussion course exploring the debates that have developed around film and television as cultural forces in the twentieth century. Though readings in classical theory are included, the primary emphasis will be on contemporary theory. The course also includes discussions of, and practice in, research methodology. Three hours.

Note: Required of all Film \& Video majors concentrating in theory and criticism.
Prerequisite: FA/FILM 24006.0 or permission of the course director.

FA/FILM 3420 3.0 Studies in Genre.
Courses examining the concept of genre in popular cinema, its cultural significance and
relationship with social and historica determinants and the relevance of genre study within critical methodology. Each offering focuses on a particular genre; see the Film \& Video department handbook for details. Four hours.

Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3500 6.0 Special Topics in Film/ Television (Directed Seminar Studies). Directed seminar studies in various areas of special interest to faculty and students Consult the department office for further information on yearly offerings. Three hours.

Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 3501 6.0 Special Topics in Film/ Television (Studio Workshops). Studio workshops in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours
Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 3510 6.0 Television Workshop. A workshop to acquaint students majoring in Mass Communications with television production. Four hours. Additional fee required.
Prerequisite: Permission of the director of Mass Communications.

FA/FILM 3600 3.0 Special Topics in Film/ Television (Directed Seminar Studies). Directed seminar studies in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours.
Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 3601 3.0 Special Topics in Film/ Television (Studio Workshops). Studio workshops in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours

Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 3610 3.0 Studies in National Cinemas. Focusing on Oriental cinemas and the cinemas of developing nations, these courses explore issues involved in defining a national cinema, including particular cultural characteristics and themes, modes of narrative, significant directors and relations between a national cinema and the international context. Each course focuses on the films of a particular country or area. Three hours.

Prerequisite: FA/FILM 14006.0 or permission of the course director

FA/FILM 3710 6.0 Japanese Culture, Literature and Film. By comparing works by Japanese authors with related films, this course explores basic patterns and themes of Japanese culture. (Same as AS/HUMA 34206.0 and AS/JP 3720 6.0.)

FA/FILM 3810 3.0 Women and Film. An examination from a feminist perspective of the ways in which women have been presented in the cinema (both "mainstream" and "alternative") and of the achievements of women filmmakers. Four hours. (Same as AK/FILM 3230 3.0.)
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 3910 3.0 Jewish Film I./FA/FILM 3911 3.0 Jewish Film II. This course looks at how Jews have been depicted in world cinema by investigating how films of various genres have portrayed Jewish characters and dealt with Jewish themes.
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 4100 6.0 Film and Video Production. An honours thesis course in film and video production.

Prerequisites: FA/FILM 3010 6.0, FA/FILM 3020 6.0, FA/FILM 31703.0 and permission of the production committee.

Note: Open only to Film \& Video majors.
Degree credit exclusions: FA/FILM 4010 6.0, FA/FILM 4020 6.0.

FA/FILM $4120 \quad 6.0$ Advanced Screenwriting. Advanced practice in the art of screenwriting; adaptations and original scripts ranging from half-hour to feature-length works. Three hours.
Prerequisites: FA/FILM 31206.0 with a final grade of $B+$ or higher, and permission of the course director.

FA/FILM 4160 3.0 Cinematography. An
intensive exploration into lighting and the principles of photography for film and video production. Four hours

Prerequisites: FA/FILM 3010 6.0, FA/FILM 3020 6.0, FILM 31703.0 and permission of the production committee.

FA/FILM 4201 6.0 Acting \& Directing. A
workshop course in acting and directing for the screen through the practical application of film techniques in the recording and editing of dramatic scenes. Analysis of work in progress and of finished productions is an integral part of the course. Four hours. Open to third- and fourth-year Film \& Video and Theatre majors.
Prerequisites: FA/FILM 3010 6.0, FA/FILM 3020 6.0, and FA/FILM 31703.0 for Film \& Video majors, and permission of the production committee. Theatre majors must be members of the 4th-year Acting Ensemble.

FA/FILM 4500 6.0 Special Topics in Film/ Television (Directed Seminar Studies). Directed seminar studies in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours.

Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 4501 6.0 Special Topics in Film/ Television (Studio Workshops). Studio
workshops in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours.
Prerequisite: To be announced, depending on subject matter. By permission of the course director.

FA/FILM 4600 3.0 Special Topics in Film/ Television (Directed Seminar Studies). Directed tutorial studies in various advanced areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Hours to be arranged.

Prerequisite: To be announced, depending on subject matter. By approval of department faculty and permission of the course director.

FA/FILM 4601 3.0 Special Topics in Film/ Television (Studio Workshops). Studio
workshops in various areas of special interest to faculty and students. Consult the department office for further information on yearly offerings. Three hours.
Prerequisite: To be announced, depending on yearly subject matter. By permission of the course director.

FA/FILM 4700 3.0 Canadian Cinema: Production, Distribution, Exhibition, Marketing and Criticism. This course is designed to familiarize students with the inner workings of the Canadian film industry. Using case study approach, most aspects of film production are investigated.
Prerequisite: FA/FILM 14006.0 or permission of the course director.

FA/FILM 4800 3.0 Honours Thesis. This
course is designed to provide history and criticism students with a focused research and writing project as a culmination of their undergraduate degree.
Note: Required of all Film \& Video majors concentrating in history and criticism. Consult the department office for more details.

Prerequisite: FA/FILM 34103.0 and permission of the course director.

FA/FILM 4900 3.0, FA/FILM 49006.0 Independent Studies in Film/Television. Open to fourth-year students, the course gives the individual student an opportunity to pursue a specific and intensive personal study under the supervision of a faculty member on topics not offered in other courses within the department. Proposed topics are subject to departmental approval.
Note: Open by petition to the department.
FA/FILM 4901 3.0, FA/FILM 49016.0 Independent Studies in Film/Television. Open to fourth-year students, the course gives the individual student an opportunity to pursue a specific and intensive personal study under the supervision of a faculty member on topics not
offered in other courses within the department. Proposed topics are subject to departmental approval.
Note: Open by petition to the department.

## Fine Arts Cultural Studies Fine Arts

## Programme Office:

279 Winters College, (416) 736-5822
Associate Professor and Coordinator of the Fine Arts Cultural Studies Programme: P. Morris

Contemporary artists must increasingly integrate all of the fine arts, and there is a strong theoretical basis to much of their work. This theoretical basis may come from psychology, sociology, anthropology, philosophy or other areas of the social sciences and humanities. Consequently, critics, arts administrators, and fine arts educators must have a keen interest in the relationship of the fine arts to these other disciplines. The mandate of Fine Arts Cultural Studies, in the broadest sense, is to educate students who will be able to understand and participate in this discourse.
The programme in Fine Arts Cultural Studies is multi-disciplinary, permitting studies in all of the fine arts disciplines: dance, film \& video, music, theatre and the visual arts. The emphasis is upon the study of cultural, critical and historical issues in the fine arts, which may include a concentration of courses that focus on arts and psychology, arts administration, arts and anthropology, arts and societies/ European, arts and societies/non-European, and aesthetics and arts criticism. There are opportunities to pursue hands-on multimedia studies and scholarly/internship or studio/ apprenticeship interests too. For further information on these interest areas, refer to the Fine Arts Cultural Studies programme handbook.
The Fine Arts Cultural Studies major comprises at least 60 credits in Fine Arts, including 24 credits in core courses from the Interdisciplinary Fine Arts (INFA) Division, and is available to students in the Faculty of Fine Arts as a General Honours BA programme, and to students in the Faculty of Arts as a second major in an Honours Double Major programme. A 30 credit Honours minor in Fine Arts Cultural Studies is also available to qualified students in the Faculties of Arts, Environmental Studies, and Fine Arts. Programme requirements are described in the Faculty of Fine Arts section of this Calendar.

## Founders College - Arts

Academic Programme Office:
217 Founders, (416) 736-5148
College Master:
Patricia Stamp
Academic Advisor:
Alina Marquez

Listed below are the 1000-level and 2000-level 9 credit Foundations courses which are part of the Faculty of Arts General Education requirement. These courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.
Students enrolling Founders College Foundations courses, in either the Division of Humanities or the Division of Social Sciences, will be members of Founders College with access to academic advising, orientation programmes, social and co-curricular events.

## 1000 and 2000 Level Courses

AS/HUMA 1300 9.0 The Cultures of Resistance in the Americas: The African American Experience. This course examines oppression and the ways in which Afro-American, Amerindian, and racially-mixed communities in the Caribbean, Latin America, Canada, and the United States use cultural patterns - the oral tradition, religion and ethics - both to comment on that oppression and to express alternatives.
Degree credit exclusion: AS/HUMA 1300 6.0.
AS/HUMA 1400 9.0 Culture and Society in East Asia. Introduction to traditional East Asian civilization by examining daily life in eighteenth-century Peking and Edo (Tokyo), and their rural hinterland. Topics include the physical setting, social distinctions and occupations, arts, and crafts, religion, literature, and entertainment.

Degree credit exclusion: AS/HUMA 1400 6.0.
AS/HUMA 1630 9.0 Forms of Fantasy. This course explores the development of fantasy in the Western imagination through a variety of interdisciplinary materials, with special emphasis given to the links between fantasy and culture, politics, marginality, and the articulation of unconscious desires.
Degree credit exclusion: AS/HUMA 1630 6.0.
AS/HUMA 1960 9.0 Women, the Family, and Children in Europe, 1150-1800. This course examines ideas about, and practical realities concerning women, the family, and children in Europe, 1150-1800.
Degree credit exclusion: AS/HUMA 1960 6.0.
AS/HUMA 2310 9.0 An Introduction to Caribbean Studies. This course introduces students to the major cultural characteristics of the contemporary Caribbean through an examination of the writers, artists and scholars of the region.
Degree credit exclusion: AS/HUMA 2310 6.0.
AS/HUMA 2420 9.0 Introduction to Korean Culture. This course offers an introduction to the study of Korean culture through a historical survey of literary, social, religious and political trends from ancient times to the present.

AS/HUMA 2640 9.0 Modes of Fantasy. In this 2000-level Foundations Course students study some of the principle modes and models of fantasy. In the first term three major modes
of fantasy -- literary, historical, and psychological -- are examined in detail, drawing on appropriate theoretical materials and fantasy texts. In the second term, four major models of fantasy are examined: Romance and Horror, and Utopias and Dystopias.

## Degree credit exclusion: AS/HUMA 2640 6.0.

AS/HUMA 2761 9.0 Italian Cinema and Society: From Neorealism to Postmodernism, 1945 to the Present. The course focuses on twelve of the most significant films since World War II in the context of the radical changes that have taken place in Italy from the fall of Fascism to the present, and as critical statements on the phenomena connected with the rapid transformation of Italian society: industrialization and the "economic miracle", urbanization, the crisis of traditional values, and postmodern fragmentation.
Cross-listed to: AS/IT 2761 9.0.
AS/HUMA 2930 9.0 On Women: An Introduction to Women's Studies. This course explores the social, political and economic institutions which shape women's lives, and introduces key theoretical approaches within feminist scholarship to investigate specific feminist issues in areas such as women's writing, visual representations, family, race, sexuality, women and work.
Degree credit exclusions: AS/SOSC 2180 6.0, AS/HUMA 2930 6.0, GL/WMST 2950 6.0, GL SOSC 2950E 6.0 GL/SOSC 2950F 6.0, GL/ WMST 2950 6.0, AK/WMST 2000 6.0.
Cross-listed to: AS/AK/GL/WMST 2510 9.0, AS/SOSC 2180 9.0.

AS/HUMA 2990A 9.0 Aspects of Italian Culture. This course aims to present and analyze some of the most interesting themes underlying the development of Italian intellectual life from the fourteenth century to the nineteenth century.
Degree credit exclusion: AS/HUMA 2990A 6.0, AS/IT 2750 6.0, ASIIT 2751 6.0.
Cross-listed to: AS/IT 2751 9.0.
AS/SOSC 1210 9.0 Minorities in Canadian Society. This interdisciplinary course examines Canadian attitudes, institutional practices, and government policies affecting opportunities for full participation in Canadian society for various Canadian minorities, ethnic and religious groups, homosexuals, women, the aged, disabled, and poor. Strategies for change are critically analyzed.
Degree credit exclusion: AS/SOSC 1210 6.0.
AS/SOSC 1430 9.0 Introduction to Development Studies. This course introduces students to the field of Development Studies, which has emerged as a result of efforts to bring about "development" in Third World countries. It uses a critical and historical approach drawing on concrete case studies, to examine the assumptions, practices, and consequences of development.

AS/SOSC 1440 9.0 Introduction to CrossCultural Studies: the Family, Production and Social Groups. The course introduces basic issues in social science. We examine various methods and approaches designed to help understand, analyze, and predict human behaviour. In particular we will focus on families and work in a variety of different cultures.
Degree credit exclusions: AS/SOSC 1000 6.0, AS/SOSC 1000 9.0 Section B.

AS/SOSC 2180 9.0 On Women: An Introduction to Women's Studies. See description for AS/HUMA 2930 9.0.
Cross-listed to: AS/AK/GL/WMST 2510 9.0, AS/HUMA 2930 9.0.

AS/SOSC 2480 9.0 Introduction to African Studies. The course explores common themes in the social organization, history and cultural heritage of Africa's diverse peoples. It then moves to examine the impact of colonialism, and the struggle to develop politically and economically viable nationstates in the post-colonial era. The work of African writers, artists, and statesmen furnishes an important contribution to the course's understanding of Africa, past and present.
Degree credit exclusion: AS/SOSC 2480 6.0.
AS/WMST 2510 9.0 On Women: An Introduction to Women's Studies. See description for AS/HUMA 2930 9.0.
Cross-listed to: AK/GL/WMST 2510 9.0, AS/ HUMA 2930 9.0, AS/SOSC 2180 9.0.

## French Studies - Arts

Department Office:
N727 Ross, (416) 736-5086
Professor and Chair of the Department: R. Mougeon

Director of Undergraduate Studies:
S. Sévigny

Faculty Members Emeriti:
J. Baron, H. Bouraoui, G.D. Jackson,
P.E. McConkey, C. E. Rathé, R. Schattner,
P. Yashinsky, M. Zimmerman

## Professors:

J. Cotnam, R. Mougeon

Associate Professors:
M. Adriaen, N.L. Corbett, D. Cyr, G. Echard, Z. Ellis, M. Lambert-Drache, P. Laurendeau, J.E. Priestley, A. Vercollier, S. Villani, D.M. Walker

Senior Lecturer:
A. Favrod

Associate Lecturers:
D. Beausoleil, M. de Bie Waller, C. Dumont, C. Marjollet, L. Morrison, S. Sévigny, K. Whalen

## Courses in French Studies

The Department of French Studies offers courses in four curricular areas enabling students to pursue interests in French language, linguistics, literature and their respective context. The language-skills
courses listed in section I form a prescribed Language-in-Context sequence designed to help students improve their proficiency in French. They constitute a curricular "core," which is complemented by the offerings of section II, Linguistics sequence, and those of section III, Literature and Its Context and IV, Courses for Non-Majors
A language placement questionnaire must be filled out by students prior to enrolling for the first time in the Department of French Studies. Optionally, students may earn a Certificate of Proficiency in French by passing a set of examinations. Details are available from the departmental office. A basic introductory course is offered every year in each of sections II, Language and Linguistics sequence, and III, Literature and Its Context, and these lead to more specialized upper-level courses in each of these two areas. Students are free to limit their choice of optional courses to those in section II or to those in section III or to select courses in both areas. Courses in French Studies have three class hours, unless otherwise indicated.
Not all courses are offered in all years. For information about specific offerings, and a more detailed description of offerings, students should consult the supplementary calendar available each spring from the Departmental office. For specific requirements of programmes offered by this Department, please consult the 'Programmes of Study' section, Faculty of Arts. Students may consult with the Undergraduate Director in the Department in order to plan a coherent programme of study.
In order to proceed from one level of French Studies to the next (the four levels being 1000, 2000, 3000, 4000), a student must obtain a minimum grade of $C$ in each course taken within the Language-In-Context sequence (see section I).
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## I. Language-in-Context Sequence

(All instruction, discussion, written assignments and examinations in these courses will be in French.)

AS/FR 1080 6.0 French Language-inContext, Levell. An intensive course designed to improve the student's ability to speak, understand, read and write French. Guided and free conversation, grammar review, compositions, readings from a variety of sources. Four class hours, plus lab sessions.
Prerequisite: AS/FR 10306.0 (with a minimum grade of $C$ ) or through a language placement questionnaire, which takes place between March 22 and September 3.

AS/FR 2080 6.0 French Language-inContext, Level II (Majors). Oral practice, phonetics, conversation, listening comprehension, translation, grammar and composition. Four class hours, lab sessions, and one conversation group.
Prerequisite: AS/FR 10806.0 (with a minimum grade of C). Not open to students who have taken AS/FR 20706.0 (prior to 1997/1998).
Note: Students who completed AS/FR 2070 6.0 (prior to 1997/1998) and subsequently declared French as a Major/Minor, must then also complete AS/FR 2080 6.0.

AS/FR 3080 6.0 French Language-inContext, Level III (Majors/Minors). Further study of French language, both oral and written. Class discussions and free compositions. Three class hours, one conversation hour and lab.
Prerequisite: AS/FR 20706.0 (prior to 1997/ 1998) or AS/FR 20806.0 (with a minimum grade of $C$ ).

AS/FR 4090 6.0 Language and Techniques of Communication. This course is designed for students who are already fluent in French. It is a study of communication techniques and also of the expressive resources and research methods used in various media and in public communication. Three class hours.
Prerequisite: AS/FR 30806.0 (with a minimum grade of $C$ required, a grade of $B$ is strongly recommended).

## II. Linguistics Sequence

(All instruction, discussion, written assignments and examinations in these courses will be in French.)
Note: The courses identified with an asterisk (*) are offered alternate years. Check the departmental calendar for yearly offerings. All 3000-and 4000-level Language and Linguistics courses require AS/FR 21006.0 as a prerequisite.

AS/FR 2100 6.0 Introduction to the Linguistic Study of French. Introduction to the linguistic analysis of language (structuralist approach). Study of spoken variety of Canadian French and comparison with Standard French. Students wishing to pursue further study in French Language and Linguistics must enrol first in this introductory course. Three class hours, one individual lab hour, and one conversation hour.

AS/FR 3100 6.0 French Morphosyntax. Study of the major linguistic structures of French and Canadian French. Coverage of phonology, morphology, syntax and semantics, differences between spoken and written French.

AS/FR 3121 6.0 Translation and Contrastive Linguistics. Introduction to the theoretical and practical aspects of translation through the perspective of contrastive linguistics. The students are introduced to linguistic theories of translation while being given an opportunity to familiarize themselves with the process of translation.

AS/FR 3130 6.0 French Semantics and Lexicology. Study of French vocabulary, its structure and functions. Analysis of words and their frequencies, organisation by semantic fields. Study of dictionaries, polysemy, synonymy, homonymy, onomatopoeia, derivation and composition. Study of lexical meaning in discourse.
Degree credit exclusion: AS/FR 4130 6.0.
AS/FR 3140 6.0 French Phonetics and Oral Performance. Theory and practice of French speech-habits. Elements of French phonology and French prosody; intensive pronunciation practice as well as study of stylistic levels and regional variants; study of pronunciation errors.
Note: Language lab may be required. Consult the departmental supplemental calendar.

AS/FR 4100 6.0 French Sociolinguistics*. Introduction to the theoretical and empirical aspects of the description of variation in French usage. Focus on language norm, the registers of French, the regional dialects of French, the social class dialects of French and the phenomenon of linguistic change.

AS/FR 4110 6.0 Sociolinguistic History of French*. Evolution of the French language from Vulgar Latin to the present day, covering phonology, morphology and syntax. Attention is paid to external and sociolinguistic factors governing the speed and direction of language change. Emphasis is placed on the usefulness of linguistic history as a means of better understanding the dominant patterns and characteristic features of contemporary French.

AS/FR 4120 6.0 Linguistics Applied to the Teaching of French*. Introduction to major current linguistic theories and their potential contribution to the teaching of French; survey of various language learning theories and their application to the teaching of French. Principles of development of language materials based on linguistic findings.
Prerequisite: AS/FR 21006.0 and one of AS/ FR 3100 6.0, AS/FR 3130 6.0, AS/FR 3140 6.0.

AS/FR 4121 6.0 Ethnolinguistics and Francophone Amerindianity*. Study of the ethnohistory of culture and language of the Amerindian nations within Quebec. Focus is on the relationship between language, culture and society as it applies to Quebec Amerindians in the global Canadian context.
Prerequisite: AS/FR 21006.0 and AS/FR 3080 6.0.

AS/FR 4141 6.0 Enunciative Linguistics*. Approaches of Anglo-Saxon pragmatics and of French enunciative linguistics. Chief problems tackled including: speech acts, deixes, modalities and the notianal domain.

AS/FR 4150 6.0 Introduction to Canadian French*. Empirical study of Canadian French in its historical, sociocultural and geopolitical context with emphasis on its vernacular variety. Listening comprehension and analysis
of texts, audio and video tapes. Emphasis on phonological rule, morphosyntactic change, register and norms, and functions of language. Prerequisite: AS/FR 21006.0 and one 3000level course in French linguistics.
Degree credit exclusion: AS/FR 3150 6.0.
AS/FR 4181 6.0 French-Based Creoles*. Study of French-based creoles with focus on origins and genesis of French-based creoles; the theories of creolization; French and Creole in countries that were once part of the French Colonial Empire.
Prerequisite: AS/FR 21006.0 and one 3000level course in French linguistics.

## 4000-Level Specialty Courses

Note: One or more of the following specialty linguistics courses may be offered. Consult the departmental supplemental calendar.

AS/FR 4210 6.0 Language Philosophy (French Domain). Description of the approach of fundamentals of language as existing in the French tradition of materialist language philosophy (Condillac, Destutt de Tracy, Volney, Helvetius, Lefebvre, Bakhtine). This approach is presented as a theoretical alternative to the anglo-saxon Analytical Philosophy.

AS/FR 42203.0 or AS/FR 4220 6.0 Special Topics in Linguistics Sequence. In any given year, the department may offer one or more courses under this rubric. Students should consult the department's supplemental calendar for a detailed description of the topic.

## III. Literature and its Context

(All instruction, discussion, written assignments and examinations in these courses will be in French.)
Note: The courses identified with an asterisk $\left(^{*}\right)$ are offered alternate years. Check the departmental calendar for yearly offerings. All 3000-and 4000-level Literature courses require $A S / F R 22006.0$ as a prerequisite.

AS/FR 2200 6.0 Approaches to French Literature: An Introduction. A course in literary methodology in which the student learns analytical and expository techniques appropriate for examining the quality and context of works from various genres and periods of French literature. Students wishing to pursue further study in French literature must enrol first in this introductory course.

## AS/FR 3360 6.0 The Literature of French

 Canada. This course concentrates on the poetry, novel and theatre of French Canada. Representative works in all genres are studied as literary creation and as reflections of a society in the process of defining itself.AS/FR 3380 6.0 A Survey of Literature in French. The course concentrates on works representative of the most significant currents in French writing, giving students a panorama of the historical development of French letters.

AS/FR 4310 6.0 The French Renaissance*. A study of the literature of the Renaissance, from the wit of Marot to the wisdom of Montaigne. Attention is paid to the intellectual and cultural life of the period as it informs the literature.
Degree credit exclusion: AS/FR 3310 6.0.
AS/FR 4320 6.0 French Literature of the Seventeenth Century: from Henri IV to Louis XIV*. The major writers of the grand siècle, Descartes, Corneille, La Fontaine, Molière, Pascal, Mme de Lafayette, Boileau, and Racine, seen against their political, social, material, and artistic background. Poems and/ or short prose selections by other writers are included.

AS/FR 4330 6.0 The Age of Enlightenment (1715-1789)*. A study of the major literary and philosophical writings from Bayle-Fontenelle to the last years of the ancien régime.

AS/FR 4340 6.0 Romantism, Realism and Nineteenth Century French Literature*. A study of the major literary movements and parallel trends in the other arts in the century following the French Revolution, showing how closely they are connected to the unsettled political and social climate of the age which saw the emergence of a large reading public.

Degree credit exclusion: AS/FR 3340 6.0.
AS/FR 4350 6.0 The Modern Period and Twentieth Century French Literature*. A study of selected works of prose, poetry and theatre, representative of important aesthetic, socio-historical and philosophical developments of this century (e.g. surrealism, existentialism, structuralism, feminism).
Degree credit exclusion: AS/FR 3350 6.0.
AS/FR 4360 6.0 Special Topics: Literature and the Arts. Courses given under this general rubric, Literature and the Arts, explore the relationship of French literature to the arts. One special topic will be chosen per year. Students should consult the Department's supplemental calendar for a detailed description of the topic being offered.

AS/FR 4370 6.0 Francophone Literature*. A study of works written in French by artists mainly from Africa and the Caribbean, emphasizing the evolving intersection in this literature of both local and global socio-political contexts and aesthetic forms.

AS/FR 4380 3.0/4380 6.0 Special Topics in French Literature and its Context. One or two topics are offered per year, for example, studies in author, genre, theme or movement. Students should consult the department's supplemental calendar for a detailed description of the topic.

AS/FR 4410 6.0 Methodological Approaches and Literary Criticism. This course is an introduction to the main methodological approaches used in modern criticism to describe a literary text: structuralism (Barthes, Greimas), deconstructionism (Derrida, DeMan),
phenomenology (Poulet, Bachelard), psychocriticism (Lacan, Mauron) and sociocriticism (Lukacs, Duchet).
Prerequisite: AS/FR 2200 6.0.
AS/FR 4900 6.0 Individualized Study. The content of this course are determined on an individual basis through consultation between student and professor and are subject to departmental approval. The project must have thematic unity or involve intensive study of one particular area of interest. In order to be eligible for an Independent Reading course, a student must have a 7.0 grade point average in French courses taken during the previous academic session. No student may take more than one (1) Independent Reading course with the same member of the Department.
Note: Consult the 'Enrolment and Registration' section, Faculty of Arts for regulations on independent reading courses.

## IV. Courses for Non-Majors

AS/FR 1020 6.0 Elementary French, Near Beginners. This course is designed for students who, although they are not complete beginners, have not studied sufficient French to be admitted to AS/FR 1030 6.0. The course involves the development of oral and written skills. Grammar and reading are also emphasized. Four class hours, plus lab sessions.
Language of instruction: French.
Note: Students may only register in one of AS/ FR 10106.0 or AS/FR 10206.0 through a language placement questionnaire which takes place between March 22 and September 3.

AS/FR 1030 6.0 Intermediate French. This course is for students who have studied or had some contact with French, but not enough to enter AS/FR 1080 6.0. The aim of the course is to review, consolidate and develop oral and written skills. Special emphasis is placed on grammar. Four class hours, plus lab sessions.
Language of instruction: French.
Prerequisite: AS/FR 10106.0 or AS/FR 1020 6.0 (with a minimum grade of $C$ ) or through a language placement questionnaire, which takes place between March 22 and September 3.

AS/FR 1050 6.0 Basic French for Political Science. This course, designed for students of Political Science who desire to maintain and develop their knowledge of French, focuses on French political terminology and articles and documents relating to the institutions, processes and issues of government, with particular emphasis on the Canadian context.
Prerequisite: OAC French or AS/FR 1030 6.0. Language of instruction: French.
Note: This course is not a major course for French Studies students.

AS/FR 2051 6.0 Francophone African Literature. Reflecting on the evolving interface between various societies of Africa and francophone colonialism, we analyze the literary achievement of representative
expressions of French-speaking Africa's critical engagement with the socio-political and moral issues related to global cultural integration.
Language of instruction: English.
Note: This course is not a major course for French Studies students.

AS/FR 2052 3.0 Music and Identity in the French Caribbean. The course acquaints students with the French-speaking cultures of the Caribbean. Focuses on identity and the impact of popular music. Offers an insight on main current issues.
Language of instruction: English.
Note: This course is not a major course for French Studies students.

AS/FR 2053 3.0 Literature and Identity in the French Caribbean. This course examines literary works from the French Caribbean. Resistance to the experience of slavery, colonialism, post- and neo-classism, racism, and sexism gives birth to original and innovative forms of expression reflecting the particular historical and social circumstances of the writers.
Language of instruction: English.
Note: This course is not a major course for French Studies students.

## Geography - Arts, Pure and Applied Science

## Department Office:

N417 Ross, (416) 736-5107
Associate Professor and Chair of the Department:
A. Robert

Professors:
W.C. Found, D.B. Freeman, B. Greer-Wootten, C. Heidenreich, A.R. Hill, M.C. Kellman, B.H. Massam, R.A. Murdie, G.B. Norcliffe, P. Simpson-Housley

Professors Emeriti:
J.T. Davis, J.R. Gibson, B.V. Gutsell, J.U. Marshall, H.R. Merrens, J. Warkentin, R.I. Wolfe

Associate Professors:
R.L. Bello, Q. Cheng, L. Lo, V.A. Preston, J.P. Radford, G.E. Walker

Associate Professors Emeriti:
A.M. Blair, I.A. Brookes

Assistant Professors:
P. Treitz, P. Wood, K.L. Young

Geography is concerned with the spatial variations of human and physical phenomena, the processes which produce these variations, and the interrelationships between people and their environments. Fields that have always been of importance to geographers are well represented in the department. Regional courses dealing with Canada, the former Soviet Union, Africa, Europe, the Caribbean, and the United States explore the past and present geography of these areas. Likewise there are clusters of courses relating to urban, economic, cultural, historical, and physical geography. Combined with these offerings are specialties such as those dealing with water resources and resource management, spatial diffusion, regional planning, ecological studies,
landforms, arctic climates, and the social geography of cities and rural areas.
For specific requirements of programmes offered by this department, see the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes and Science section V for BSc programmes.
Note: A Geography supplementary calendar is available each spring in the department's Teaching Resources Centre, S405 Ross.

## Courses in Geography

Not all courses will necessarily be offered in any given year; consult the department's supplementary calendar for details of courses to be offered.
Prerequisites. The specific course prerequisites listed for Geography courses in this Calendar are intended to ensure that students do not unwittingly enrol in courses for which they have inadequate preparation. In some cases, students lacking the stated course prerequisite(s) may be permitted to enrol in the course by written permission of the course director.

## 1000-Level Courses

AS/GEOG 1000 6.0 Introduction to World Geography. This course explores geographic approaches to disparities of cultural, economic, political, and environmental development in major world regions comprising developed capitalist and socialist countries and underdeveloped nations.

AS/SC/GEOG 13906.0 (1390 3.0) Special Topics. In any given year an additional number of courses may be offered. Information concerning these is available at the department office. Only topics in physical geography are eligible for Science (SC) credit.
Prerequisite: Permission of the course director.
AS/SC/GEOG 1400 6.0 Physical Geography.
A study of the physical-biotic environment through a consideration of the character and processes of its components - atmosphere, hydrosphere, biosphere, and lithosphere - and of the spatial distributions which reflect interaction among these components. Two lecture hours per week, three laboratory hours normally every second week. Two terms.
Equivalent and degree credit exclusion: AK/ GEOG 2510 6.0.

AS/GEOG 1410 6.0 Human Geography. An introduction to the study of human geography which puts emphasis on geographical aspects of population, culture, society and economy. Detailed examples are studied in tutorials.
Equivalent and degree credit exclusion: AK/ GEOG 2500 6.0.

## 2000-Level Courses

AS/GEOG 2050 6.0 Political Geography. This course deals with the reciprocal links between geography and political processes at the global, national and local levels. A secondary focus is on
particular state policies and how they influence, and are influenced by, geographical patterns and processes.
Prerequisite: AS/GEOG 14106.0 or AK/GEOG 2500 6.0.
Equivalents and degree credit exclusions: AS/ GEOG 3050 6.0, AK/GEOG 3450 6.0.

AS/GEOG 2060 6.0 Historical-Cultural Geography. An examination of spatial patterns of behaviour of past and present cultural groups and an explanation of these patterns in terms of the relationships among the physical environment, group technology, social systems, and ideologies.
Equivalent and degree credit exclusion: AK/ GEOG 3410 6.0.

AS/GEOG 2100 6.0 Economic Geography. An introduction to economic geography. Major topics include the geographic bases of economic activity, regional and national systems, spatial patterns of industrial location, transportation and trade, diffusion of innovation and change processes, the development of economic systems, structures and institutions.
Prerequisite: AS/GEOG 14106.0 or AK/GEOG 25006.0 or an introductory course (full or half) in Economics.

AS/SC/GEOG 2130 3.0 Fundamentals of Map Design and Interpretation. This course introduces the basic principles and conventions for compiling, designing, drafting and interpreting maps and other visual representations of geographic data. Two lecture hours, one scheduled laboratory hour. One term.
Prerequisite: One of AS/SC/GEOG 1400 6.0, AS/GEOG 1410 6.0, AK/GEOG 2500 6.0, AK/ GEOG 2510 6.0.
Degree credit exclusion: SC/GEOG 2130 2.0.
SC/GEOG 2140 3.0 Basic Plane Surveying. Instruction in the principles and practices of elementary plane surveying. A practical course in which students prepare maps of local terrain, showing increasing complexity and using instruments of increasing sophistication. Three consecutive hours per week. One term. Prerequisite(s): One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/EATS 1010 6.0, or both SC/EATS 10103.0 and 3 additional credits in Earth and Atmospheric Science.
Degree credit exclusions: AS/GEOG 2140 3.0, AS/SC/GEOG 31403.0 (taken before 1995/ 96).

AS/GEOG 2300 6.0 Social Geography. A study of social processes underlying spatial patterns, relationships, and interactions within and among social groups. The course examines urban and rural social structures within their spatial settings, focusing on social and environmental problems and solutions.
Prerequisite: AS/GEOG 10006.0 or AS/GEOG 14106.0 or AK/GEOG 2500 6.0.

AS/SC/GEOG 23906.0 (2390 3.0) Special Topics. In any given year an additional number of courses may be offered. Information concerning these is available at the department office. Only topics in physical geography are eligible for Science (SC) credit.
Prerequisite: Permission of the course director.

AS/SC/GEOG 2400 6.0 The Hydrosphere. This course examines the physical processes and the environmental factors that govern the movement of water and energy in lakes, rivers, oceans and the soil-plant-atmosphere continuum. Boundary-layer climates and mechanisms of water movement and storage are emphasized. Two lecture hours per week, sixteen three-hour laboratories over two terms. Prerequisite: AS/SC/GEOG 14006.0 or AK/ GEOG 2510 6.0.

AS/SC/GEOG 2420 3.0 Introductory Statistical Analysis in Geography. This introductory course aims to provide a working knowledge of several statistical techniques which are widely used in many branches of geography. Some attention is also given to broader questions concerning the nature of the scientific method. Two lecture hours per week, nine two-hour laboratory sessions. One term.
Prerequisites: 24 credits passed. This course is intended primarily for students majoring in Geography and is normally taken during the second year of study.
Degree credit exclusions: SC/BIOL 3080 3.0, AK/BIOL 3080 6.0, AK/BIOL 3080 3.0, SC/ BIOL 3090 3.0, AK/BIOL 3090 3.0, AS/ECON 2500 3.0, EN/ENVS 2010 3.0, ES/ENVS 2010 6.0, ES/ENVS 2010 3.0, AS/SC/KINE 2050 3.0, AS/SC/AK/MATH 1131 3.0, AS/SC/MATH 1132 3.0, AK/MATH 2430 6.0, AS/SC/AK/ MATH 2560 3.0, AS/SC/AK/MATH 2570 3.0, AS/SC/PHED 2050 3.0, AS/SC/PSYC 2020 6.0, AS/SC/PSYC 2021 3.0, AK/PSYC 2510 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/ SC/MATH 2030 6.0.

AS/SC/GEOG 2500 3.0 Introduction to Vegetation and Soils. An introduction to the structure and functioning of vegetation and soil systems, emphasizing local patterns and processes, methods of description and sampling, dynamic processes, response to environmental change and human disturbance. Field work is emphasized in laboratories. Two lecture hours and two laboratory hours per week, a one-day field trip. One term.

Prerequisite: AS/SC/GEOG 14006.0 or AK/ GEOG 25106.0 or ES/ENVS 2500 6.0.

AS/SC/GEOG 2700 3.0 Introduction to Geomorphology. An introduction to the principles of landform science, examining history of thought, modes of investigation, and the nature of geomorphic systems operating under the influence of internal (tectonic) and external processes. Two lecture hours per week, two laboratory/tutorial hours in alternate weeks. One term.

Prerequisite: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/EATS 1010 6.0, SC/ EATS 1010 3.0.

## 3000-Level Courses

Prerequisites. Unless otherwise indicated, 3000-level Geography courses are open only to students who have successfully completed at least 24 credits, including any specific course prerequisites noted in the following course outlines.

AS/GEOG 3010 6.0 Geography of Canada. A study of basic physical and human geographical patterns in Canada, stressing the processes which produced the latter, and selected characteristics of major Canadian regions. Tutorials require intensive reading in selected sources.
Prerequisite: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, AS/GEOG 1410 6.0, AK/ GEOG 2500 6.0.
Equivalent and degree credit exclusion: AK/ GEOG 3540 6.0.

AS/GEOG 3020 6.0 Geography of the Caribbean. This course traces the geographical transformation of the Caribbean islands from 1492 to the present. Emphasis is placed on understanding social, economic and environmental problems, and on current efforts to plan for the future.

Degree credit exclusion: AS/GEOG 3020 3.0.
AS/GEOG 3030 6.0 Geography of the Former U.S.S.R. An introductory study of the historical and contemporary geography of the former Soviet Union. The approach is primarily topical, with an emphasis on selected problems of political, physical, population, and settlement geography.

AS/GEOG 3040 6.0 Geography of Europe. An introduction to both the historical and present-day geography of Europe (excluding the former Soviet Union). The course combines a thematic survey of the continent as a whole with detailed integrative studies of selected small areas.

Prerequisite: At least 48 credits passed, or written permission of the instructor.
Degree credit exclusion: AS/GEOG 3390J 3.0.
AS/GEOG 3060 6.0 The Historical Geography of Canada to 1821. This course focuses on the changing human geography of Canada from pre-European times to 1821. Dominant themes include European exploration, exploitation, and settlement; Native cultures and economies; and European-Native relations. (Same as AS/HIST 3515 6.0.)
Degree credit exclusion: AS/HIST 3515 6.0.
AS/GEOG 3080 6.0 Reading Landscapes Through Time (formerly AS/GEOG 30803.0 - before 1997/98). The course focuses upon the analysis of changing geographic landscapes with particular reference to the United Kingdom, the United States, and, to a lesser extent, Canada, in order to draw some
general conclusions about processes responsible for landscape change. (Same as AS/HIST 3890 6.0.)
Degree credit exclusions: AS/GEOG 3080 3.0, AS/HIST 3890 6.0, AS/HIST 3890 3.0.

AS/GEOG 3090 3.0 The African Environment. The African physical environment is examined in order to understand problems of human occupance and development of this tropical continent. Regional case studies illustrate ways in which African cultures alter their environments to improve their living standards.
Prerequisite: AS/GEOG 10006.0 or AS/GEOG 14106.0 or AK/GEOG 2500 6.0.

Degree credit exclusions: AS/GEOG 3390Z 3.0, AK/GEOG 3550L 6.0.

AS/GEOG 3110 6.0 Rural Geography. A course dealing with the fundamental background and research procedures used in rural geography. The focus is on such topics as agriculture, land-use classification, social processes, settlement, and planning. Canadian examples are emphasized.
Equivalents and degree credit exclusions: AK/ GEOG 3440 6.0, AS/SOSC 3750 6.0.

AS/GEOG 3120 6.0 Urban Geography. An introductory course in which past and present urban phenomena are examined. Attention is focused on the analysis of regional urban networks and the internal spatial structure of the city.
Prerequisites: 48 credits passed, including one of AS/GEOG 1410 6.0, AK/GEOG 2500 6.0, AS/SOSC 2710 6.0.
Equivalent and degree credit exclusion: AK/ GEOG 3430 6.0.

AS/GEOG 3130 3.0 The Global Economy. This course examines the evolution of the world economy as well as the major institutions that have supported it, and interprets the new geography of investment, production and consumption that accompanies it.
Degree credit exclusion: AS/GEOG 3390N 3.0.

AS/GEOG 3140 3.0 Retailing, Shopping, Society and Space (formerly AS/GEOG 3390R 3.0 -before 1999/2000). This course provides an overview of consumer shopping behaviour, the structure and process of retail location, and various social and economic issues associated with the contemporary retail economy. The geographical perspective is emphasized.
Prerequisites: 54 credits passed, including AS/ GEOG 14106.0 or AK/GEOG 2500 6.0, or written permission of the course director.
Degree credit exclusion: AS/GEOG 3390R 3.0.

AS/GEOG 3150 3.0 The Rural-Urban Fringe. This course focuses on the relations between land-use changes, the economic dynamics which generate those changes, and the social composition of the countryside which emerges. The interpretive emphasis of
the course is on the impacts of advanced capitalism on its social and geographic settings. Degree credit exclusion: AS/SOSC 3740D 3.0.

AS/SC/GEOG 3180 3.0 Introduction to Geographic Information Systems (GIS). Introductory course in Geographic Information Systems (GIS), oriented around raster structures. Computer graphics for mapping introduced and work undertaken on finely divided surfaces. GIS considers both practical and theoretical questions of interpretation. Macintosh computers and raster-based software used for hands-on focus. (Same as ES/ENVS 3520 3.0.) One and one half lecture hours, one and one half laboratory hours. One term.
Prerequisite: AS/SC/GEOG 21303.0 or SC/ GEOG 2130 2.0.
Equivalents and degree credit exclusions: AK/ GEOG 3600 3.0, ES/ENVS 3520 3.0.

AS/SC/GEOG 3200 3.0 Terrestrial Ecosystems. An examination of the structure and function of vegetation and soil systems. The course focuses on such topics as the adjustment of ecosystems to human modification and the role of biogeography in conservation and resource management. Three lecture hours. One term.
Prerequisites: 48 credits passed, including one of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/ BIOL 2050 3.0.

AS/GEOG 3250 3.0 Environmental Perception and Natural Disasters. This course assesses the way people perceive their environment. Initially the course considers the theory of environmental perception. Considerable emphasis is placed on appraisal of natural and technological hazards and cultural perception.
Degree credit exclusion: AS/GEOG 3390E 3.0.
AS/SC/GEOG 32906.0 (3290 3.0) Directed Reading. This course may be used for individualized study, in which case the student requires permission from a faculty member who agrees to supervise the programme of directed reading and from the Chair of the department.
Note: See the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for Faculty of Arts regulations on independent reading courses. Only topics in physical geography are eligible for Science (SC) credit.

AS/GEOG 3340 6.0 Resource Analysis and Management. This course is concerned with the use of the natural resources of the Earth and with the economic, institutional, physical and biological factors that affect, condition and control the use of these resources.

Prerequisites: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, AS/GEOG 1410 6.0, AK/ GEOG 2500 6.0; one of AS/GEOG 2100 6.0, AK/GEOG 3420 6.0.

AS/SC/GEOG 33906.0 (3390 3.0) Special Topics. In any given year an additional number of courses may be offered. Information concerning these is available at the department office. Only topics in physical geography are eligible for Science (SC) credit.
Prerequisite: Permission of the course director.

AS/SC/GEOG 3400 3.0 Glacial Geomorphology. This course examines the distribution, mass balance, form and flow of glaciers as a basis for an analysis of landforms originating by glacial erosion and deposition. Canadian regional examples are used extensively, including a local field study. Two lecture hours and two laboratory/tutorial hours per week, a weekend field excursion. One term.
Prerequisite: AS/SC/GEOG 14006.0 or AK/ GEOG 2510 6.0.
Equivalent and degree credit exclusion: AK/ GEOG 3310 3.0.
Degree credit exclusions: AS/SC/GEOG 2390G 3.0, AK/GEOG 3310 6.0.

AS/SC/GEOG 3420 3.0 Research Design and Field Studies. This course begins with lectures on field research methodology. The second phase concentrates on defining a field problem, leading to data collection in the field. The final part of the course deals with data analysis, and reviews methodological implications. Two two-hour periods per week (including lectures, seminars and workshops), a three-day field trip. One term.
Prerequisites: Students must be registered as Honours majors in Geography and must have passed 48 credits, including AS/SC/GEOG 1400 6.0 or AK/GEOG 2510 6.0; AS/GEOG 14106.0 or AK/GEOG 2500 6.0; AS/SC/GEOG 24203.0 or a degree credit exclusion approved by the Geography Department.
Degree credit exclusion: AS/SC/GEOG 3390B 3.0.

AS/SC/GEOG 3421 3.0 Intermediate Statistical Methods in Geography. This course examines the application of methods of geographical analysis to empirical data sets representing geographical and ecological phenomena. Bivariate linear regression and multiple regression and time/spatial series are emphasized. Two lecture hours per week, two laboratory hours in alternate weeks. One term.
Prerequisite: AS/SC/GEOG 24203.0 or equivalent.
Degree credit exclusions: SC/BIOL 3090 3.0, AS/ SC/MATH 3033 3.0, AS/SC/MATH 3034 3.0, AS/ SC/AK/MATH 3230 3.0, AS/SC/AK/MATH 3330 3.0, AS/SC/PSYC 2020 6.0, AS/SC/PSYC 2022 3.0, AS/SOCI 3030 6.0.

AS/GEOG 3440 3.0 Environmental Remote Sensing. This course represents an introduction to the methods in which remote sensing data are collected, processed and analysed. An emphasis is placed on environmental applications. The synergy between the technologies of remote sensing and
geographic information systems (GIS) is also stressed. (Same as ES/ENVS 3521 3.0.) Two lecture hours, two laboratory hours. One term.
Prerequisites: AS/SC/GEOG 21303.0 or SC/ GEOG 2130 2.0; AS/SC/GEOG 2420 3.0; or written permission of the course director.
Degree credit exclusions: AS/SC/GEOG 4390T 3.0, ES/ENVS 3521 3.0.

AS/SC/GEOG 3500 3.0 Plant Geography. An analysis of the geography of higher plants, emphasizing processes that operate at the species population level, the origin and diversity of higher plant life, geographic patterns of diversity and floras, and dynamics of species populations at local and continental scales. (Same as SC/BIOL 3500 3.0.) Two lecture hours, two laboratory hours. One term.
Prerequisite: AS/SC/GEOG 25003.0 or SC/ BIOL 2050 3.0.
Degree credit exclusion: SC/BIOL 3500 3.0.
AS/SC/GEOG 3600 3.0 Process Geomorphology. Reviews the operation of Earth surface processes of weathering, erosion and deposition and the consequent creation of landforms under fluvial, coastal, glacial, cryonival, and aeolian regimes. Two lecture hours per week, four two-hour laboratory sessions. One term.
Prerequisite: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/EATS 1010 6.0, SC/ EATS 1010 3.0.

AS/SC/GEOG 3700 3.0 Global Geoscience and Global Change. The interrelationship and change among the hydrosphere, lithosphere, biosphere, and atmosphere are examined at a global scale. Emphasis is placed on the study of biogeochemical pathways and storage, and the direct and indirect effect humans have in altering global cycles. Three lecture hours, or two lecture hours and a tutorial hour. One term.
Prerequisites: 48 credits passed, including at least one of AS/SC/GEOG 1400 6.0, AK/ GEOG 2510 6.0, SC/EATS 1010 6.0, SC/ EATS 1010 3.0, SC/BIOL 2050 3.0, and a minimum of 18 additional Science credits at the 2000 level or higher. Highly recommended: OAC Calculus and OAC Chemistry.

AS/GEOG 3770 3.0 Housing Policy. The
course studies Canadian housing policy using the approaches of economics, political science and public administration. The course examines models of housing markets, the effects of housing policies, the politics and process of policy formation, and procedures for policy evaluation. (Same as AS/SOSC 3770 3.0.)
Degree credit exclusion: AS/SOSC 3770 3.0.

## 4000-Level Courses

Prerequisites. Unless otherwise indicated, 4000 -level Geography courses are open only to students who have successfully completed at least 54 credits, including any specific course prerequisites noted in the following course outlines.

AS/SC/GEOG 4000 6.0 Honours Thesis. An independent piece of research done under the supervision of a faculty advisor. The thesis must be submitted before the end of classes in the Winter Term; an exact date is established each year. There is an oral examination on the Honours Thesis. Only theses topics in physical geography are eligible for Science (SC) credit. One lecture hour per week at the beginning of the course. Two terms.
Prerequisite: 84 credits passed.
AS/GEOG 4040 6.0 Urban Historical Geography. A course which examines the historical geography of cities, particularly those of nineteenth-century North America. The major focus of attention is the role of certain economic and cultural factors in the development of spatial arrangements within and among cities.
Prerequisite: One of AS/GEOG 1410 6.0, AK/ GEOG 2500 6.0, AS/HIST 2510 6.0, AS/HIST 2600 6.0, AS/HIST 3440 6.0, AS/HIST 3621 6.0.

AS/GEOG 4050 3.0 The Exploration and Mapping of Canada to 1820. Exploration and mapping are inseparable; the former is the purposeful seeking, and the latter is the proof, of geographical discovery. The course traces the gradual exploration of Canada and its graphical portrayal from John Cabot (1497) until the early nineteenth century, when the country's outline became largely known. (Same as AS/HIST 4515 3.0.)
Degree credit exclusion: AS/HIST 4515 3.0.
AS/GEOG 4060 3.0 Geography of Gender: Historical Perspectives on Women's Spaces and Places in North America (formerly AS/GEOG 4390K 3.0-before 1997/98). This course explores the changing geographies of women in Canada and the United States over the past three centuries, focussing on the historical and spatial construction of gender. (Same as AS/HIST 4050E 3.0.)
Degree credit exclusions: AS/GEOG 4390K 3.0, AS/HIST 4050E 3.0.

AS/GEOG 4090 3.0 Urban Identities: Historical Perspectives on Race, Ethnicity, Gender and Class in Canadian and American Cities. This course considers the historical and spatial construction of racial, ethnic, gender and class identities in the broader context of urban development in Canada and the United States in the nineteenth and twentieth centuries. (Same as AS/HIST 4050F 3.0.)
Degree credit exclusion: AS/HIST 4050F 3.0.
AS/SC/GEOG 4100 3.0 Regional Geomorphology of Canada. Through a study of pioneer and modern works, the course attempts to develop an understanding of the distinctiveness and origins of Canadian landscapes from the perspective of the Earth sciences. Major regions and topical themes are selected for study. Normally one lecture hour, two seminar hours. One term.

Prerequisites: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/EATS 1010 6.0, or SC/EATS 10103.0 and 3 additional credits in Earth and Atmospheric Science; 6 additional credits in physical geography or Earth science.

## AS/GEOG 4110 3.0 Regional Urban

 Systems. An evaluation of theories and techniques used in studies of the structure and growth of regional and national urban systems. Illustrations are drawn mainly from Western Europe and North America. The course stresses concepts and methods rather than factual information.Prerequisites: AS/SC/GEOG 24203.0 or a degree credit exclusion approved by the Geography Department; AS/GEOG 31206.0 or AK/GEOG 3430 6.0.
Degree credit exclusions: AK/GEOG 4180 6.0, AK/URST 4180 6.0.

AS/GEOG 4130 3.0 The History and Theory of Geography. An examination of the evolution of geography as a distinctive field of enquiry is followed by an analysis of selected recent controversies. Modern geographic thought is illuminated by reference to contemporary trends in the philosophy of knowledge.
Prerequisites: At least 12 credits in Geography at the 3000 level.
Degree credit exclusion: AK/GEOG 4100 6.0.
AS/GEOG 4140 3.0 The Theory and Planning of Rural Land Use. An overview of the concepts and methods relevant to rural land management from the individual property through to national levels. Emphasis is placed on agriculture, recreation, conservation, and forestry and the special problems of the rural-urban fringe.
Prerequisite: AS/GEOG 31106.0 or AK/GEOG 3440 6.0.
Degree credit exclusions: AK/GEOG 4140 6.0, AK/URST 4140 6.0.

AS/GEOG 4160 3.0 Risk Assessment in Resource Management. Theories and concepts of "risk" are discussed and evaluated critically with respect to public policy for the resources sector. The analytical framework employed distinguishes between risk estimation, risk evaluation, and risk management and communication activities. Resource management issues are analyzed with a focus on energy policy in Canada, in the context of environment-energy interactions. (Same as ES/ENVS 4530 3.0.)
Prerequisite: Previous course-work in resource management (e.g., AS/GEOG 3340 6.0 or EN/ENVS 34403.0 or ES/ENVS 3440 3.0) or fourth-year standing in the Faculty of Environmental Studies or written permission of the instructor.

Degree credit exclusions: EN/ENVS 4530 3.0, ES/ENVS 4530 3.0.

AS/GEOG 4170 3.0 Geographic Perspectives on Immigration, Ethnicity and Race in Modern Cities. This course first discusses a number of conceptual issues concerning the residential segregation of
ethnic and racial groups. The course then considers several case examples that exemplify the varied experiences of ethnic and racial groups in modern cities.
Prerequisites: 84 credits passed, including AS/ GEOG 23006.0 or AS/GEOG 31206.0 or AK/ GEOG 34306.0 or written permission of the course director. Third-year Honours students with 78 credits completed who are also taking summer courses may enrol.

AS/GEOG 41803.0 / SC/GEOG 41804.0 Laboratory Analysis of Ecological Materials. This course introduces students to a comprehensive range of laboratory techniques for the analysis of plant, soil, and water samples. Laboratory sessions and projects provide students with experience in analytical procedures and the operation of major items of laboratory equipment. Four scheduled lecture/laboratory hours, three additional laboratory hours. One term.
Prerequisite(s): 6 credits in physical geography at the 3000 level; or SC/EATS 1010 3.0; or SC/EATS 1010 6.0; or SC/BIOL 2010 4.0, SC/BIOL 2030 5.0, and SC/BIOL 2050 3.0.

AS/GEOG 4190 3.0 Regional Planning. An examination of the "regional problem." Alternative interpretations of differential regional growth provide a basis for evaluating various regional planning policies. (Same as AS/SOSC 4560 3.0.)
Prerequisite(s): One of AS/GEOG 2100 6.0, AK/GEOG 3420 6.0, AS/ECON 1000 3.0/1010 3.0.

Degree credit exclusion: AS/SOSC 4560 3.0.
AS/SC/GEOG 4200 3.0 Water Quality and Stream Ecosystems. The course focuses on selected aspects of river water quality, including hillslope hydrology and the transport of pollutants, the impacts of human activities on water chemistry, nutrient transformations within stream ecosystems, and the effects of water quality on stream biological communities. Two lecture hours, one laboratory hour. One term.
Prerequisites: One of AS/SC/GEOG 1400 6.0, AK/GEOG 2510 6.0, SC/BIOL 2050 3.0; at least 6 credits in Physical Geography or Biology at the 3000 or 4000 level.

AS/SC/GEOG 4205 3.0 Climatology of High Latitudes. A study of the processes of energy and moisture exchanges in polar regions with emphasis on the Canadian North. Topics include atmospheric and oceanic transport of energy, surface microclimate and the sensitivity of high latitude environments to climate change. Normally offered in alternate years. Three lecture hours, one laboratory hour. One term.
Prerequisite: AS/SC/GEOG 2400 6.0.
Degree credit exclusion: AS/SC/GEOG 3210 3.0.

AS/SC/GEOG 4210 3.0 Hydrometeorology. A study of the relationship between the atmosphere and the hydrosphere with the emphasis on the process of evaporation. The
course includes an in-depth review of evaporation models and the instrumentation necessary for data acquisition. Normally offered in alternate years. Two lecture hours, a laboratory session. One term.

## Prerequisite: AS/SC/GEOG 2400 6.0.

AS/GEOG 4220 3.0 Industrial Geography.
This course presents an interpretation of the new industrial geography from a regulationist perspective.
Prerequisite: One of AS/GEOG 2100 6.0, AS/ GEOG 3120 6.0, AK/GEOG 3430 6.0, AS/ECON 1010 3.0, AS/ECON 3230 3.0.

AS/GEOG 4240 3.0 The Planning of Urban Public Facilities. Theoretical and practical problems concerning the supply and distribution of public goods and services in urban areas.
Prerequisite: AS/GEOG 31206.0 or AK/GEOG 34306.0 or AS/SOSC 2710 6.0.

AS/GEOG 4250 3.0 Geography and Landscape in Secular and Religious Literature. The focus of the course in on descriptions of landscapes and other geographical phenomena in works of literature. Real, symbolic and imaginary vistas are included.
Prerequisite: AS/GEOG 32503.0 is recommended, but not required.

AS/GEOG 4260 3.0 Applied Transportation Geography. This course focuses on urban transportation planning and policy analysis as an area of research. It discusses the theoretical principles governing movement and planning, and analytically examines approaches to policy problems.
Prerequisite: One of AS/GEOG 2100 6.0, AK/ GEOG 3420 6.0, AS/GEOG 3120 6.0, AK/GEOG 3430 6.0.

AS/SC/GEOG 4280 3.0 Tropical Environments. The tropics are studied as a unique environment and habitat posing special problems for development and occupancy. Topics include the history of environments, ecology of human activity, soils, nutrient conservation, biotic communities, pest problems, pastoralism, and agriculture in the tropics. Two lecture hours, two seminar hours. One term.
Prerequisites: 84 credits passed, including AS/ SC/GEOG 25003.0 or SC/BIOL 2050 3.0.

AS/SC/GEOG 42906.0 (4290 3.0) Directed Reading. This course may be used for individualized study, in which case the student requires permission from a faculty member who agrees to supervise the programme of directed reading and from the Chair of the department.
Note: See the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for Faculty of Arts regulations on independent reading courses. Only topics in physical geography are eligible for Science (SC) credit.

AS/GEOG 4300 3.0 Rural Social Geography. The countryside is examined as a social geographic phenomenon with emphasis upon social partitioning by class,
ethnicity and territory. Analysis of social relations is related to land-uses and power, linking the countryside to advanced capitalism. (Same as AS/SOSC 4730 3.0.)
Prerequisite: AS/GEOG 31106.0 or AK/GEOG 34406.0 or AS/SOSC 3750 6.0.

Degree credit exclusion: AS/SOSC 4730 3.0.
AS/SC/GEOG 4310 3.0 Dynamics of Snow and lce. This course examines the formation, distribution, structure, and degradation of snow, as well as lake, river and sea ice. Two lecture hours and two tutorial hours per week, two half-day field experiments. One term.

## Prerequisite: AS/SC/GEOG 2400 6.0.

AS/GEOG 4330 3.0 Spatial Choice Models: Theory and Application. This course looks at how spatial choice is modelled at both aggregate and disaggregate levels. Formal structure and theoretical rigour of gravity-type models and discrete choice models are discussed. Applications are drawn from a variety of interaction contexts.
Prerequisites: AS/GEOG 21006.0 or AS/ ECON 1000 3.0; AS/SC/GEOG 2420 3.0.

AS/SC/GEOG 4340 3.0 Geographic Information Systems. Advanced course in Geographic Information Systems (GIS), oriented around raster structures. Computer graphics for mapping introduced and work undertaken on finely divided surfaces. GIS considers both practical and theoretical questions of interpretation. Macintosh computers and raster-based software used for hands-on focus. Two lecture hours, two laboratory hours. One term.
Prerequisite: AS/SC/GEOG 31803.0 or AK/ GEOG 3600 3.0.
Equivalent and degree credit exclusion: AK/ GEOG 4220 3.0.
Degree credit exclusion: ES/ENVS 4520 3.0.
AS/GEOG 4370 3.0 The Geography of Third World Development. Problems and patterns of rural and urban development in Third World countries are examined from a geographical perspective. Theoretical and practical aspects are treated, based on case studies drawn mainly from Africa and the Pacific and Indian Ocean basins.
Prerequisite: One of AS/SC/GEOG 1400 6.0, AK/ GEOG 2510 6.0, AS/GEOG 1410 6.0, AK/GEOG 2500 6.0.

## AS/GEOG 4380 3.0 Urban Social Policy. A

critical examination of the links between urban social problems and state policies. The course studies how policy makers, planners, and geographers understand and deal with social problems in the contemporary city and evaluates selected planning policies.
Prerequisites: One of AS/GEOG 1000 6.0, AS/ GEOG 1410 6.0, AK/GEOG 2500 6.0; at least 6 additional credits in human geography at the 2000 or 3000 level.

AS/SC/GEOG 4390 6.0 (4390 3.0) Special Topics. In any given year an additional number of courses may be offered. Information concerning these is available at the department office. Only topics in physical geography are eligible for Science (SC) credit.
Prerequisite: Permission of the course director.

AS/SC/GEOG 4400 3.0 Physical Hydrology and Water Resources. An intermediate course in the physical principles of hydrological and water resource systems. Topics to be discussed include groundwater storage and flow, deterministic hydrological models and physical hydrological aspects of current water resource problems. Normally offered in alternate years. Two lecture hours, two laboratory hours. One term.
Prerequisite: AS/SC/GEOG 2400 6.0.
AS/GEOG 4420 3.0 Project Experience in Applied Geography. This course enables Honours students to apply work experience in applied geography to their degree programme. It provides students an opportunity to put their classroom learning into practice in a nonacademic environment. The objective is to encourage students to put geographic skills to work in the addressing of "real world" problems.
Prerequisites: Permission of the course director. Students must be registered in the Specialized Honours Applied Geography Programme and must have successfully completed 84 credits.
Prerequisite or corequisite: AS/SC/GEOG 3420 3.0.

AS/GEOG 4440 3.0 Remote Sensing and Image Processing for Geographical Analysis and Environmental Monitoring. Sophisticated methods and techniques for collecting, processing and analysing remote sensing data are examined. Special topics include image enhancement techniques (e.g., texture transforms), non-traditional image classification and data integration for incorporation of remote sensing data products into geographic information systems (GIS). (Same as ES/ENVS 4521 3.0.) Three lecture hours. One term.
Prerequisite: AS/GEOG 34403.0 or SC/EATS 42203.0 or written permission of the course director.
Degree credit exclusions: AS/SC/GEOG 4390T 3.0, ES/ENVS 4521 3.0.

AS/SC/GEOG 4600 3.0 Fluvial Geomorphology. This course concentrates on processes of erosion, sediment transport and resultant depositional features in alluvial channels. Emphasis is placed on the hydraulics and mechanics of open channel flow, flow turbulence-sediment transport interactions, as well as river cross-sections and channel patterns. Two lecture hours, two seminar hours. One term.
Prerequisite: AS/SC/GEOG 14006.0 or AK/ GEOG 2510 6.0.

## German Studies - Arts

Programme Office:
230 York Lanes Ross (416) 736-5695 ext. 20220
Coordinator:
Mark Webber, 230 York Lanes, (416) 7365695 ext. 20220
Programme Advisors:
W. Ahrens, S520 Ross (416) 5016, I. Steinisch, 2134 Vari Hall, (416) 736-5223

German Studies is an Honours interdisciplinary double major programme that can be pursued jointly with one of the following: Economics, Geography, German, History, Humanities, Philosophy, Political Science or Sociology. German Studies as an interdisciplinary field examines how, why, and to what effect the culture of the Germanspeaking world has organized and expressed itself over the centuries. Thus German Studies considers and evaluates geographical, political, historical, sociological, philosophical, economic, linguistic, literary, and artistic data. Although a primary focus is Germany, other German-speaking countries and Germany's relations with Europe and the world receive appropriate attention. Integral to German Studies is its intercultural perspective, which subjects to critical study the history and actuality of interactions between the Germanspeaking and non-German-speaking world.
Students in German Studies courses benefit from the existence of the Canadian Centre for German and European Studies at York University (230 York Lanes). Although its resources are aimed at the graduate level, many guest lectures and materials housed in the centre are also suitable for students at the undergraduate level.

## Courses in German Studies

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major. For specific requirements of programmes in German Studies, please consult the Programmes of Study section, Faculty of Arts.
Descriptions of the content and format of these courses are contained in the appropriate departmental and divisional listings in this Calendar. Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the coordinator. For more detailed course listings please consult the German Studies Supplemental calendar.

## Required Courses:

AS/ANTH 3000N 3.0 Barbarian Europe. AS/ECON 3120 3.0 Economic Development in Europe Before the Industrial Revolution.
AS/ECON 3130 3.0 Economic Development in Europe from the Industrial Revolution to the Present.
AS/GEOG 3040 6.0 Geography of Europe. AS/GER 1000 6.0 Elementary German. AS/GER 1020 6.0 Elementary German for Reading Knowledge.
AS/GER 1050 6.0 Intermediate German. AS/GER 2040 6.0 Advanced German, Level I. AS/GER 3040 6.0 Advanced German, Level II.

AS/GER 2200 6.0 Introduction to German Literature and Culture. An introduction to German literary texts in their cultural context. The course provides the basis for further work in German Literature and the broader field of German.

AS/GER 3130 3.0 Words and Meaning in German and English.
AS/GER 3610 3.0 The German Drama in the Twentieth Century.
AS/GER 3790 6.0 Germany In Film: Literary And Historical Perspectives.
AS/GER 4120 3.0 Theory and Practice of Translation: German-English, EnglishGerman.
AS/GER 4600 3.0 Berlin in German Literature: Texts and Contexts.
AS/GER 4610 3.0 The German Drama in the Twentieth Century.
GL/HIST 1600 6.0 Introduction to the History of Modern Europe: 1450-Present.
GL/HIST 1690 6.0 Pensees et civilisations européennes.
AS/HIST 2210 6.0 Early Modern Europe, 1400-1700.
AS/HIST 2300 6.0 Modern Europe.
GL/HIST 3255 3.0 Reformation Europe 14941598.

AS/HIST 3320 6.0 Modern Germany: 1871 to the Present. Modern Germany from the formation of the Bismarckian Empire through the Weimar Republic and the Nazi regime to the division of Germany after 1945. The analysis centers on the interrelationship of political and socio-economic developments, foreign and domestic policies.

GL/HIST 3360 3.0 European Social History 1750-1914.
AS/HIST 3365 3.0 European Fascism: 18901945.

GL/HIST 3615 3.0 Art as Propaganda.
AK/HIST 3860 6.0 Germany from Napoleon to the Present.
AS/HIST 3820 3.0 Welfare States in Comparative Perspective.
AS/HIST 4350 6.0 European Thought In Early 20th Century.
AS/HIST 4930C 6.0 War And Peace: European Diplomacy 1800-1914.
AS/HUMA 2160 6.0 Romanticism.
AS/HUMA 2170 6.0 Modern Art: 1750 To The Present.

AS/HUMA 2190 9.0 Germany Through the Ages: Culture and Society. An introduction to anthropology from the perspectives acquired through comparative study of primitive and complex societies. The course illustrates both the diversity and the recurring principles of social behaviour. Topics include economic organization, kinship patterns, political and legal systems, and ritual and religion.

AS/PHIL 2120 3.0 Existentialism. AS/PHIL 3125 3.0 Contemporary Existentialism.
AS/PHIL 3640 3.0 German Philosophy. AS/POLS 3040 6.0 Currents in Modern Political Theory.

AS/POLS 3240 3.0 Multilateralism I Introduction to International Organization.
AS/POLS 3530 3.0 West European Politics.
AS/POLS 4205 3.0 The New German Politics and European Integration.
AS/POLS 4435 3.0 The New German Politics and European Integration.
AS/POLS 4445 3.0 European Union.
AS/SOSC 4990 3.0 The Media and New Social Movements in Europe.
FA/VISA 2620 6.0 Modern Art: 1750 to the Present.

## Health and Society - Arts

Programme Office (Division of Social Science):
S741 Ross, (416) 736-5054
Associate Professor and Coordinator of the Programme:
H. Rosenberg, Social Science
"Health and Society" is a term used to denote a body of scholarship that has emerged over the past 20 years in response to perceived limitations in a strictly biomedical approach to health issues. The health and society concept embraces research conducted in a number of overlapping interdisciplinary fields including: history and philosophy of medicine; medical sociology; behavioural medicine; medical anthropology; social epidemiology; psychosomatic medicine; health psychology; community mental health; international development; family, the life course and gerontology; occupational health and safety; environmental health and women and health.

The programme aims to meet the needs of students who wish to go on to work in healthrelated occupations, to enter graduate programmes in health studies, or simply to enrich the experience of those who have general interests in health-related issues.

## Departmental and Divisional Courses in Health and Society

Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.
Note: Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the Social Science supplemental calendar, available from the Divisional office, S748 Ross.

## Anthropology

AS/ANTH 3080 6.0 Modes of Enablement. AS/ANTH 3190 6.0 Nutritional Anthropology: Food and Eating.
AS/ANTH 3280 6.0 Psychiatric Anthropology and Social Stress.
AS/ANTH 3330 6.0 Health and Illness in Cross-Cultural Perspective.

## Kinesiology and Health Science

AS/KINE 2020 3.0 Introduction to Health.
AS/KINE 3640 3.0 Epidemiology of Physical Activity, Fitness and Health.
AS/KINE 4640 3.0 Lifestyle and Current Health Issues.

AS/KINE 4660 3.0 Exercise and Addictive Behaviours.
AS/KINE 4710 3.0 Psychology of Health and Chronic Disease.

## Philosophy

AS/PHIL 2070 3.0 Introductory Ethics.**
AS/PHIL 2075 3.0 Introduction to Practical Ethics.**
AS/PHIL 3020 3.0 Ethics.
AS/PHIL 3025 3.0 Practical Ethics.**
AS/PHIL 3260 3.0 Philosophical Psychology.**
(Cross-listed to: AK/PHIL 3635 3.0)
AS/PHIL 3280 3.0 Mind and Nature: Philosophy of Biology.

## Political Science

AS/POLS 4450 3.0 Madness, Asylums and Politics I.
AS/POLS 4455 3.0 Madness, Asylums and Politics II.
AS/POLS 4620 3.0 Health Policy in Canada
AS/POLS 4625 3.0 Issues in Canadian Health Policy.

## Psychology

AS/PSYC 3440 3.0 Introduction to Health Psychology.
AS/PSYC 3490 3.0 Psychology of Adult Development and Aging.
AS/PSYC 3560 3.0 Psychology of Death and Dying. (Cross-listed to: AK/PSYC 3290 3.0)
AS/PSYC 4040 6.0 Rehabilitation Psychology.

## Sociology

AS/SOCI 3820 6.0 Sociology of Health and Health Care.

Degree credit exclusions: AK/SOCI 3490 6.0, AK/ ADMS 4700 3.0, GL/SOCI 3230 6.0.
AS/SOCI 3850 3.0 Social Gerontology.
AS/SOCI 4300 3.0 Sociology of Health Care Delivery.
AS/SOCI 4970 3.0 Sociology of Adult Development.

## Social Science

AS/SOSC 2110 9.0 A Critical Study of Health and Society.
AS/SOSC 2112 6.0 The Political Economy of Health: Comparative Perspectives.

Degree credit exclusion: AS/SOSC 2990G 6.0.
AS/SOSC 2113 6.0 Theories and Issues of Health Care Professions.
AS/SOSC 2150 6.0 Families in Crisis: Issues of Health Environments and Poverty.
AS/SOSC 3090 6.0 Medicine and North American Society in Historical Perspective. (Cross-listed to: AS/HIST 3880 6.0)
AS/SOSC 3111 6.0 Special Topics in Health and Society.
AS/SOSC 3120 6.0 To Be or Not To Be: Suicide and Culture in Comparative Perspective.
AS/SOSC 3140 6.0 Psychotherapy and the Arts.
AS/SOSC 3160 6.0 Understanding Psychotherapy.
AS/SOSC 3162 3.0 Drama, Ritual and Healing.

AS/SOSC 3920 6.0 Disability and Society: Historical Sociocultural and Educational Issues.
AS/SOSC 4140 6.0 Health and Society Seminar.
AS/SOSC 4150 6.0 Aging and Caregiving.

## School of Women's Studies

AS/AK/GL/WMST 3511 3.0 Women's Sexualities. (Cross-listed to: GL/SOSC 3625 3.0)

## Atkinson

## Administrative Studies

AK/ADMS 2300 6.0 Research Methods in Health Studies.
AK/ADMS 3400 3.0 Occupational Health and Safety.**
AK/ADMS 3710 3.0 Comparative Health Administration.**
AK/ADMS 4710 3.0 The Canadian Health System. (Cross-listed to: AK/NURS 4710 3.0)
AK/ADMS 4720 3.0 Management of Health Facilities.**+

## Economics

AK/ECON 3520 3.0 Economic Evaluation in Health Care. **

## Geography

AK/GEOG 3460 6.0 Medical Geography. AK/GEOG 3470 3.0 Geography of Nutrition.

## Nursing

AK/NURS 2720 3.0 Perspectives on Health and Health Promotion.
AK/NURS 3740 3.0 Health Care Planning for Communities. + **
AK/NURS 4710 3.0 The Canadian Health Care System. (Cross-listed to: AK/ADMS 4710 3.0)

Philosophy
AK/PHIL 3600 6.0 Health Ethics.

## Psychology

AK/PSYC 3215 3.0 Abnormal Psychology.
AK/PSYC 3290 3.0 Psychology of Death and Dying. (Cross-listed to: AS/PSYC 3560 3.0) AK/PSYC 3700D 3.0 Aging and Human Development.
Degree credit exclusion: AS/PSYC 3490 3.0.
AK/PSYC 4210 3.0 Counselling and Psychotherapy: Systems and Theories I.
AK/PSYC 4220 3.0 Counselling and Psychotherapy: Systems and Theories II.
AK/PSYC 4240 3.0 Counselling and Psychotherapy: Skills and Applications.
AK/PSYC 4250 3.0 Seminar in Psychology of Death and Dying.

## Sociology

AK/SOCI 3490 6.0 Sociology of Health.
Degree credit exclusion: AK/ADMS 4700 3.0, AS/ SOCI 3820 6.0, GL/SOCI 3230 6.0.
AK/SOCI 3850 6.0 Women, Violence and Social Policy.
AK/SOCI 4240 6.0 Health, Society and Human Resources.

## Social Science

AK/SOSC 3520 6.0 Social Construction of Health and Illness.

## Social Work

AK/SOWK 3010 3.0 Foundations of Health Care Assessment and Planning. +**
AK/SOWK 3020 3.0 Issues in Health Care Assessment and Planning. +**

## Glendon

## Sociology

GL/SOCI 3230 6.0 Sociology of Health and Illness.
Degree credit exclusion: AK/ADMS 4700 3.0, AK/SOCI 3490 6.0, AS/SOCI 3820 6.0 GL/ SOCI 3945E 3.0 Social Policy the Case of Mental Health.

## Psychology

GL/PSYC 3230 3.0 Abnormal Psychology.
GL/PSYC 3300 3.0 Introduction to Development: Infancy and Childhood.
GL/PSYC 3310 3.0 Introduction to Development: Adolescence, Adulthood and Aging.
GL/PSYC 3510 3.0 Disturbances in Development.
GL/PSYC 3700 3.0 Health Psychology.

+ Students may only enrol in one of these courses.
** Degree credit for these courses is conditional upon approval by the Health \& Society Coordinator.


## History - Arts

Department Office:
2140 Vari Hall, (416) 736-5123; Fax (416)

## 736-5836

Web Address:
www.yorku.ca/dept/histarts
Professor and Chair of the Department:
A. Shubert

Distinguished Research Professors Emeriti:
J. Bosher, J. Ch'en, J. Granatstein, G. Kolko

Distinguished Research Professor:
P.E. Lovejoy

University Professors Emeriti:
S. Eisen, W.W. Piepenburg, J. Saywell

Professors Emeriti:
G.R. Cook, J. Ernst, L. Hertzman, V.J. Hunter, F. Ouellet, R. Storr

## Professors:

I. Abella, C. Armstrong, R.D. Cuff, M. Egnal, A. Haberman, R.C. Hoffmann, W. Irvine, A.S. Kanya-Forstner, M.P. Maidman, S. Mann, H.V. Nelles, P. Oliver, N.C.T. Rogers, A. Shubert, O. Subtelny, B.T. Wakabayashi

## Associate Professors Emeriti:

H. Bowsfield, C. Dent, G. Jordan, J.M. Maiguashca, F. Matthews

## Associate Professors:

B. Bradbury, T.V. Cohen, C.A. Dent, J.C. Edmondson, D. Hay, C. Heron, S.E. Houston, G.S. Jordan, M. Ladd-Taylor, T.J.A. Le Goff, B.H. Luk, J.M.P. McErlean,
K. McPherson, E. Melville, P.M. Mitchell, J.M. Neeson, R. Schneider, M. Shore, I. Steinisch, P.D. Stevens, P.R. Swarney, D. Trotman

## Assistant Professors:

T. Abdullah, S. Brooke, E. Cohen,
G.A. Ginsburg, M. Martel, M. Stein, J. Trevett, W. Wicken

## Sessional Assistant Professors:

J. Curto

The History Department offers a variety of approaches to the study of history, and a variety of courses ranging from ancient to contemporary and from Canadian to Third World history. Courses introducing History majors, minors and potential majors to the discipline of history, its techniques, its methods and its own history are offered at the 1000 level. Basic introductory courses in all the broad fields are given each year at the 2000 level, and these lead to more specialized courses at the 3000 level. 4000-level seminars enable small groups of Honours students to concentrate on the close investigation of specific historical problems. Students are responsible for their own selection of courses within the limits of the Department's regulations, and advisors are available to help them plan coherent programmes of study.
Note: For specific requirements of programmes offered by this Department, please consult the "Programmes of Study" section, Faculty of Arts.

## Courses in History

Courses at the 1000 level have either a lecture/ tutorial or a seminar format. Courses at the 2000 level normally have two lecture hours and one tutorial hour. Courses at the 3000 level are taught either as colloquia or as lecture courses. 4000-level courses will be offered as two-hour or three-hour seminars. All courses above the 1000 level in History are open to students studying in other departments, unless otherwise indicated. Admission to 4000-level seminars is by permission of the instructor or the instructor's representative. The Department urges all students whose concentration is in History to contact the appropriate faculty advisor before choosing courses. If you have any questions, contact the History Department office, 2140 Vari Hall, telephone (416) 736-5123.
All History courses are numbered and grouped according to field. The thousands digit indicates the level at which the course is offered, the hundreds digit the field (general 000, ancient 100, premodern Europe 200, modern Europe 300, Great Britain 400, Canada 500, United States 600, Africa, Asia and Latin America 700, comparative and interdisciplinary courses 800), and the tens digit indicates the number of the course within the field.
Note: Not all the courses listed below will be offered in any one academic year. A supplementary calendar, including courses to be offered and advising procedures for the coming year, will be published each February/ March. Copies are available in the Department office.

Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## I. 1000-Level Courses

Note: Courses at the 1000 level introduce History majors, minors, and potential majors to the discipline of history, its techniques, its methods, and its own history. These courses have either a lecture/tutorial or a seminar format.

AS/HIST 1000 6.0 Issues in History. An investigation of major issues in various historical periods and fields designed to teach historical methods, the basic skills of research and writing, and the nature of historical arguments and judgments. Topics vary from year to year. For details, consult the department.

AS/HIST 1010 6.0 War, Revolution and Society in the Twentieth Century. A study of the major political and social upheavals which have helped to shape the contemporary world. The course concentrates on the origins of the two World Wars and the "Cold War," and on their consequences. Topics chosen for detailed examination vary from year to year.

AS/HIST 1020 6.0 The Emergence of the Nation-State: The Quest for National Identity in Europe and North America. This course studies the origin and development of the nation-state in Western Europe and North America from the mid-eighteenth century to the present. It focuses on the relationship of the ideas of individuals and groups to political, economic and social life in the Atlantic world.

AS/HIST 1030 6.0 Imperialism and Nationalism in Modern Asia. This course concerns the community of independent Asian nations, examining their distinctive traditional societies, the impact of imperialism, their reactions to it, and their modern evolution.

AS/HIST 1040 6.0 From Colony to Nation. A study of some of the major problems which have helped to shape the Canadian nation in its development from a colony to a nation. Topics chosen for detailed examination vary from year to year.

AS/HIST 1050 6.0 Ordinary People In A Changing World: Europe and North America, 1700-1914. Explores the ways in which large historical forces in the recent past, such as industrialization, urbanization and the growth of the state, have affected family, community, work and leisure and ways in which people have responded, embracing, adapting to, or resisting change.

AS/HIST 1060 6.0 Revolutions in Thought: The Modern West. An investigation of major developments in the intellectual history of the West from the Renaissance to the present. Examples of topics studied are the relationship
between the individual and society; science and human understanding; the idea of nationalism; and belief and unbelief.

## II. 2000-Level Courses

Note: Courses at the 2000 level are basic introductory courses in all the broad fields taught in the Department. These lead to more specialized courses at higher levels. 2000level courses normally have two lecture hours and one tutorial hour.

AS/HIST 2100 6.0 Ancient Greece and Rome. A study of the Greek and Roman world, with particular emphasis on its social, economic, and intellectual history, using primary sources - archaeological, epigraphic and literary - wherever possible.

AS/HIST 2110 6.0 The Ancient Near East. This course surveys the history of some of the oldest civilizations of the world and their immediate successors; Sumer, Akkad, Assyria, Babylonia, Egypt, "Hittite-land," Canaan, and Israel. Problems of how to determine the facts of ancient history are also discussed.

## AS/HIST 2200 6.0 Medieval Europe.

Themes in European institutional, social, economic, and intellectual history from the fourth through the fourteenth centuries.

AS/HIST 2210 6.0 Early Modern Europe, 1400-1700. A study of the Renaissance, the Reformation, the scientific revolution, and the emergence of the modern centralized state.

AS/HIST 2300 6.0 Modern Europe. An introduction to the development of modern Europe from the emergence of the seaborne empires to the First World War. Each week, there are two lectures on aspects of European society, politics and intellectual life during the past three centuries.

AS/HIST 2310 6.0 Russian Culture: Continuity and Conflict. This course examines Russian culture in an historical and social context focusing on Kievan Rus', the rise of Muscovy, the expansion of the Russian Empire and its revolutionary mutation into the Soviet Union, and the post-Soviet contemporary scene.
Cross-listed to: AS/RU 27506.0 and AS/ HUMA 2990D 6.0.

AS/HIST 2400 6.0 British History. An examination of the evolution of Britain through the analysis of a series of major problems in political, social, economic, and intellectual history. The topics chosen touch upon the main features of British development.

AS/HIST 2500 6.0 Canadian History. An introduction to the development of Canada from pre-European native societies to the present, including the evolution of the economy, social structures and social movements, family and gender relations, cultural development and conflicts, federal and provincial politics, and external relations.

AS/HIST 2600 6.0 United States History. This broad survey of United States history from colonization to the present explores the interlocking patterns of political, economic, social and cultural change. The racial and ethnic diversity of the US is a major theme.

AS/HIST 2700 6.0 The Making of The South Atlantic World. Relations between Europe and the non-European world from the sixteenth century to 1914 are studied comparatively, with emphasis on the nature of European empires, the impact of colonial rule, and the varied responses of non-European societies to European expansion.

AS/HIST 2710 6.0 Traditional Societies of East Asia. An introduction to political, social, economic, and philosophic developments in traditional China and Japan, with emphasis on the emergence of their distinctive traditions to the mid-eighteenth century.

## III. 3000-Level Courses

Note: Courses at the 3000 level are specialized courses in the fields taught by the Department. They are offered either as colloquia or as lecture courses.

AS/HIST 3000 6.0 Contemporary History: Theory and Practice. A study of the major schools of historical thought of the twentieth century and their methodological contributions to the discipline.

AS/HIST 3010 6.0 Quantification and History. The course studies the handling of quantifiable data. It treats maps, charts, diagrams, tables, codebooks, computers and elementary statistics with an eye to their value in historical enquiry.

AS/HIST 3110 6.0 Ancient Israel: From Its Origins in the Settlement to the Babylonian Exile. Investigations include methodological limitations; Old Testament, archaeology, and ideology; Israel's origins the settlement in Canaan; Philistia and the Israelite state; the Davidic Revolutions; the twin kingdoms, economic, religious, and topographic factors; Assyria, Babylonia, and the end of the Israelite people.
Degree credit exclusion: AS/HIST 3140 6.0.
AS/HIST 3120 6.0 Foundations of Athenian Democracy. A study of Athens in the fifth century B.C., concentrating on social and economic structures and institutions. The course concerns itself with topics appropriate to a pre-industrial society, such as peasants, slaves, and the development and function of the early state.

AS/HIST 3130 6.0 The Roman Revolution.
An examination of the political, cultural, economic, and social transformation of the Roman state and society during the late Roman republic and early empire.

AS/HIST 3131 6.0 Rome and Empire: From War to the Pax Romana. Rome's growth from city-state to Empire. Topics considered include the nature of Roman imperialism, the mechanisms of Roman conquest, the emergence of a system of provincial
administration and the social, economic and cultural impact of conquest on Roman and provincial societies.

AS/HIST 3150 6.0 Early Greek History from the Bronze Age to the Persian Wars. This course examines the political, social, economic and intellectual history of Greece in the Bronze Age and the Archaic Period. It covers Mycenean Greece, the Dark Age, the rise of the city-state, and culminates in the Persian Wars.

AS/HIST 3200 6.0 Structure and Function in the Institutions of Medieval Society.
Through research in primary sources for law, government, economics, and social organization, a detailed examination of the institutions of life in Medieval Europe, plus a review of major schools and analytic techniques in the recent historiography of the subject.

AS/HIST 3211 3.0 Economic Development of Preindustrial Europe. Structures and changes in European economic life from the end of ancient civilizations to the beginnings of Industrial Revolution.

Degree credit exclusion: AS/HIST 3210 6.0.
AS/HIST 3212 3.0 Society in Preindustrial Europe: Selected Themes. Issues and perspectives in the evolution of social life and structures in Europe between the demise of ancient society and the transformations which began in the eighteenth century.
Degree credit exclusion: AS/HIST 3210 6.0.
AS/HIST 3225 6.0 At the Fringes of the Medieval West. A comparative analysis of five "peripheral" regions which experienced the impact of European expansion or became part of "Europe" during the middle ages: the Celtic west, Iberia, Scandinavia, east-central Europe, and the eastern Mediterranean. Uniting the sections is a continuing concern for the conditions, character, and result of cultural contact and interaction in the medieval context.

Degree credit exclusion: AS/HIST 3240 6.0.
AS/HIST 3230 6.0 The Renaissance. The emergence of European consciousness, with readings in intellectual history from the fourteenth to the seventeenth centuries.

AS/HIST 3233 6.0 Women In Medieval And Early Modern Europe. This course investigates the experiences of pre-modern women in the realms of society, economy, politics, religion, and culture. Considered in their impact on institutions, groups, and individuals are ideas about the nature of the sexes and their roles.

AS/HIST 3250 6.0 Italy in the Renaissance. The political and social institutions which fostered the intellectual and artistic culture of the Italian Renaissance.

AS/HIST 3300 6.0 France Since Louis XIV. This course emphasizes social and economic history, focusing on such topics as the social structure in the ancien régime; the Enlightenment, the various revolutions, political
and social movements, the growth of an industrial economy, and France in Europe and the world.

AS/HIST 3310 3.0 Russia: From Origins to 1917. Russia from primitive princely state to the collapse of the Romanov dynasty in 1917.

AS/HIST 3311 3.0 History of the Soviet Union. This course examines the evolution of the world's first communist regime. After examining the traditional struche government, the role of the Communist party and the nature of Soviet politics, it focuses on Gorbachev's attempts to reform the system.

AS/HIST 3315 3.0 Modern Ukrainian History. This course focuses on the integration of Ukrainians into the Habsburg and Russian empires, socio-economic change, cultural and ideological development and the emergence of a modern Ukrainian nation. Other topics include the Revolution of 1917-1921, Soviet and Western Ukraine between the wars, the impact of World War II and developments in Soviet Ukraine in the post-war period.

AS/HIST 3320 6.0 Modern Germany: 1871 to the Present. Modern Germany from the formation of the Bismarckian Empire through the Weimar Republic and the Nazi regime to the division of Germany after 1945. The analysis centers on the interrelationship of political and socio-economic developments, foreign and domestic policies.

AS/HIST 3330 6.0 Ideas and Movements in Nineteenth Century Europe. European thought and action from the Congress of Vienna to World War I, emphasizing such topics as attitudes toward science, the development of various schools of art, literature and philosophy, nationalism and the idea of a state system, and reform and revolutionary movements.

AS/HIST 3350 6.0 Modern Italy: 1815-1945. This course examines the social, economic and political development of Italy from the end of the Napoleonic Wars until the end of the Second World War.
Degree credit exclusion: GL/HIST 3410 3.0.
AS/HIST 3365 3.0 European Fascism: 18901945. This course examines the varieties of European fascism that emerge after 1890, the intellectual and cultural origins of fascist ideology and the nature of fascist movements and regimes in inter-war Europe.
Degree credit exclusion: GL/HIST 4230 6.0.
AS/HIST 3380 3.0 Eastern Europe, 17721918. A survey of the emancipation from Turkish, Habsburg, Prussian and Russian empires of East European countries from the awakening of national consciousness in the 18th century to new arrangements at the end of World War I.
Degree credit exclusion: AS/HIST 3380 6.0.

AS/HIST 3381 3.0 Eastern Europe, Since 1918. The "Successor States"; their interwar problems and successes; evolution during WW II; four decades of Communist rule; "Return to Diversity" in the 1990's.
Degree credit exclusion: AS/HIST 3380 6.0.
AS/HIST 3391 6.0 Italy, Spain and Portugal Since 1800. An examination of the political, economic and social history of three southern European countries in the nineteenth and twentieth centuries. A thematic approach emphasizes comparison among these three countries.

AS/HIST 3392 3.0 The Spanish Civil War. A study of one of the central events of modern European history, the Spanish Civil War. While examining the causes and nature of the war the course also considers the place of the conflict in European politics and culture.

AS/HIST 3400 6.0 Tudor and Stuart England: 1485 to $\mathbf{1 7 1 4}$. This course examines the recovery and development of English society after the late medieval crisis. Topics include: aristocracy and peasantry; crime and the law; women; religion; the Tudor state; the Civil War.

AS/HIST 3415 6.0 British Law and Society from the Seventeenth Century. The history of English law and British legal institutions, with emphasis on the relationships among law, litigation, and the social, political, economic, and intellectual changes England underwent between the civil war and the end of the nineteenth century.

AS/HIST 3440 6.0 Victorian Culture and Society. A study of institutions, ideas and cultural movements using both primary and secondary sources from a variety of disciplines.
Cross-listed to: AS/HUMA 3360 6.0.
AS/HIST 3480 6.0 British Society and Politics in the Twentieth Century. The social and political history of Britain in the twentieth century. Topics to be examined include social politics, the development of the welfare state, the trade union movement and the effects of two world wars upon British society.

AS/HIST 3500 6.0 Old Ontario, 1783 to 1905. A regional approach to nineteenthcentury Ontario which emphasizes the growth of a provincial society through the interrelationship of social, economic and political developments.

AS/HIST 3510 6.0 Canada: The Making of a Nation. This course examines the development of Canada's constitutional and political institutions during the nineteenth century. Particular emphasis is placed on the emergence of regional communities, the origins and development of the political party system, the politics of confederation, the origins and development of the Constitution.

AS/HIST 3515 6.0 The Historical Geography of Canada to 1821. This course focuses on the changing human geography of Canada from pre-European times to 1821. Dominant themes include European exploration, exploitation, and settlement; Native cultures and economies; and European-Native relations.
Cross-listed to: AS/GEOG 3060 6.0.
AS/HIST 3520 6.0 The Canadian West, 16001990. A study of the Canadian West, concentrating on such themes as Aboriginal societies, the fur trade, agricultural settlement, regional identity, urbanization, the social impact of war, and political movements such as feminism, the CCF and the Reform Party.

AS/HIST 3530 6.0 Canadian Social History. An introduction to the major themes of Canadian social development. Demography, geography, economy, social structure, and institutional development are among the major aspects to be examined.
Cross-listed to: AS/SOSC 3250 6.0.
AS/HIST 3531 6.0 The Working Class in Canadian Society. The changing nature of paid and unpaid work in Canada in the nineteenth and twentieth centuries and the impact of those changes on Canadian society. Cross-listed to: AS/SOSC 3210 6.0.

AS/HIST 3533 6.0 The History of Women in Canada. The political, economic and social history of women in Canada, from 1600 to the present. A thematic approach investigates commonalities and differences of women's experience.

Degree credit exc/usion: AK/HIST 3000D 6.0 (FW96).

AS/HIST 3540 6.0 Canada in the French Empire (Before 1763). Themes in the history of Canada as a French colony with special reference to the development of Atlantic trade and shipping, to the society and institutions of the mother country, to other European colonies, and to the imperial struggles of early modern Europe.

Degree credit exclusion: AK/HIST 3000C 6.0.
AS/HIST 3543 3.0 Quebec - The PreIndustrial Era. The evolution of Quebec society from the seventeenth century to 1850 . Special emphasis is placed on social and economic factors which affected the formation of the society and its evolution until the process of urbanization was engaged.

AS/HIST 3544 3.0 Quebec - The Industrial Era. The general evolution of Quebec society from 1850 to the 1980s. Special attention is placed on urbanization, industrialization, working class, women, education and ideologies.

AS/HIST 3555 6.0 Canadian Jewish History. A study of the origins, growth and development of the Canadian Jewish Community since the 1750's. Themes to be dealt with include immigration, Western

Settlement, the Holocaust, religion, antisemitism, Zionism, labour, integration and continuity.

AS/HIST 3560 3.0 Canadian Economic Development to 1870. An introduction to the economies, business institutions and policy requirements of the regional staple producing societies of Newfoundland, the Maritimes, New France and Lower Canada, Upper Canada, and the Hudson's Bay Company territories.

AS/HIST 3561 3.0 Canadian Economic Development, 1870 to 1985. An introduction to Canadian industrialization and structural change within the Canadian economy over the past century. Emphasis is placed upon trade and commercial policy, demographic change, capital formation, labour markets, the state sector and regional development from the National Policy to Wage and Price Controls.

AS/HIST 3580 6.0 Twentieth Century Canada. An analysis of the major events and developments affecting Canadian society during the past hundred years, including political and constitutional evolution, economic and social change and alterations in the climate of ideas.

AS/HIST 3591 6.0 Politics, Law and the Constitution in Modern Canada. The history of constitutional change and adaptation in Canada during the twentieth century. Emphasis is placed upon the evolution of institutions (particularly the courts and the federal-provincial conference), changing doctrines of federalism, inter-governmental conflict over policies and jurisdiction, and the definition and defence of fundamental human rights.

AS/HIST 3600 6.0 Native Peoples and European Colonization in North America to 1783. Focusing first on pre-contact Native American societies and their displacement from ancestral lands, this course will then examine the evolution of European societies north of the Rio Grande, namely New Spain, British North America, New France and the Caribbean.

AS/HIST 3610 6.0 Nineteenth Century United States Social History. America's transition from an agricultural to a predominantly industrial society is viewed through the lives of ordinary people, using biographies and group studies.

AS/HIST 3611 6.0 The Constitution and the New Nation, 1783-1824. The making of the new American state and society in the after math of the Revolution. The interplay of politics, economics, social structure, and ideas; western expansion and relations with other countries.

AS/HIST 3620 6.0 History of Sexuality in the United States. This course explores the history of sexual attitudes, desires, behaviours, identities, communities, and movements. Among the topics covered are reproduction, birth control, and abortion;
prostitution and commercialized sex; sexuallytransmitted diseases; interethnic sexualities; and same-sex and cross-sex sexualities.

AS/HIST 3621 6.0 America in the Nineteenth Century: Jackson, the Civil War and Reconstruction. American politics and society from 1820 to 1876. The emergence of democratic politics under Jackson, the causes and consequences of the Civil War, the modernization of American society.

AS/HIST 36306.0 Interpretations of United States History since 1870. A historical approach to the U.S. social system and experience, covering such topics as the nature of the economy, the character of social classes and their political manifestations, the relationship of the economy and power, and the nature of U.S. relations with the world.

AS/HIST 3640 6.0 The United States: Emergence of a Modern Society, 1865-1950. The changing structure of American society from the Civil War to 1940. Economic maturity and overseas expansion. The mutual influence of changes in social structure, intellectual life, politics, and the economy.

AS/HIST 3660 3.0 U.S. Economic and Business History to 1880 . The inception, rise, development and maturing of the U.S. economy and the changing nature of business organization. Connections with political and social change are also emphasized.

AS/HIST 3670 3.0 U.S. Business History since 1880: The Origins and Consequences of Managerial Capitalism. The inception, rise, development, maturing and present state of the U.S. economy and the changing nature of business organization. Connections with political and social change are also emphasized.

AS/HIST 3690 6.0 United States Foreign Policy Since 1890. The major diplomatic policies and events, sources of policy and the goals the U.S. has sought to attain, with special emphasis on U.S. relations with the Third World and its participation in major wars.

AS/HIST 37106.0 Ideology, Politics and Revolution in the Caribbean. The economic, social, and cultural roots of political change in the Caribbean from the Haitian revolution of 1791 to the Cuban revolution of 1959. Particular emphasis is placed on the development of ideologies in Haiti, Cuba, Jamaica, and Trinidad.

AS/HIST 3720 6.0 Modern Latin America.
An introduction to the history of post-colonial Latin America from the early nineteenth century to the present, with attention to economic, social, political, and ideological developments.

AS/HIST 3730 6.0 Mexican History from the Aztecs to the Mexican Revolution (13251911). The course deals with the processes of imperial expansion and collapse in the indigenous, Spanish and Mexican eras, within a context of increasing globalization.

AS/HIST 3750 6.0 Modern Africa. The history of the African continent from 1800 to the present, concentrating on such major themes as political and economic change in pre-colonial African states, the impact of colonial rule, and the emergence of modern nationalism.

AS/HIST 3760 6.0 Modern Japan. Japan from her unification as a nation in 1600, through the era of seclusion to 1868 , and the drive for empire that ended in 1945, to recovery from defeat and evolution as a leading world economic power today.

AS/HIST 3770 6.0 Modern China. The process by which modern China emerged from the ruins of the traditional order, tracing the history of China from the early nineteenth century to the present.

AS/HIST 3775 3.0 The History of Hong Kong. The economic, political, social, and cultural development of the city state of Hong Kong and its environs, within the context of Chinese and British imperial history, from its 19th-century foundations to the present.

AS/HIST 3780 6.0 Asian Crossroads: Southeast Asia Since the 17th Century. Southeast Asia (Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam) has been a crossroad for trade and cultural interchange for centuries. The course traces the economic, political, social and cultural development of the region from 1600 to the present.
Cross-listed to: AK/HIST 3109B 6.0.
AS/HIST 3785 6.0 Science, Technology and Society in Chinese History. This course examines the development of science and technology in China from the Classical period to the 20th century, in the context of the economic, social, political and intellectual history of China and Eastern Asia.
Cross-listed to: AS/SOSC 3785 6.0.
AS/HIST 3790 6.0 The Islamic World. A survey of the history of Islamic societies from the seventh century to the present. Topics covered include the nature of Islamic civilization, the diversity of Islamic traditions, social and economic transformations, the impact of westernization and the struggle for independence.

AS/HIST 3809 6.0 History of the Christian Church: Beginnings to the Reformation. Stages of the developing Christian church from its origins in apostolic times to the late Middle Ages. Topics include personalities, institutional structure, leadership and rules, thought, education, liturgical and spiritual life, pastoral care, and the church in the secular world.

## Cross-listed to: AS/HUMA 3780 6.0.

AS/HIST 3810 6.0 History of the Christian Church: Reformation to the Present. The organizations and associations developed by the Christian community, and the precepts by which the churches have governed their members and justified their own validity since the Reformation.

[^0]AS/HIST 3820 3.0 Welfare States in Comparative Perspective. This course takes a comparative approach toward the formation, theories and administration of welfare states in Europe and North America. Special attention is also paid to recent research on women's role in the creation of western welfare states and to the gendered nature of social policy.

AS/HIST 3840 3.0 Canadian-American Relations in the Twentieth Century. The relations of Canada and the United States in the twentieth century, with special attention to the impact of war and cold war and to economic and political questions.

AS/HIST 3860 6.0 Modern History of the Jews. A survey of Jewish history from the breakdown of traditional society in the eighteenth century until the present. The focus is on the Jews of Europe and the major offshoots of Jewish Europe, Israel and North America.

AS/HIST 3870 6.0 The Historical Development of Technology Since 1800 and Its Impact. Technology's development and its interactions with North Atlantic society since the Industrial Revolution, including innovation processes, idea transfer, statistics and "precision," transportation and communication improvements, urbanization, mass production/consumption, and the computer. Interwoven themes: differential acceptance of innovation, technological "forecasting."

AS/HIST 3880 6.0 Medicine and North American Society in Historical Perspective. Explores North American social and cultural responses to disease. It offers a critical, historical evaluation of the ways in which science accorded medicine a new intellectual and institutional status that transformed explanations for disease and patterns of healing/caregiving.
Cross-listed to: AS/SOSC 3030 6.0.
AS/HIST 3890 6.0 Reading Landscapes Through Time. The course focuses upon the analysis of changing geographic landscapes with particular reference to the United Kingdom, the United States, and, to a lesser extent, Canada, in order to draw some general conclusions about processes responsible for landscape change.
Cross-listed to: AS/GEOG 3080 6.0.
Degree credit exc/usions: AS/GEOG 3080 3.0, AS/HIST 3890 3.0.

AS/HIST 3930 6.0 Special Topics in History. From time to time lecture courses or colloquia may be offered on a single-year basis. See the supplementary calendar for details.

## IV. AS/HIST 4000 3.0/4000 6.0 Honours Essay

Note: Open only to honours candidates in History after the completion of 84 credits and with the permission of the Department. Candidates should confer with the Chair
before the end of the preceding academic session.

## V. Honours Seminars

Note: These seminars enable small groups of Honours students to concentrate on the close investigation of specific historical problems. These courses usually meet as two-hour weekly sessions. Open to honours students in History after the completion of 48 credits and to others only with the permission of the department. Admission to any seminar requires written permission of the instructor. Because these courses are offered in rotation, not all are available in any given academic session. Consult each year's supplementary calendar for more detailed descriptions of the seminars then offered.

AS/HIST 4030 6.0 The Philosophical Implications of Historical Narrative. A
reading of such authors as Hegel and Kierkegaard to determine the ontological dimensions of historical narration.

AS/HIST 4050 6.0 Colloquia in History. The course provides an advanced-level study of the critical issues of a clearly defined problem or theme in a chosen period of history. Each year several sections of this course may be offered on a variety of topics. For details, see the Department's annual Supplemental Calendar.

AS/HIST 4100 6.0 Selected Problems in Israelite History. Problems in the determination of the international relations of the Israelite states in the Iron Age. Sources, written and unwritten, from Israel, Assyria, Babylonia, Egypt, and Israel's smaller neighbours are examined in the course of these investigations.

AS/HIST 4120 6.0 Problems in the History of Ancient Greece. Selected topics in one or more areas of concentration in the history of ancient Greece.

AS/HIST 4130 6.0 Problems in Roman History. Selected topics in one or more areas of concentration in the history of ancient Rome.

AS/HIST 4140 6.0 Problems in Hellenistic History. Selected topics in one or more areas of concentration in the history of the Mediterranean world of Alexander the Great and his successors.

AS/HIST 4150 6.0 Topics in Ancient Social History. The course examines in a seminar format a topic in comparative Ancient Social History. In any given year one or more courses may be offered under this rubric. A full description of each appears in the Department of History's Mini-Calendar.

AS/HIST 4200 6.0 Culture and Society in Medieval Europe. Relationships between important works of medieval literature and the society that produced them.

AS/HIST 42206.0 Iconological Methods for Medieval Study. Visual imagery in the Middle Ages was self-consciously conceived as a language, in a semiotic frame of meaning with
cultural references and for social purposes. This seminar teaches iconological methods of historical analysis which enable scholars to read the "language of the visual"; it concludes with a methodological critique of the historiography of Iconology
Cross-listed to: AS/HUMA 47356.0 and FA/ VISA 4930 6.0.

AS/HIST 4240 6.0 Human Economy and Natural Environment in Preindustrial Europe. Interactions between Europeans and their environment in the context of economic development and daily life from late classical antiquity to the 1700 s. Topics may include attitudes toward nature, human disease, agricultural and pastoral ecosystems, energy use, woodlands, and aquatic resources.

AS/HIST 4250 6.0 Mediterranean Societies $\mathbf{1 5 0 0}-1620$. A study of the structure of society which looks to trial transcripts, to social history, and to the modern anthropology of that inland sea to explore patterns of belief, of values, and of public and private behaviour.

AS/HIST 4260 6.0 Topics in Early Modern European Social and Cultural History. This course examines in seminar format topics in early modern European social and cultural history. In any given year one or more courses may be offered under this rubric. A full description of each will appear in the Department of History's Mini-Calendar.

AS/HIST 4310 6.0 The French Revolution. A close study and review of the Revolution, in the light of the fresh questions raised in recent books and articles.

AS/HIST 4320 6.0 Topics in French History. Analysis of the interaction of social structure and change, ideas and ideology, and state policy over three centuries in the leading power of continental Europe.

AS/HIST 4330 6.0 Selected Issues in the History of Modern Germany. An
examination of major themes in nineteenth and twentieth century German history. Emphasis is placed on conflicting interpretations and methodological differences.

AS/HIST 4350 6.0 European Thought in Crisis: The Shape of European Thought in the Early Twentieth Century. The transformation of basic assumptions in several intellectual and aesthetic disciplines in European thought from 1870 through World War I.

AS/HIST 4360 6.0 Europe Between the Wars, 1918-1939. Problems such as political ideologies, militarism, economic instability, youth movements, and class roles in modernization, studied comparatively across frontiers wherever possible.

AS/HIST 4370 6.0 East European Nationalism and Independence. The development of national consciousness, historical awareness, national literature and the continuing struggle for independent identity in ethnic groups within east European empires from the tenth century to the present.

AS/HIST 4380 6.0 Selected Problems in Modern Russia. Issues which may be discussed include developments since 1861 leading to the revolutions of 1917 and their results.

AS/HIST 4410 6.0 Science and Religion in Victorian England. An examination of scientific and religious ideas in Victorian England, with emphasis on Darwin.

AS/HIST 4420 6.0 Great Britain in the Twentieth Century. An examination of selected themes in British history during the twentieth century.
Degree credit exclusion: AS/HIST 44206.0 taken previously.
AS/HIST 4440 6.0 Land and Power in Early Modern England. Agrarian England in the seventeenth and eighteenth centuries with emphasis on the structure of rural society, the relationship between landholding and political power, and the links between agricultural and industrial change.

AS/HIST 4450 6.0 Themes in EighteenthCentury British Social History. Social change and state policy in a maturing capitalist order dominated by a landowning aristocracy.

AS/HIST 4510 6.0 Social Reform Movements in Nineteenth Century Canadian History. The analysis of reform activity, particularly in Ontario, stressing penology, mental health, public charity, and public welfare.

AS/HIST 4511 6.0 Twentieth-Century Canadian Social History. This course examines the changing social life of Canadians from the turn of the century to the 1950s. Themes addressed include economy, family, work, ethnicity, education, and popular culture.

AS/HIST 4515 3.0 The Exploration and Mapping of Canada to 1820. Exploration and mapping are inseparable; the former is the purposeful seeking, and the latter is the proof, of geographical discovery. The course traces the gradual exploration of Canada and its graphical portrayal from John Cabot (1497) until the early nineteenth century, when the country's outline became largely known.
Cross-listed to: AS/GEOG 4050 6.0.
AS/HIST 4520 6.0 The Persistence of Nationalism in Quebec. A study of nationalism in Quebec from Louis-Joseph Papineau to René Lévesque, with particular emphasis on the ideas and politics of the period. A reading knowledge of French is desirable.

AS/HIST 4530 6.0 The Development of Toronto. Toronto from its earliest beginnings to recent times: population increase, social change, economic development, metropolitan dominance, religion, and political life of the city.

AS/HIST 4540 6.0 Selected Topics in Western Canadian History. Examines themes in the economic, political and social history of the Canadian West, 1850-1970.

Themes include the roots of western regionalism; women, work and family on the Western Canadian "frontier;" and the evolution of Western social institutions.

AS/HIST 4550 6.0 Ontario in the Twentieth Century. The Making of a Study Modern Society. A study of the Ontario community and the influences, social, political, and economic, which shaped its growth in the postConfederation years.

AS/HIST 4560 6.0 Canadian Political Parties. The evolution and structure of political parties in Canada since Confederation, and of the social and economic forces which shaped their development.

AS/HIST 4570 6.0 Canada in War and Peace, 1911-1951. The way Canadian political parties and institutions responded to the problems posed by the Great War, the inter-war causes and course of the Depression in the various regions of Canada; its economic and social impact; and the political response - parties and policies - at the national and provincial levels.

AS/HIST 4580 6.0 The Uses of the Past: Public Memory and Popular Culture in Canada. This research seminar explores the ways in which history has been used to develop national consciousness, group identities and commercial opportunities in Canada, and how over time both the substance and the construction of public memory have changed.

AS/HIST 4610 6.0 Political Power in American Society. Examines, in terms of modern political theory, the shifting distribution of political power between the colonial period and the late nineteenth century.

AS/HIST 4620 6.0 Comparative Political Movements in 20th Century U.S. History. This course conducts comparative analyses of major political movements that have transformed the United States in the 20th century. The focus is on African American, women's, lesbian/gay, and conservative movements.

AS/HIST 4640 6.0 Organizing the United States for War. How the United States has organized for war in the twentieth century, focusing on the two world wars, Korea and Vietnam.

AS/HIST 4660 6.0 The American Revolution: Origins and Aftermath.
Origins of the American Revolution, the period of Confederation, and the adoption of the Constitution.

AS/HIST 4670 6.0 The American Novel as an Historical Document. Examines a series of literary works and emphasizes the ways in which they reflect the changing nature of United States society.

AS/HIST 4680 6.0 History of Communication in the United States. The mutual interactions of an expanding system of communication since c. 1750 with economic, social and political developments. Roads and
canals, railroads, telegraph, newspapers, radio, movies, the automobile and airplane, computers and satellites.

AS/HIST 4690 6.0 Race and Politics in America Since World War II. This course examines the different forms of black political action in the United States since World War II and assesses the effectiveness of each in reducing racial discrimination and poverty.

AS/HIST 4700 6.0 The Partition of Africa. The European occupation of Africa, with special emphasis on African responses to European expansion and to the establishment of colonial rule.

AS/HIST 4710 6.0 The Last Years of Slavery. Slavery, plantation life, and the struggle for freedom in the British West Indies, 1770-1865.

AS/HIST 4720 6.0 Post-Emancipation Societies in the Americas. Compares the economic, social, political, and cultural problems encountered by the black and coloured ex-slaves of the Caribbean, the American South, and Brazil from the 1830s to the 1920s.

AS/HIST 4740 6.0 Chinese Rural Society. The transformation of Chinese rural society in the nineteenth and twentieth centuries.

AS/HIST 4750 6.0 Backwardness and Revolution in Latin America. Problems of underdevelopment and revolution in Latin America with emphasis on specific revolutions, such as those of Cuba and Chile, and selected topics related to underdevelopment, such as the role of multinational corporations and the problems of marginalism.
Cross-listed to: AK/HIST 4109A 6.0.
AS/HIST 4760 6.0 War and Peace in East Asia: The Second World War. The experience of the Second World War and its aftermath in China, Japan and the larger Pacific region, including the rise of Communism in China and the transformation of Japan during and after the American occupation.

AS/HIST 4770 6.0 The African Urban Past. This course examines Africa's urban past. It first concentrates on precolonial cities as centres of political organization, religious learning, regional and long-distance trade and, thereafter, on urban health, crime, women, crowds, squatters, workers, and political movements during the colonial and post-independence eras.

AS/HIST 4800 6.0 The Science of Society: Social Thought in North America, 1890-1940. An interdisciplinary analysis of the intellectual, cultural and social contexts which contributed to the rise of the social sciences and the reorganization of the liberal arts in North America during the period 1890-1940.
Cross-listed to: AS/HUMA 4220 6.0.
AS/HIST 4810 6.0 Minds and Matters in Victorian Culture. Through a reading of the contemporary scientific literature on materialism, the mind and the economy, this course examines

Victorian debates on science and its application to pressing moral and social problems.
Cross-listed to: AS/HUMA 4225B 6.0.
AS/HIST 4900 3.0/4900 6.0 University of Toronto Seminars.

Note: Open to Honours students with the permission of both departments.
Students should consult the supplementary calendar for the seminars being offered by the Department of History at the University of Toronto this year.

## AS/HIST 4900 6.0 University of Toronto Seminars.

Note: Open to Honours students with the permission of both departments.
Students should consult the supplementary calendar for the seminars being offered by the Department of History at the University of Toronto this year.

AS/HIST 4930 6.0 Special Seminar in History. From time to time special seminars may be offered. See the supplementary calendar for details.

AS/HIST 4990 3.0 Supervised Reading and Research. This course is intended to enable students of exceptional ability to pursue individual fields of interest not otherwise provided for by the regular curriculum.

AS/HIST 4990 6.0 Supervised Reading and Research. This course is intended to enable students of exceptional ability to pursue individual fields of interest not otherwise provided for by the regular curriculum.
Note: Open to History majors after completion of 84 credits with the permission of the Chair and with the agreement of a member of the department who will act as supervisor. Students are advised to familiarize themselves as soon as possible with the departmental regulations governing AS/HIST 4990 6.0. Please consult the Enrolment and Registration section, Faculty of Arts, for regulations on independent reading courses.

## Humanities - Arts

## Division Office:

203 Vanier College, (416) 736-5158
Associate Professor and Chair of the Division:
D. Freake

Professors:
G. Butler, S. Eisen, E. Faas, M. Fichman, A. Haberman, B. Lightman, H. Parry, L.B. Polka, S. Mason, W.J. Whitla

## Associate Professors:

R. Adolph, G. Argyle, R. Arthur, R.S. Beckwith, M.G. Brown, C. HendersonCarpenter, R. Chace, T.V. Cohen, D. Cooper-Clark, M. Corrigan, C.A. Dent, G. Echard, J. Edmondson, M. Gerwurtz, T. Goossen, M. Kadar, S. Katz, N.M. Lary, M. Lockshin, P.M. Mitchell, E. Newton, J. Paper, J. Priestley, F.M. Quealey, J. Rehner, N. Rowen, R. Schattner,
R.S. Schneider, J. Scott, M. Shore, A. Shteir, J.C. Stephens, J. Stuckey, S. Swan, P.R. Swarney, S. Tanenzapf, P. Taylor, D. Trotman, S. Warwick, M.J. Webber, W.E. Westfall, B. Zelechow, F.D. Zingrone

## Assistant Professors:

K. Anderson, A. Buturovic, M. Clark, E. Cohen, C. Ehrlich, T. Hyun, D. Orr, A. Pomson, E. Ramsay, J. Rives, J. Steigerwald, R. Teleky, N. Traill, R. Walcott
"Nothing human is alien to me."(Terence)
Traditionally, the "humanities" include such fields as literature, philosophy, history, art, architecture, music and religion, and it is characteristic of courses offered in the Division of Humanities that they embrace more than one of these fields or disciplines. In short, the Division of Humanities provides a space for interdisciplinary studies in the area of humanities.
Further, it is characteristic of courses in the Division of Humanities that they pay special attention to what is unique, particular, and unpredictable in human experience. They are concerned with all aspects of human creativity and thus with cultural expressions of a wide range. Finally, while questions of "value" are deliberately (and appropriately) set aside in most scientific investigations, questions of "value" - aesthetic, moral, religious or social are focal in a Humanities course. In other words, it is part of the concern of courses in the humanities to identify the values implicit in a particular society, a piece of literature, a social theory or a work of art.
Not all courses are necessarily offered in all years. For information about specific offerings students should consult the supplemental calendar available from 203 Vanier College.
Note: for specific requirements of programmes offered by this Division, please consult the Programmes of Study section, Faculty of Arts.

## Courses in Humanities

The following Humanities courses may count towards a Major/Minor degree in Humanities and may also satisfy Faculty of Arts General Education Requirements. The exceptions are Creative Writing courses AS/HUMA 3640 6.0, AS/HUMA 3645 6.0, AS/HUMA 4630 6.0, and AS/HUMA 4640 6.0. Enrolment in 3000 -level Humanities courses may require the fulfillment of one of the following requirements: a previous Humanities course or permission of the instructor. 3000-level Humanities courses with either of these prerequisite requirements will be clearly identified in the Divisional Supplemental Calendar. Failure to satisfy the listed prerequisite requirement will result in de-enrolment from the course.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## 1000-Level Courses

Selected 1000- and 2000-level courses offered through the Division of Humanities are a part of the Faculty of Arts Foundations programme. These courses have a 9 credit value and are affiliated with one of the Arts Colleges. As a part of the General Education requirement of the Faculty of Arts, these courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level.

## Western Culture

AS/HUMA 1100 9.0 Worlds of Ancient Greece and Rome. A study of the classical world with a view to understanding the origin and evolution of some of the literary, philosophical, and political ideals of ancient Greece and Rome. Materials for this study will be drawn from Greek and Roman literature in translation, with illustration from the plastic arts. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1100 6.0.
AS/HUMA 1105 9.0 Myth and Imagination In Greece and Rome. An introduction to ancient and modern myths and theories about myths and mythology in comparative perspectives and their influences on modern literature and art. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 1105 6.0.
AS/HUMA 1110 9.0 Greek and Biblical Traditions. The stories, symbols, and myths of Greek and Biblical literature have provided the basic images for Western society's interpretation of itself and its experience. An examination of Greek and Biblical traditions which inform personal and community life today. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1110 6.0.

## AS/HUMA 1120 9.0 Medieval Civilization.

 An investigation of the culture of medieval western Europe, tracing its values, aesthetics, and habits of perception. Plastic arts and architecture, epic, romantic and lyric prose and poetry, theology, and historical documents illustrate forms of thought and expression. (This course is affiliated with Vanier College.)Degree credit exclusion: AS/HUMA 1120 6.0.
AS/HUMA 1130 9.0 The Renaissance. The course explores the European Renaissance as a form of civilization. It treats literature, music, philosophy, religion, political theory, and the plastic arts, and seeks to make clear the ideas, values, and habits of mind which gave unity to an epoch in Western history. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1130 6.0.
AS/HUMA 1150 6.0 The Enlightenment. An interdisciplinary study of early modern civilization stressing the changes in the nature of society and values. Themes explored include the belief in magic and witchcraft versus reason and science; the search for
order in government, art and architecture; and changing concepts of childhood, the family, women and education.

AS/HUMA 1170 6.0 The Modern Age. The modern writer's and artist's search for new modes of expression (1850-1975), and the relevance to this search of modern philosophy, psychology, and scientific theory.

AS/HUMA 1180 6.0 The Modern Mind. Selected issues fundamental to the modern world the problem of knowledge, ideas of aesthetics, the nature of scientific investigation, religious values, and ideals of the good society are examined.

## The Culture of the Americas

AS/HUMA 1200 9.0 Contexts of Canadian Culture. Topics illustrating the ways in which culture in Canada resembles and is different from other cultures. The emphasis is on the twentieth century. Materials to be used include fiction, poetry, folklore, the visual arts, and various social and historical studies. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 1205 6.0, AS/HUMA 1200 6.0.

AS/HUMA 1205 6.0 Exploring Canadian Culture. This course emphasizes important theoretical approaches; Marxist, feminist, semiotic, for example, to the analysis of culture, with Canadian texts of many different kinds being examined for insights into the Canadian experience and how it has been understood.
Degree credit exclusion: AS/HUMA 12009.0 and AS/HUMA 1200 6.0.

AS/HUMA 1210 3.0 Exploring Canadian Culture: Beginnings to the First World War. This course establishes the ideological, economic, and political roots of the founding nations: aboriginal, French, and English, and the various other immigrant streams added later to this mix. This course will end with World War I, and the concurrent global shift in power away from the British Empire.
Degree credit exclusion: AS/HUMA 1205 6.0.
AS/HUMA 1211 3.0 Exploring Canadian Culture: The First World War to the Present. This course examines the resulting from population amalgamations (the FrenchCanadian "question" and native land claims); Canada's emergence in a specific mid-Atlantic form, the replacement of traditional religious orientations with the values of commerce, the rise of women's equality, multiculturalism and globalization.
Degree credit exclusion: AS/HUMA 1205 6.0.
AS/HUMA 1220 9.0 Introduction to Canadian Language and Culture. This course develops the linguistic/academic skills of students from ESL backgrounds, using themes such as language and Communication, Culture and Identity, the Immigrant/Refugee Experience, and Multiculturalism. A variety of course activities
develop course themes and language proficiency. (This course is affiliated with Stong College.)
Degree credit exclusions: AS/HUMA 12206.0 and AS/ESL 1000 6.0.
Cross-listed to: AS/ESL 1000 9.0.
Note: This course is normally open only to students in their first academic session.

AS/HUMA 1300 9.0 The Cultures of Resistance in the Americas: The African American Experience. This course examines oppression and the ways in which Afro-American, Amerindian, and racially-mixed communities in the Caribbean, Latin America, Canada, and the United States use cultural patterns - the oral tradition, religion and ethics - both to comment on that oppression and to express alternatives. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 1300 6.0.
AS/HUMA 1320 6.0 Images of America. An exploration of values, ideas, and myths central to the dual experience of the United States as both actual society and western ideal. Literature, art, and social and political commentary are used to study significant themes: Puritanism, the frontier, authority and dissent, ethnicity, and race.

## Non-Western Cultures

AS/HUMA 1400 9.0 Culture and Society in East Asia. Introduction to traditional East Asian civilization by examining daily life in eighteenthcentury Peking and Edo (Tokyo), and their rural hinterland. Topics include the physical setting, social distinctions and occupations, arts, and crafts, religion, literature, and entertainment. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 1400 6.0.

## Studies in Themes and Values

AS/HUMA 1500 6.0 Special Topics in Themes and Values. In any given year other courses may be offered in this area. Information concerning these is available at the divisional office.

AS/HUMA 1610 9.0 The Art of Writing. A
course on the nature and evolution of European, British and American writing through the modern period. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1610 6.0.
AS/HUMA 1620 9.0 Archetypal Themes in Literature. An interdisciplinary examination of those recurring patterns, narrative structures and images in Western culture which have the power to express (symbolize) our quest for meaning and values. Readings are selected from a broad range of cultures and eras in order to focus upon the dynamic persistence of these motifs and the variety of works in which they occur. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 1620 6.0.
AS/HUMA 1630 9.0 Forms of Fantasy. This course explores the development of fantasy in the Western imagination through a variety of interdisciplinary materials, with special
emphasis given to the links between fantasy and culture, politics, marginality, and the articulation of unconscious desires. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 1630 6.0.
AS/HUMA 1650 9.0 The Networked Imagination. This course explores the technological determinants operating today on almost all cultural forms. The main theme of this course is how the nature of digital representation and communication affects the nature of literature, visual arts and music, altering not only the forms and content, but the roles of artist/author and their audiences. (This course is affiliated with Calumet College.)

AS/HUMA 1810 6.0 Good and Evil.
A
critical examination of significant ethical and religious themes in Western philosophy and literature from classical antiquity to the present. Special attention is given to the historical causes of and intellectual reasons for the current mood of ethical and religious scepticism.

AS/HUMA 1820 6.0 Ideology and Morality. What is moral action? How can conflicts between moral and political duties be resolved? When must people resist the state? The ways in which ideology shapes and distorts the perception of these questions receives special consideration.

AS/HUMA 1830 6.0 Irrationality. An attempt to explore various aspects of the irrational life, through a consideration of works which, in dealing with irrationality, throw light on questions of human values.

AS/HUMA 1840 9.0 Existence, Freedom, and Meaning: The Idea of Human in European Thought. Major works of literature, philosophy, religion, and science since the Renaissance are read and discussed in a search for the distinctively human. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1840 6.0.
AS/HUMA 1850 6.0 The Bible and Modern Knowledge. This course explores the relationships between the Bible and modern conceptions of knowledge. We illuminate some aspects of the close connections between biblical values and the basic premises of modern knowledge by analyzing various books of the Bible and some modern commentary on the nature of knowledge.

AS/HUMA 1905 9.0 Dangerous Visions, Brave New Worlds: The Science Fiction Culture and Our Scientific Age. This course explores how the medium of science fiction has given cultural expression to changing attitudes towards modern science and technology. Topics include science fiction and the computer, relativity and quantum theory, religious belief, genetics and potential apocalypses. (This course is affiliated with Bethune College.)

AS/HUMA 1910 9.0 Science and the Humanities: Nature and Human Nature. This course investigates how scientific thinking about the place of human beings in nature involves humanistic thinking about the place of nature in being human. (This course is affiliated with Norman Bethune College.)
Degree credit exclusion: AS/HUMA 1910 6.0.
AS/HUMA 1915 9.0 Animals and the Literary Imagination. From antiquity to the present, the animal world has been strongly reflected in Western literature. The course presents a cross-cultural examination of the depiction of animals in Western literature and culture (especially the English, North American, German, and Russian traditions). (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 1500C 6.0.
AS/HUMA 1920 6.0 Communications. This course seeks to develop an understanding of the informational organization of our environment and of the essential difference between the product and the process of communication. We shall use materials drawn from the study of language, media, information theory, the philosophy and history of science and technology, interpersonal communication, cybernetics, general system theory.

AS/HUMA 1950 9.0 Concepts of "Male" and "Female" in the West. An examination of the origins of, and the interrelationships among, gender, male and female concepts and roles through myth, literature, art, and artifacts from various Western cultures, past and present. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/HUMA 1950 6.0.
AS/HUMA 1960 9.0 Women, the Family, and Children in Europe, 1150-1800. This course examines ideas about, and practical realities concerning, women, the family, and children in Europe, 1150-1800. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 1960 6.0.
AS/HUMA 1970 9.0 Worlds of Childhood. An exploration of childhood as an aspect of human experience represented in many forms in various cultures over time. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 2215 6.0.

## 2000-Level Courses

## Studies of Culture

AS/HUMA 2000 6.0 Special Topics in Studies of Culture. In any given year other courses may be offered in this area. Information concerning these is available at the divisional office.

AS/HUMA 2100 6.0 The World of Ancient Greeks. A study of the culture of ancient Greece at various high points in its development. Areas of human artistic endeavour to be explored include sculpture, painting, architecture, and literature.

AS/HUMA 2105 6.0 Roman Literature and Culture. An introduction to Roman literature and culture, c. 200 B.C. to A.D. 200. Emphasis is placed on the literature, art and architecture of the Romans and on the impact of Roman culture on those peoples under Roman rule.

AS/HUMA 2110 9.0 Egypt in the Greek and Roman Mediterranean. An examination of Egypt and Egyptians in the imagination and History of the cultures of the Greek and Roman Mediterranean. (This course is affiliated with Vanier College.)

AS/HUMA 2120 6.0 Epic and Romance in Medieval Society. A close study of representative medieval European epics, sagas and adventure romances and the manner in which they embody, transmit, and revise the social and cultural norms of the society in which they were produced.

AS/HUMA 2130 6.0 Themes in Renaissance Humanism. This course examines a theme of particular richness in the Renaissance, focusing mainly on works of a literary and philosophical nature. Classical and medieval influences are explored. Attention may be paid to Renaissance painting, sculpture and architecture.

AS/HUMA 2140 6.0 Renaissance and Baroque Art and Architect. This course examines the art of Northern and Southern Europe from the early fifteenth century to the mid-eighteenth century.
Cross-listed to: FA/VISA 2560 6.0.
AS/HUMA 2150 6.0 Sense and Sensibility in the 18 th Century. A study of eighteenthcentury culture which stresses the values of Enlightenment Civilization and the transition to Romantic Thought. Themes to be examined include the nature of humanity, of society and of morality, the idea of progress, concepts of education, women, and the idea of the family. Emphasis is placed on contemporary works such as novels, treatises, paintings and music.

AS/HUMA 2160 9.0 Romanticism. A study of Romanticism with an emphasis on its values as expressed in the arts, chiefly in the Romantic era, through historical, literary, musical, and philosophical texts and works from the visual arts. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 2160 6.0.
AS/HUMA 2170 6.0 Modern Art: 1750 to the
Present. A comprehensive survey of major artists and monuments from ca. 1780 to ca. 1945 with special emphasis on European painting and sculpture.
Cross-listed to: FA/VISA 2620 6.0.
AS/HUMA 2180 6.0 The End of an Era and the Beginning of Modernism, 1870-1914. The course deals with the relationship between social change and the transition to Modernism in literature and the arts from 1870 to 1914.

AS/HUMA 2190 9.0 Germany Through the Ages: Culture and Society. This course introduces students to the culture of Germany and the German-speaking countries from a North American perspective. The course takes an intercultural and interdisciplinary approach to key aspects of the literary, artistic, political, and social history of these countries. (This course is affiliated with Calumet College.)
Degree credit exclusion: AS/HUMA 2190 6.0.
AS/HUMA 2210 6.0 Folk and Popular Culture. An exploration of the role of folklore as a mirror and moulder of identity, particularly national identity. Relationships between folk and popular culture are considered historically and cross-culturally to develop a better understanding of the dynamics of culture.

AS/HUMA 2310 9.0 An Introduction to Caribbean Studies. An introduction to the major cultural characteristics of the contemporary Caribbean through an examination of the outstanding writers, artists and scholars of the region. The course is panCaribbean in perspective and the material is thematically arranged and includes scholarly and literary works, films and music. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 2310 6.0.
AS/HUMA 2320 9.0 Ideas of America: The Cultures of North America. This course undertakes a study of major artistic, historical, philosophical and/or political texts by and about North Americans. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 2320 6.0.
AS/HUMA 2410 6.0 Chinese Art, Poetry and Religion. Introduction to aspects of the culture and religion of China, emphasizing the influence of Taoism and Ch'an Buddhism on the lifestyles of the elite and on aesthetics as reflected in poetry, landscape painting, ceramics, music and garden architecture.

AS/HUMA 2420 9.0 Introduction to Korean Culture. This course offers an introduction to the study of Korean culture through a historical survey of literary, social, religious and political trends from ancient times to the present. (This course is affiliated with Founders College.)

## Studies of Themes and Values

AS/HUMA 2500 6.0 Special Topics in Studies of Themes and Values. In any given year other courses may be offered in this area. Information concerning these is available at the divisional office.

AS/HUMA 2610 6.0 Perspectives on Literature. An exploration of the relationship between literature and other humanistic disciplines such as philosophy, history, psychology, politics, visual arts. Insights and methods of these approaches in conjunction with selected cross-cultural literary works will be studied.

AS/HUMA 2640 9.0 Modes of Fantasy. An examination of the various forms, themes and functions of fantasy, this course includes
consideration of speculative fiction, utopian literature, children's literature, social and psychological studies, folklore and mythology, and the visual arts. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 2640 6.0.
AS/HUMA 2670 9.0 Film and Literature. The nature of film is explored through detailed comparison with fiction and drama. The different possibilities of drama, narrative, and language in film and in literature are emphasized. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/HUMA 26706.0 and FA/FILM 2711 6.0.

AS/HUMA 2680 9.0 Early Times: Literature and the Imagination of the Child. The course is centered, in the reading and discussion of literature written for, appropriated by, or in a particular sense related to children. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 3650 6.0.
AS/HUMA 2730 6.0 The Artist in the Modern World. The course explores the assumptions, conditions and institutions that determine the creation of art and the life of the artist in the modern world through an examination of the artists' own works and their self-reflections on them.

AS/HUMA 2740 6.0 Film, Television and Society. This course examines the interrelationship between film and television and the societies in which they are produced and consumed with attention to the social relations and ideological and political characteristics of contemporary societies and with an introduction to contemporary criticism which has analyzed these media.
Cross-listed to: FA/FILM 2401 6.0.
AS/HUMA 2761 9.0 A Italian Cinema and Society: From Neorealism to Postmodernism, 1945 to the Present. The course focuses on twelve of the most significant films since World War II in the context of the radical changes that have taken place in Italy from the fall of Fascism to the present, and as critical statements on the phenomena connected with the rapid transformation of Italian society: industrialization and the "economic miracle", urbanization, the crisis of traditional values, and postmodern fragmentation. (This course is affiliated with Founders College.)
Cross-listed to: AS/IT 2761 9.0.
AS/HUMA 2800 9.0 Introduction to the Study of Religion. This course places the classic expressions of religion in their social and cultural contexts. It employs different humanistic and social science disciplinary tools and deals with important methodological questions in the study of religion. (This course is affiliated with Vanier College.)
Degree credit exclusions: AS/HUMA 28006.0 and AS/SOSC 2600 6.0.

AS/HUMA 2810 6.0 The Hebrew Bible. An introduction to scholarly treatment of the Hebrew Bible (Old Testament) in translation. Students deal with the text in the context of issues in the history of religion and the history of ideas. The relationship of biblical text to its environment is a focus of attention.

AS/HUMA 2815 9.0 Islamic Tradition. The course examines the beliefs, rituals, doctrines and teachings that have constituted the Islamic tradition from its inception until the present.

AS/HUMA 2830 9.0 The Founders of Christianity. An introduction to the literature and history of the early Christian communities in Palestine, Syria, Asia Minor, Greece, and Rome. The varieties of early Christian thought and practice are examined in terms of their religious, cultural, and political contexts. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 2830 6.0.
AS/HUMA 2840 6.0 Perspectives on Contemporary Moral Issues. Contemporary moral problems are explored with reference to religious and secular concepts and images of what is genuinely human. Using imaginative literature as well as theoretical analyses, this course examines specific issues of personal and social morality.

AS/HUMA 2850 9.0 The Jewish Experience: Symbiosis and Rejection. Jewish-Gentile relationships through the ages as an exercise in acculturation. The course will consider Hellenistic, medieval, and modern periods, with special emphasis on modern Europe and Israel. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/HUMA 2850 6.0.
AS/HUMA 2900 9.0 Introduction to Creative Writing. This course is an introduction to the writing of poetry and prose fiction. The main focus of the course will be the student's own writing. Students will be expected to satisfy a number of assignments relating to both fiction and poetry. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/EN 2900 6.0.
AS/HUMA 2910 6.0 Modern Science, Culture and Society. An examination of the complex interrelationship between science, culture, and western society from the seventeenth century to the early twentieth century.

AS/HUMA 2915 9.0 Darwin, Einstein, and the Humanities. An intensive examination of how Darwin and Einstein's scientific thought both shaped and was shaped by their respective intellectual, cultural, and social context. (This course is affiliated with Bethune College.)

AS/HUMA 2920 9.0 Spreading the Word: Knowledge, Technology and Culture. This course explores technologies of knowledge in social and cultural context, examining histories of classification, ethical and political concerns about information, debates over artificial intelligence and artificial life, and the social
impact of technologies like the book, telegraph and computer. (This course is affiliated with Bethune College.)

## AS/HUMA 2930 9.0 On Woman. This

course explores the social, political and economic institutions which shape women's lives, and introduces key theoretical approaches within feminist scholarship to investigate specific feminist issues in areas such as women's writing, visual representations, family, race, sexuality, women and work. (This course is affiliated with Founders College.)
Degree credit exclusions: AS/SOSC 2180 6.0, AS/HUMA 2930 6.0, GL/WMST 2950 6.0, GL/ SOSC 2950E 6.0 GL/SOSC 2950F 6.0, GL/ WMST 2950 6.0, AK/WMST 2000 6.0.
Cross-listed to: AS/AK/GL/WMST 2510 9.0, AS/SOSC 2180 9.0.

AS/HUMA 2960 9.0 The Body in Western Culture. From an interdisciplinary perspective this course explores the attitudes of Western culture to the body and to entities such as soul, spirit and mind which have been contrasted with it. (This course is affiliated with McLaughlin College.)

AS/HUMA 2990A 9.0 Aspects of Italian Culture. This course aims to present and analyze some of the most interesting themes underlying the development of Italian intellectual life from the fourteenth century to the nineteenth century. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/HUMA 2990A 6.0, AS/IT 2750 6.0, AS/IT 2751 6.0.
Cross-listed to: AS/IT 2751 9.0.

## 3000-Level Courses

## Studies of Culture

AS/HUMA 3000 3.0/6.0 Special Topics in Studies of Culture. In any given year other courses may be offered in this area. Information concerning these is available at the divisional office.

AS/HUMA 3100 6.0 Greek Drama and Culture. A survey of ancient Greek drama in translation. The plays are looked at mainly in terms of structure, of religious thought, and of political expression.

AS/HUMA 3110 6.0 Roman Culture and Society. The course examines literature, art and architecture in its social and cultural context within a specified period of Roman history. The course may focus on either the late Republic, the ages of Augustus, Nero or the Trajan.

AS/HUMA 3115 6.0 Myth in Ancient Greece: Texts and Theories. This course examines Greek myths of gods and heroes in their social, religious, and historical contexts through close reading of primary texts and visual representations and through analysis of modern comparative, psychoanalytical, and structuralist theories.

AS/HUMA 3120 3.0 Topics in Major Figures in Their Ages. Major figures are set within the context of their ages, using materials which may be drawn from the arts, literature, historical documents, and philosophical and religious thought.

AS/HUMA 3140 3.0 Topics in Period Studies. A study of key aspects of major eras which have shaped the modern world, using materials which may be drawn from the arts, literature, historical documents, and philosophical and religious thought.

AS/HUMA 3150 3.0 Problem in the Myth, Language, and Culture of the Ancient Near East. The purpose of this course is to introduce the students to the culture of an ancient Near Eastern civilisation through an introduction to its language and selected literature.

AS/HUMA 3160 6.0 Architects of Modern Thought. A study of selected major figures who have shaped the modern world, using materials which may be drawn from the arts, literature, historical documents, and philosophical and religious thought.

AS/HUMA 3210 6.0 The Scene of the Crime - Criminality and Modern Culture. A study of the production of ideas of criminality in Western thought since 1850 to the present, within the context of the social, cultural, political, economic and legal history of the modern age.

AS/HUMA 3215 6.0 Evolving Images of the Vampire. This course explores the evolution of vampire figures in Western culture over the past two hundred years. It traces their movement from the margins to the centre of cultural concern and looks at recent deconstructions of vampire stereotypes.
Degree credit exclusion: AS/HUMA 3140C 3.0.
AS/HUMA 3310 6.0 The Writer and Folk Culture in the Afro-Caribbean. This course examines aesthetic and expressive aspects of Afro-Caribbean folk culture and explores both the ways in which, and the reasons that, West Indian novelists, dramatists, and poets have used this culture in their literary works.

AS/HUMA 3320 6.0 Topics in Postcolonial Thought: A Caribbean Perspective. By focusing on influential postcolonial theorists, this course examines twentieth century attempts to rethink the Western humanistic tradition from the point of view of colonized and formerly colonized peoples.

AS/HUMA 3340 6.0 From Alien to Archetype: Jews in North America. The Jewish experience in the American "melting pot" and the Canadian "mosaic" from colonial times to the present, as seen through an examination of the historical record and works of the imagination by and about Jews.

AS/HUMA 3350 6.0 Modernism and AntiModernism in American Culture. A study of American culture and society in the late nineteenth and early twentieth centuries,
focusing on the conflict in ideas, aesthetics, and values fostered by industrial and technological change.

AS/HUMA 3360 6.0 Victorian Culture and Society. A study of institutions, ideas and cultural movements in a particular year or decade using both primary and secondary sources from a variety of disciplines.
Cross-listed to: AS/HIST 3440 6.0.
AS/HUMA 3410 6.0 The Art of India. This course surveys the painting, sculpture, and architecture of India, from the Indus Valley Civilization to modern times; the informing religions of Buddhism and Hinduism are also examined in some detail. Special emphasis is placed on Buddhist and Hindu iconography.
Cross-listed to: FA/VISA 3341 6.0.
AS/HUMA 3420 6.0 Japanese Culture, Literature and Film. By comparing works by Japanese authors with related films, this course explores basic patterns and themes of Japanese culture.
Cross-listed to: AS/JP 3720 6.0, FA/FILM 3710 6.0.

AS/HUMA 3430 3.0 The American Film. A survey of the major events and significant trends involved in the development of American fiction and documentary film from its beginnings through the classical studies period.
Cross-listed to: FA/FILM 3210 3.0.
AS/HUMA 3431 3.0 The American Film. The development of American cinema since the Second World War including the break-up of the studio system, the changing styles of American feature films and of documentary since the advent of network television.
Cross-listed to: FA/FILM 3211 3.0.
AS/HUMA 3450 Queer Desire, Gay Representation. This course examines 1) desire and male homosexuality(ies); 2) gay male icons and identities; 3) the connections between heterosexuality and homophobia; 4) the quest for a culture based on desire; 5) the impact of AIDS on gay culture.
Degree credit exclusion: AS/HUMA 3000E 6.0.

## Studies of Themes and Values

AS/HUMA 3500 6.0 Special Topics in Studies of Themes and Values. In any given year other courses may be offered in this area. Information concerning these is available at the divisional office.

AS/HUMA 3620 6.0 The Tragic Muse. A study of central myths, heroes, examples, themes and theorists of Western tragedy, from Greek and Hebrew prototypes through selected later tragedies to the present, using dramas, novels, paintings, music, and films.

AS/HUMA 3630 6.0 The Comic Muse. Major literary, visual, and musical examples and theories of Western comedy are studied chronologically (classical to contemporary) and thematically (mythic patterns), exploring
comedy's varied means (like exaggeration), its effects (joy, laughter), and its relations to other genres (like tragedy).

AS/HUMA 3640 6.0 Intermediate Prose Workshop: Fiction. A course for students who have demonstrated talent in the writing of prose fiction. Study may be made of the craft of the journal, short story, and novel through the work of both recognized writers and students in the course.
Prerequisite: Permission of the Creative Writing Programme.

AS/HUMA 3645 6.0 Intermediate Poetry Workshop. A course for students who are seriously engaged in the practice of poetry, and who wish to explore their strengths and develop the range of their skills in the company of other poets. The "workshop" approach encourages learning while doing.
Equivalent Course(s): AS/EN 3240 6.0.
AS/HUMA 3660 6.0 The Oral Tradition. An introduction to the oral/aural aspects of culture involving discussion of their nature, origins, transmission, and functions with a focus on the Canadian tradition. The history and methods of studying oral materials and practices, and the various means of interpreting them are considered.

AS/HUMA 3670 6.0 Fantasy in the Modern World. An exploration of the ways fantasy has shaped modern sensibility since the French Revolution.

AS/HUMA 3680 6.0 Interpretation, Morality and the Novel. A reading of novels to examine the interaction between the moral values in novels and those of their readers.

AS/HUMA 3710 6.0 The Arts of the Opera. This course explores opera as a unique synthesis of music, drama, epic and the visual arts in order to study the special qualities and characteristics of operatic expression and communication in the context of modern European culture.

AS/HUMA 3720 6.0 Form in the Arts. An exploration of pattern, order and expressive form as embodied in non-verbal arts such as visual art, architecture, music, dance, design, ritual and games. Class exercises in analysis and construction are supplemented by demonstrations, discussion, and readings from a wide range of sources.

AS/HUMA 3730 6.0 Art and Visual Perception. An exploration, through analysis and illustration, of concepts fundamental to the creation and critical interpretation of visual art and sculpture: Form, growth, space, light, colour, movement, tension and expression. Strategies of visual perception, expressive conventions and nonverbal communication are emphasized.

AS/HUMA 3750 6.0 Visual Images of Canada. Various themes selected from Canadian visual cultural history are used to examine problems of changing values in the society.

AS/HUMA 3780 6.0 History of the Christian Church: Beginnings to the Reformation. Studies stages of the developing Christian church from its origins in apostolic times to the late middle ages. Topics include personalities, institutional structure, leadership and rules, thought, education, liturgical and spiritual life, pastoral care, and the church in the secular world.

## Cross-listed to: AS/HIST 3809 6.0.

AS/HUMA 3781 6.0 History of the Christian Church: Reformation to the Present. A
survey of the development and variety of formal organizations and associations, large and small, within which the community of professed Christians has manifested its public, historical existence, and of the norms, rules, codes, and theologies with which the church(es) govern and justify their existence, from apostolic times to the present.
Cross-listed to: AS/HIST 3810 6.0.
AS/HUMA 3782 6.0 Christian Thought from 1500 to 1830. A course on Christian religious thought in the context of European culture from the Renaissance and Reformation through the Enlightenment to the Romantic period.

AS/HUMA 3785 6.0 The Making of Christianity and Christendom (100-800 C.E.). A study of how the Christian movement of the New Testament period turned into the coherent religion, culture, and social institution of early-medieval Christianity, in the process defining its position on leadership, doctrine, sex roles, education, worship, etc.
Degree credit exclusion: AK/HUMA 3880 6.0.
AS/HUMA $3790 \quad 6.0$ Jesus and Interpretation. Who was the historical man Jesus? Which sayings and parables attributed to him are authentic? An introduction to the historical-critical methods used to identify and reconstruct this core material, and to various philosophical and literary interpretations of the issues.

AS/HUMA 3800 6.0 Contemporary Religious Thought. An enquiry into modern conceptions of God, humanity and the world, with special emphasis on tracing their origins in ancient and medieval thought.

AS/HUMA 3805 6.0 Religious Belief and Philosophical Thought in the Twentieth Century. A study of new developments in theology and in the philosophic investigation of religion. The focus is on the more comprehensive systems of thought put forward in the Twentieth Century in response to the increasing secularity of North Atlantic societies.

AS/HUMA 3810 6.0 Interpretations of Reality. While major emphasis in this course is placed on reading Renaissance literature, biblical, classical and modern texts are also included.

AS/HUMA 3820 3.0 Female Spirituality: Comparative Perspectives-Non-Western Traditions. Introduction to the comparative study of religion, focusing on female spirits, female spirituality and women's religious roles, and related gender issues. Cultures studied include those of East Asia, India, Africa, and Native America (North and South).
Degree credit exclusion: AS/HUMA 2820 6.0.
AS/HUMA 3821 3.0 Female Spirituality: Comparative Perspectives--Western Traditions. A comparative study of religion, focusing on female spirits, female spirituality and women's religious roles, and related gender issues. Traditions studied includes Judaism, Christianity and Islam, as well as their precursors, and modern Goddess spirituality.
Degree credit exclusion: AS/HUMA 2820 6.0.
AS/HUMA 3830 6.0 Israelite Prophecy. An
enquiry into the evolving forms and messages of biblical prophecy, this course concentrates primarily, but not only, on the history of the religion of Israel. Special attention is devoted to the place of prophets in Israelite society.

AS/HUMA 3835 6.0 Medieval Jewish Thought. A critical study of the development of Jewish religious thought during the Middle Ages. Attention is given to the more comprehensive systems of philosophy, those of Philo, Saadia Gaon, Judah Halevi, Moses Maimonides, Levi Gersonides, and to the Zohar.

AS/HUMA 3840 6.0 Rabbinic Judaism: Thought and Institutions. A historical analysis of the formation of the ideas, literature, and institutions of rabbinic Judaism as they took shape from the first to the seventh centuries.

AS/HUMA 3850 6.0 The Final Solution: Perspectives on the Holocaust. An
examination of the Nazi attempt to exterminate the Jews: the historical and philosophical background, the theological and psychological implications, the history and literature of the period.

AS/HUMA 3860 6.0 Mysticism. An
introductory study of ecstatic religious experience in primal cultures (Amerindian shamanism and African mediumism) and the high civilizations (the mystic experience in Chinese religion, Hinduism, Buddhism, Judaism, Christianity and Islam) and modern theories concerning the nature of trance states.

AS/HUMA 3870 6.0 Religions of Native American Peoples. Introduction to the study of non-Western religions, analyzing primal cultures and early civilizations using Amerindian examples, considering traditional (Ojibwa to Inca) and contemporary (American Indian Movement, Peyote Religion) phenomena and their interrelationships with Western religion. Canadian examples will predominate.

AS/HUMA 3880 6.0 On Values. Kinds and instances of values expressed in poetry and prose are examined, the primary concern
being with the problems of recognition, appreciation, and rational criticism of values in a literary context.

## AS/HUMA 3890 6.0 On Love.

An
investigation of the implications of a word which has been near the centre of our consciousness (in terms of religious experience, attitudes towards the irrational, attitudes towards others or the other) since poets first began to record that consciousness.

AS/HUMA 3895 6.0 Magic and Imagination. The course examines both real magic and magic in myth and literature as exercises in imagination.

AS/HUMA 3920 6.0 Technology and Communication. This course examines various degrees of cultural modification as attempts to survive the network of supracultural values established by technology. It is this altered pattern of cultural behaviour which is referred to as Culture Two.

AS/HUMA 3930 6.0 Woman, Myth and Religion. A study of the role of woman and/or the concept of the female (or the feminine) in myth and religion.

AS/HUMA 3940 6.0 The Feminine in Chinese Culture: Ideal and Reality. A study of the feminine ideal and its role in the evolution of Chinese culture from earliest times to the present.

AS/HUMA 3950 6.0 Gender and Morality: Feminist Challenges to the Tradition. From an interdisciplinary perspective this course studies the relationship between gender and conceptions of moral decision making and the moral life.

AS/HUMA 3960 6.0 Mothering and Motherhood. This course examines motherhood as it is theorized and analysed in interdisciplinary feminist scholarship and as it is portrayed in women's fictional and autobiographical writings. The history, sociology, psychology, and politics of motherhood with emphasis on class, cultural and racial differences are investigated.
Degree credit exclusions: AK/WMST 3040 6.0, AK/WMST 3001N 6.0.
Cross-listed to: AS/AK/GL/WMST 3508 6.0, GL/ SOSC 3608 6.0.

## 4000-Level Courses

AS/HUMA 4000 3.0/4000 6.0 Special Topics in Humanities. Several seminars in special subjects are offered by members of the division, as announced annually.
Prerequisite: Permission of the instructor.
AS/HUMA 4050 3.0/4050 6.0 Independent Studies. In any given year, a limited number of faculty members may be available to supervise a special programme of study (for a limited number of students) equal in credit to one full or half course.

Note: Enquiries should be directed to the office of the Division of Humanities. Please consult the Enrolment and Registration section, Faculty of

Arts, for regulations on independent reading courses.
Prerequisite: Permission of the instructor and the Curriculum Committee of the Division of Humanities.

AS/HUMA 4100 6.0 Studies in Greek and Roman Culture. The course examines in a seminar format a selected theme in Greek and/ or Roman culture, using Greek and/or Roman literary, historical, philosophical and artistic material. In any given year one or more courses may be offered under this rubric.

## Prerequisite: Permission of the instructor.

AS/HUMA 4101 6.0 Narratives in Ancient Art and Literature. A study of representative visual and textual narratives in Greek and Roman society which characteristically featured the social, political ideological and programmatic symbols and imagery of their time.

## Prerequisite: Permission of the instructor.

AS/HUMA 4160 6.0 Madness and Culture. This course utilizes literature and the fine arts, together with studies in history, sociology, and psychology, to explore how various cultures and time periods respond to and identify madness.
Prerequisite: Permission of the instructor.
AS/HUMA 4210 6.0 Canadian Literature and the Arts. Selected themes in Canadian writing (about two-thirds of the required material and related class discussion is in the field of writing), film, architecture, visual and performing arts.

## Prerequisite: Permission of the instructor.

AS/HUMA 4220 6.0 The Science of Society: Social Thought in North America, 18901940. An analysis of the intellectual, cultural, and social changes which contributed to the rise of the social sciences and re-organization of the liberal arts in North America during the period 1890-1940. By focusing on this context as well as major theories and trends in several disciplines, this course provides insight into modern North American culture.
Cross-listed to: AS/HIST 4800 6.0.
Prerequisite: Permission of the instructor.
AS/HUMA 4225 6.0 Topics in Science in Cultural Context. This course analyzes the diversity of cultural influences upon the genesis of scientific and technological ideas and practices from the Seventeenth Century to the present. It also explores the impact of science upon social/political structures and cultural expressions.

## Prerequisite: Permission of the instructor.

AS/HUMA 4300 6.0 Aspects of Modern Latin American and Caribbean Studies. This seminar is designed to integrate the General Honours Programme in Latin American and Caribbean Studies at the upper level.
Cross-listed to: AS/SOSC 4450 6.0.
Prerequisite: Permission of the instructor.

AS/HUMA 4310 6.0 Topics in Religion and Politics in Latin America and the Caribbean. This course examines religious thought and practice in Latin America and the Caribbean focusing on religious responses to social and political issues in the region.
Prerequisite: Permission of the instructor.
AS/HUMA 4610 3.0 Psychology and Literature. An exploration of issues involved in the interrelationship of psychology and literature in order to enhance students' understanding and appreciation of human behaviour, human experience, and imaginative literature.
Prerequisite: Permission of the instructor.
Cross-listed to: AS/PSYC 4120 3.0.
AS/HUMA 4620 6.0 Works and Days: Writers on their Art and their Lives. The course centres on the reading and discussion of journals, autobiographies, letters, novels, poems which show writers reflecting on their work, on its development, on its perceived relationship both to their own lives and to the lives of others.
Prerequisite: Permission of the instructor.
AS/HUMA 4630 6.0 Senior Prose Workshop: Fiction and Non-Fiction. This course is intended primarily for students who have taken AS/HUMA 36406.0 or AS/HUMA 36456.0 and demonstrated that they can benefit from advanced study of the writing of prose fiction. Students are expected to reexamine and enlarge potentialities already evident within their work.
Prerequisite: Permission of the instructor.
AS/HUMA 4640 6.0 Senior Poetry Workshop. This course is intended primarily for students who have taken AS/EN 32406.0 and demonstrated that they can benefit from advanced study of the writing of poetry. Students are expected to re-examine and enlarge potentialities already evident within their work.

## Prerequisite: Permission of the instructor.

AS/HUMA 4650 6.0 Myth and Mythology. An interdisciplinary study of myth and mythology from a variety of points of view, among which may be literary, cultural, psychological, religious, political, sociological, and anthropological. Among the possible emphases may be definition, interpretation, and influences.
Prerequisite: Permission of the instructor.
AS/HUMA 4680 6.0 The Self in and Against Culture. A study of the emergence and development in nineteenth- and twentiethcentury Western literature of the novel of lifeapprenticeship, with such special cases as the Bildungsroman and the artist novel.

Prerequisite: Permission of the instructor.
AS/HUMA 4730 6.0 Topics in Arts and Ideas. A study of the sources, contexts, expressions, and inter-relationships of the ideas and the non-literary arts of a place or period. Social, literary, philosophical and
religious works and their interactions with the arts (painting, sculpture, music, and architecture) are examined in a specific context.

Prerequisite: Permission of the instructor.
AS/HUMA 4735 6.0 Iconological Methods for Medieval Study. Visual Imagery in the Middle Ages was self-consciously conceived as a language, in a semiotic frame of meaning with cultural references and for social purposes. This seminar teaches Iconological methods of historical analysis which enable scholars to read the "language of the visual"; it concludes with a methodological critique of the historiography of Iconology.
Cross-listed to: AS/HIST 4220 6.0, FA/VISA 4930 6.0.

## Prerequisite: Permission of the instructor.

AS/HUMA 4740 6.0 The Sacred and the Arts. Cross-cultural study of art and religion from historical and phenomenological perspectives. Seminar analyzes the decor of artifacts utilized in ritual, images that are the focus of worship or symbolic of the sacred, and art as a religious activity.
Prerequisite: Permission of the instructor.
AS/HUMA 4800 6.0 The Parables of Jesus. In order to begin to understand how the parables of Jesus function, one must master a range of critical methods (e.g., form criticism, historical criticism, rhetorical criticism, structural exegesis) and learn the various conceptual approaches to the hermeneutical problem.
Prerequisite: Permission of the instructor.
AS/HUMA 4810 6.0 The Bible and the Birth of Western Monotheism. An exploration of the intellectual, social and political processes giving rise to the concept of western monotheism with particular reference to ancient Israel.

## Prerequisite: Permission of the instructor.

AS/HUMA 4820 6.0 Problems in the Study of Judaism. In any given year one or more courses related to Jewish philosophy, culture and history may be offered. Information concerning these is available at the divisional office in March of the preceding year.
Prerequisite: Permission of the instructor.
AS/HUMA 4880 6.0 Special Seminars: Text and Interpretation. Several seminars are offered by members of the division who are Vanier College Fellows as announced annually. Typically such courses would involve intensive examination of the works of a single author as these pertain to cultural criticism and theories of interpretation.

Prerequisite: Permission of the instructor.
AS/HIST 4881 3.0 Bertolt Brecht: Literature, Culture and Politics. Using an interdisciplinary approach, the course examines Brecht's understanding of the interplay of literature, culture and politics, as shown in his dramatic, poetical and theoretical works.

Cross-listed to: AS/GER 4620 3.0.
Prerequisite: AS/GER 22006.0 or permission of the department

AS/HUMA 4890 6.0 Topics in Religion and Literature. In any given year, one or more courses, related to the study of religion and literature, may be offered. Information concerning these is available at the Divisional office in the spring of the preceding year
Prerequisite: Permission of the instructor.

## Individualized Studies - Arts

Programme Office:
238 McLaughlin College, (416) 736-5128
Programme Coordinator:
Jerry Ginsburg
(416) 736-5128, ext. 77086

The programme in Specialized Honours Individualized Studies is designed for students who wish to pursue a topic or line of enquiry that requires drawing together courses from several of the University's disciplines or fields of study.
Students interested in pursuing an Individualized Studies degree will be asked by the Coordinator to prepare a statement describing the particular subject they wish to pursue. They will also be asked to identify a set of courses, from the Faculty of Arts and elsewhere, which are relevant to this theme. If the Coordinator is satisfied that the proposed subject cannot be adequately pursued under an established programme or departmental major and that sufficient courses and faculty expertise exist to support individualized study in the area in question, the student will be permitted to enter the Individualized Studies programme. (Normally, students are eligible to join the programme if they have completed at least four and no more than eleven courses by the start of the academic year.)
Students in Individualized Studies must follow all the rules for a degree in Specialized Honours. In addition, they must take, as 6 of the 54 credits relevant to their theme, the Individualized Studies Thesis Course, AS/ INDV 4000 6.0. This course is to be taken during the student's final year of study.

## Courses in Individualized Studies

AS/INDV 4000 6.0 Honours Thesis or Project. The purpose of AS/INDV 40006.0 is to offer Individualized Studies students a chance to draw together the parts of their topic by carrying out a sustained piece of research and writing. An advisor, arranged for by the student, directs the thesis and act as one of its readers. Normally the finished thesis is between 50 and 100 pages long.

## Information Technology - Arts

Programme Office:
N520 Ross, (416) 736-5250

## Web Address:

www.ITEC.yorku.ca
Professor and Coordinator:
A. Dow

Associate Professor:
S. MacKenzie

The Faculty of Arts Information Technology Programme (ITEC) is designed to provide students with the ability to examine how information and computer technology interact with culture and society. The multi-disciplinary core of the Programme combines the applied aspects of computer systems with the historical, social, and ethical contexts of computing and information processing and dissemination.
Drawn from the various components of the programme, the skills the ITEC Programme fosters include computing, problem solving, analytical, research, and critical writing skills. The Programme offerings are structured around both technology related courses - which develop the applied aspects of computer systems - and nontechnology related courses - which focus on understanding the implications of technology across a broad range of activities within our society.
For specific Information Technology degree requirements, see the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes.

## Courses in Information Technology

AS/AK/ITEC 1010 3.0 Information and Organizations. The value and importance of information to organizations, how it is used, stored and processed; emphasizes the uses of information technologies of various kinds, the benefits of the technologies, and the associated costs and problems; use of desktop applications. Prerequisite: None.

AS/AK/ITEC 1011 3.0 Introduction to Information Technologies. Hardware and software technology for handling information; system architecture for single user, central and networked systems; telecommunications; human computer interface; storage systems; operation systems; applications software.

## Prerequisite: None.

AS/AK/ITEC 1020 3.0 Introduction to Computer Science I. The main objective of the course is to introduce the student to problem solving using a procedural programming language. The course also covers the tools and techniques of an advanced interactive programming environment and simple data structures and algorithms. Three lecture hours, laboratory exercises.
Prerequisites: If no university-level mathematics: OAC Calculus and one other $O A C$ in mathematics (normally Finite Mathematics or Algebra and Geometry) with an average grade of 75 percent in all OAC mathematics and no grade less than 65
percent; otherwise: at least 6 credits of university-level mathematics with a grade average over all MATH credits of C+ or better [B+ or better if it is a service course (second digit is 5)]. Recommended: Previous programming experience; for example, a high school programming course or SC/AS/AK/ COSC 1530.03.
Corequisite: AS/SC/AK/MATH 1090.03 or AS/ SC/AK/MATH 1190 3.0.

Cross-listed to: SC/AS/AK/COSC 1020 3.0.
AS/AK/ITEC 1030 3.0 Introduction to Computer Science II. The main objective of the course is to provide the student with a rudimentary understanding of algorithms and data structures. Three lecture hours, laboratory exercises.
Prerequisites: SC/AS/COSC/ITEC 10203.0 or AS/AK/ITEC 1020 3.0; AS/SC/AK/MATH 1090 3.0, or AS/SC/AK/MATH 1190 3.0.

Cross-listed to: SC/AS/AK/COSC 10303.0
AS/AK/ITEC 2010 3.0 Systems Analysis and Design I. Case studies in the development of information systems; exposing the reasons for success or failure; IS planning; various IS development methodologies and their strengths and weaknesses; role of the analyst; analysis project.
Prerequisites: AS/AK/ITEC 10103.0 and AS/AK/ ITEC 1011 3.0.

AS/AK/ITEC 2011 3.0 Fundamentals of Data Structures. A study of fundamental data structures and their use in the efficient implementation of algorithms. Topics include abstract data types, lists, stacks, queues, trees and graphs.
Prerequisites: SC/AS/AK/COSC 10303.0 or AS/ AK/ITEC 1030 3.0, AS/AK/SC/MATH 11903.0 or AS/AK/SC/MATH 1090 3.0.
Cross-listed to: SC/AS/AK/COSC 2011 3.0.
AS/AK/ITEC 2021 3.0 Computer Organization. Computer structures, digital representation of data, machine languages, instruction execution and addressing techniques. The major functional blocks of a computer: main memory, control unit, arithmetic and logic unit, input/output bus structures, interrupt system, DMA channels, peripheral devices.
Prerequisites: SC/AS/AK/COSC 10303.0 or AS/ AK/ITEC 1030 3.0, AS/AK/SC/MATH 11903.0 or AS/AK/SC/MATH 1090 3.0.

Cross-listed to: SC/AS/AK/COSC 2021 3.0.
AS/AK/ITEC 3210 3.0 Applied Data Communications and Networks. Communications systems, environments and components; choices for data, voice and imagery; network control, design and management; distributed and local networks; client/server and intranet technologies; web based technologies.
Prerequisites: AS/AK/ITEC 20103.0 and AS/AK/ ITEC 10303.0 or SC/AS/AK/COSC 10303.0 and AS/AK/SC/MATH 1131 3.0.

AS/AK/ITEC 3421 3.0 Introduction to Database Systems. Concepts, approaches and techniques in database management systems (DBMS). Logical model of relational databases. An introduction to relational database design. Other topics such as query languages, crash recovery and concurrency control.
Prerequisite: SC/AS/AK/COSC 20113.0 or AS/AK/ITEC 2011 3.0.
Degree credit exclusions: SC/AS/COSC 3412 3.0.

Cross-listed to: SC/AS/AK/COSC 34213.0
AS/AK/ITEC 3461 3.0 Human-Computer Interaction. This course introduces the concepts and technology necessary to design, manage and implement interactive software. Students work in small groups and learn how to design user interfaces, how to realize them and how to evaluate the end result.
Prerequisite: SC/AS/COSC 20113.0 or AS/ AK/ITEC 2011 3.0.
Degree credit exclusions: SC/AS/COSC 4341 3.0, SC/AS/COSC 43613.0 (taken before FW99).
Cross-listed to: SC/AS/AK/COSC 34613.0

## Departmental and Divisional Courses in Information Technology

For specific programme requirements please refer to the Faculty of Arts Programmes of Study Section in this calendar. Course descriptions for the courses listed below are contained in the appropriate departmental and divisional listings in the Courses of Instruction section of this Calendar.
AS/ANTH 4200H 6.0 The Cultures of the Web. AS/HIST 3785 6.0 Science, Technology and Society in Chinese History.
AS/HIST 3870 6.0 Historical Development of Technology Since 1800 and Its Impact.
AS/HIST 4680 6.0 History of Communication in the United States.
AS/HUMA 1650 9.0 The Networked Imagination.
AS/HUMA 2920 9.0 Spreading the Word: Knowledge, Technology and Culture.
AS/HUMA 3350 6.0 Modernism and AntiModernism American Culture.
AS/HUMA 3920 6.0 Technology and Communication.
AS/HUMA 4225 6.0 Topics in Science in Cultural Context.
AS/MATH 1013 3.0 Applied Calculus I.
AS/MATH 1014 3.0 Applied Calculus II.
AS/MATH 1025 3.0 Applied Linear Algebra.
AS/MATH 1131 3.0 Introduction to Statistics I. AS/MATH 1190 3.0 Introduction to Sets and Logic.
AS/MATH 1300 3.0 Differential Calculus with Applications.
AS/MATH 1310 3.0 Integral Calculus with Applications.
AS/MATH 1581 3.0 Business Mathematics I. AS/MATH 2015 3.0 Applied Multivariate and Vector Calculus.
AS/MATH 2030 3.0 Elementary Probability. AS/MATH 2131 3.0 Introduction to Statistics II.

AS/MATH 2221 3.0 Linear Algebra with Applications I.
AS/MATH 2222 3.0 Linear Algebra with Applications II.
AS/MATH 2270 3.0 Differential Equations.
AS/MATH 2280 3.0 The Mathematical Theory of Interest.
AS/MATH 2310 3.0 Calculus of Several Variables with Applications.
AS/MATH 2320 3.0 Discrete Mathematical Structures.
AS/MATH 2570 3.0 Elementary Statistics II. AS/MATH 3020 6.0 Algebra I.
AS/MATH 3033 3.0 Classical Regression Analysis.
AS/MATH 3034 3.0 Applied Categorical Data Analysis.
AS/MATH 3050 6.0 Introduction to Geometries.
AS/MATH 31103.0 Introduction to Mathematical Analysis.
AS/MATH 3131 3.0 Mathematical Statistics I. AS/MATH 3132 3.0 Mathematical Statistics II. AS/MATH 3170 6.0 Operations Research I. AS/MATH 3210 3.0 Principles of Mathematical Analysis.
AS/MATH 3241 3.0 Numerical Methods I.
AS/MATH 3242 3.0 Numerical Methods II.
AS/MATH 3280 6.0 Actuarial Mathematics.
AS/MATH 3330 3.0 Regression Analysis.
AS/MATH 3430 3.0 Sample Survey Design.
AS/MATH 3500 6. 0 Mathematics in the History of Culture.
AS/MATH 4010 6.0 Real Analysis.
AS/MATH 4020 6.0 Algebra II.
AS/MATH 4030 3.0 Probability Theory.
AS/MATH 4080 6.0 Topology.
AS/MATH 4141 3.0 Advanced Numerical Methods.
AS/MATH 4142 3.0 Numerical Solutions to Partial Differential Equations.
AS/MATH 4150 3.0 Topics in Geometry.
AS/MATH 4170 6.0 Operations Research II.
AS/MATH 4280 3.0 Risk Theory.
AS/MATH 4430 3.0 Stochastic Processes.
AS/MATH 4570 6.0 Applied Optimization.
AS/MATH 4730 3.0 Experimental Design.
AS/MATH 4930 3.0 Time Series and Spectral Analysis.
SC/NATS 1710 6.0 The Nature and Growth of Scientific Thought.
SC/NATS 1720 6.0 Light and Sound.
SC/NATS 1730 6.0 Science as Discovery.
SC/NATS 1740 6.0 Astronomy.
SC/NATS 1750 6.0 The Earth and its Atmosphere.
SC/NATS 1760 6.0 Science and Technological Change.
SC/NATS 1770 6.0 Technology and the Environment.
SC/NATS 1810 6.0 Energy.
SC/NATS 1830 6.0 Matter and Structure.
AS/PHIL 2070 3.0 Introductory Ethics.
AS/PHIL 2075 3.0 Introduction to Practical Ethics.
AS/PHIL 3025 3.0 Practical Ethics.
AS/PHIL 4160 3.0 Topics in Business Ethics.
AS/POLS 2610 6.0 Public Policy and Administration.
AS/POLS 3100 3.0 The Politics of Communication and Culture in Canada.
AS/POLS 4000L 3.0 The Politics of Cyberspace.

AS/POLS 4185 6.0 Culture and Communication.
AS/SOCI 2070 6.0 Social Order and Social Organization.
AS/SOCI 3610 6.0 The Sociology of Occupations and Professions.
AS/SOCI 3620 6.0 Formal Organizations.
AS/SOCI 3840 6.0 Mass Communications.
AS/SOSC 1080 9.0 Information and Technology.
AS/SOSC 1731 9.0 CyberCities: The Community and Communication in Changing Urban Areas.
AS/SOSC 2310 9.0 Introduction to Communications.
AS/SOSC 2860 6.0 Interactive Multimedia.
AS/SOSC 3310 6.0 Communications For Tomorrow.
AS/SOSC 3311 6.0 Communication in Organizations.
AS/SOSC 3550 6.0 Modernity at the Millennium.
AS/SOSC 3780 3.0 Microcomputers In Urban Analysis.
AS/SOSC 4320 6.0 Electronic Information Network Marketplace.
AS/SOSC 4330 6.0 Machine-Mediated Human Communication.
AS/SOSC 4990B 6.0 Modes of Communication: From Orality to Literacy to the Electronic Era.
AS/SOSC 4990S 6.0 The Underside of Progress.

## Interdisciplinary Fine Arts Fine Arts

## Division Office:

281 Winters College, (416) 736-5822
Professor and Coordinator of the Fine Arts Cultural Studies Programme and the Interdisciplinary Fine Arts Division: P. Morris

The Division of Interdisciplinary Fine Arts offers courses which explore the ways in which the arts interact with each other and with the humanities and social sciences. A number of the Faculty's artists and scholars work in areas which overlap the traditional subjects of dance, film \& video, music, theatre, and visual arts.

Courses offered within the Division of Interdisciplinary Fine Arts focus upon contemporary and innovative approaches to both the study and practice of the fine arts. Courses on popular culture and critical theory, arts administration, and interactive multimedia studio courses are offered through this division.
Students majoring or minoring in Fine Arts Cultural Studies are required to take 24 credits in core courses from the Interdisciplinary Fine Arts Division offerings. For other Fine Arts students, these courses count as fine arts electives. Some of these courses are open to all students in the University as electives. Not all courses are offered every year.

## Courses in Interdisciplinary Fine Arts

Please note: not all courses are offered every year.

FA/INFA 1900 6.0 Arts and Ideas. A
thematic introduction to the fine arts through a study of their interrelationships and underlying ideas. This course develops an understanding of the arts through presentations of contemporary work by visiting artists, selected readings, and critical analysis. Students' abilities to observe, analyse and write about the arts are stressed. Required of first-year Fine Arts Cultural Studies majors and minors. Required of all Faculty of Fine Arts students admitted to a first undergraduate degree in 1997/98 or later. Open to both Fine Arts and non-Fine Arts students.

FA/INFA 1930 6.0 The Arts Mosaic: Theory and Practice. This course provides a theoretical introduction to the practice and production of art in multi-media, popular culture and intercultural contexts. Students enrol in two different studio practicums of thirteen weeks each. The studios are complemented by weekly lectures addressing issues such as representation, ethics, aesthetics, and the impact of electronic media production on traditional forms of expressive culture.

FA/INFA 1940 6.0 Creative Writing: The Process of the New. This course is an innovative combination of creative writing studios and general lecture. This format is to both promote and inspire creativity, and to encourage and develop an imaginative and intellectual perception of the fine arts, literature and the media in the 20th century. (Same as FA/WC 1940 6.0)

FA/INFA 2900 6.0 Arts, Societies, Histories. An introduction to the social history of the arts, emphasizing the relationships of the arts to the societies in which they were made. This course begins by investigating various definitions of history, culture and society. The philosophical, ideological and aesthetic ideas of a period and how these relate to and influence the arts are then studied through an interdisciplinary approach to culture and context. Assignments emphasize the development of strong textual and bibliographic research skills. Required of all second-year Fine Arts Cultural Studies majors and minors. Open to all second-year students.
Degree credit exclusion: FA/INFA 19006.0 taken in 1987-88 or 1988-89.

FA/INFA 2920 6.0 Special Studies in the Arts I. A study of the arts in a particular geographical area or historical era. Topics are announced each spring.

FA/INFA 2930 6.0 Interactive Multimedia I. A practicum-oriented course that introduces students to the creative and artistic possibilities of interactive multimedia. Through individual and group projects using Macintosh computers, CD ROM, the Internet, HyperCard and other multimedia software, students gain
experience in the creation of multimedia works and develop the necessary skills to critically assess their work and other electronic art. Facility with computers and the web using Netscape is highly recommended.

## FA/INFA 3900 6.0 Arts and Cultures. A

thematic course on non-European arts that examines the arts in relation to the cultures in which they were produced. The religious, aesthetic and philosophical ideas of a culture and how these relate to and influence the arts are studied through the examination of one or more of: aboriginal arts of the Americas and Australia/ New Zealand; Asian arts of China, Japan, India, Korea or Indonesia; African and Afro-Caribbean arts. Emphasis is placed on developing students' ethnographic research skills. Required of all third year Fine Arts Cultural Studies majors and minors.

Prerequisite: FA/INFA 19006.0 or permission of the course director.

FA/INFA 3920 6.0 Special Studies in the Arts II. A comparative study of the arts emphasizing a selected methodological, historical, geographic or cultural topic or theme.
Prerequisite: Third or fourth-year standing in the Faculty of Fine Arts.

FA/INFA 3930 6.0 Interactive Multimedia II. An advanced level, individually directed, practicum oriented course that builds on Interactive Multimedia I. Students are involved in the creation of major individual and performance pieces and further exploration of the state of this art.
Prerequisite: FA/INFA 29306.0 or permission of the course director.

FA/INFA 3931 6.0 Multimedia Installation and Performance. This course gives students an opportunity to explore interactivity in public physical settings. Students create works where the performer and/or audience interact with media on the computer through means other than the keyboard and mouse.

Prerequisite: FA/INFA 29306.0 or permission of the instructor.

FA/INFA 3950 6.0 Arts Administration. The management of the arts in Canada is illustrated and analyzed through a survey of the history and development of arts management, and an examination of current practices, relating to both the performing and the visual arts. Extensive readings, lectures, active class discussion, case analysis, simulations, field work, guest lectures and audio visual presentations are featured.
Note: Open to third and fourth year Fine Arts students.

FA/INFA 4900 6.0 Contemporary Issues in the Arts. An Honours seminar course that examines contemporary critical issues in the fine arts such as ideas of modernism and postmodernism; the role of aesthetics; gender issues; performance theory; semiotics; and the influence of philosophy, sociology and psychology on current art practice. Texts are chosen to provide students with an introduction to and a history of contemporary critical issues and to acquaint them with the
debates surrounding these issues. Where appropriate, visiting artists, critics and curators are invited for guest seminars. As this is an Honours seminar, each student is expected to participate in the discourse and to fully research a topic pertaining to one of the critical issues under investigation for their Honours research paper, required for this course. Required of, and open only to, fourth-year Fine Arts Cultural Studies majors and minors.

FA/INFA 4920 3.0/6.0 Special Studies in the Arts III. A comparative study of the arts emphasizing a selected methodological, historical, geographic or cultural topic or theme.

## Prerequisite: Permission of the instructor.

FA/INFA 4930 6.0 Cultural Theory \& Interactive Multimedia Art. This upper level course in both multi-media art and contemporary cultural theory is designed for students who have already achieved a significant level of accomplishment in both these areas. Students will undertake extensive theoretical research using both traditional and on-line resources. The result of that research will be integrated into advanced multi-media projects.
Prerequisite: FA/INFA 39306.0 and/or permission of the instructors. Note: It is highly recommended that students have taken or will concurrently be taking courses in critical theory.

FA/INFA 4950 3.0/6.0 Independent Study. An independent project on a topic initiated by a student that centres upon questions of history, criticism or theory in the Fine Arts. Proposals for projects or topics must be signed by two faculty supervisors from two different departments, and must be approved by the programme coordinator.

FA/INFA 4951 6.0 Arts Administration II. This course includes classroom work, field research and independent study. As part of the independent study component, students will either: (a) develop a proposal to independently secure and complete an internship of a minimum of 60 hours in the cultural sector; or (b) undertake research and document a detailed business plan to launch their own cultural enterprise. This course will be of interest to students intending to become cultural entrepreneurs or to be selfemployed in the performing arts, visual arts, film, publishing, broadcasting, media, advertising, or other components of the cultural sector. Students must have basic computer literacy skills (e.g. wordprocessing and spreadsheets) and must have e-mail and Internet research skills. The primary objective of this course is to provide highly motivated students with an opportunity to acquire and practise job search, self-employment skills and entrepreneurial skills in the cultural sector. The course is open to Fine Arts Cultural Studies and other Faculty of Fine Arts students.
Prerequisite: Any of the following: FA/INFA 3950 6.0, FA/THEA 2150 3.0, FA/VISA 3921 1.5, FA/ VISA 4921 1.5.

FA/INFA 4960 3.0/6.0 Independent Study. An independent project on a topic initiated by a student in which the student prepares a creative
work or performance supplemented by an explanatory statement. Proposals for projects must be signed by two faculty supervisors from two different departments. All projects must be approved by the programme coordinator.

FA/INFA 4970 6.0 Interdisciplinary Seminar. A seminar on a topic relating fine arts studies to concerns in aesthetics and criticism, to cognate disciplines such as anthropology, psychology and sociology, or to particular methodologies for analysis such as semiotics, structuralism, performance theory, etc.
Prerequisite: One upper-level theoretical or historical course in any Fine Arts department or in the Interdisciplinary Fine Arts Division.

## Kinesiology and Health Science (School of Physical Education) - Arts, Pure and Applied Science

School Administrative Office:
302 Tait McKenzie, (416) 736-5182
Office of the Chair:
334 Norman Bethune College, (416) 7365403
Undergraduate Office:
333 Norman Bethune College, (416) 736-5807
Associate Professor and Chair of the School:
R. Kelton

Associate Lecturer and Director of Undergraduate Studies:
C. Wilson

Associate Lecturer and Associate Director of Undergraduate Studies:
M. Mosher

Associate Lecturer and Director of Sport and Recreation:
P. Murray

Professors:
E. Cafarelli, D. Chambers, C. Davis, B. Fowler, N. Gledhill, D. Hood, S.G. Robbins

## Professors Emeriti:

T. Bompa, F. Cosentino

Associate Professors:
T. Duck, J.C. McDermott, M. van der Merwe, V.E. Wilson

Associate Professor Emeritus: K. Jones

Assistant Professors:
F. Flint, T. Haas, K. Helmers, P.T. Katzmarzyk, P. Keir, G. Malszecki, S. Vail

Senior Lecturers:
R. Bain, T. Zivic

Associate Lecturers:
N. Bajin, T. Bompa, W. Dyba, N. Smith, E. Willis

Sessional Instructors:
E. Bojesin, V. Jamnik, B. Pangos

The School of Physical Education has a curriculum which presents wide and flexible offerings to the student. All students take a core of required subject matter encompassing the major areas of emphasis in Kinesiology
and Health Science. Students may choose from a variety of elective courses to develop a highly specialized area of interest or to obtain a more general and broad programme. The school attaches laboratories, field work and seminars to many of its courses, thereby coupling theory and technical knowledge with applied experiences and providing students with a greater opportunity for exchange and discussion with each other, with teachers, and with experts in the area. The school also has grouped courses, enabling students to obtain certification in the areas of sport therapy, sport administration, coaching, and fitness assessment and exercise counselling.

An extensive physical activity skills "practicum" programme is an integral part of the Undergraduate Programme in Kinesiology and Health Science. Students take at least 2 practicum credits in each of gymnastics/dance, aquatics, team sports, individual sports, track and field, and emergency care, and complete their requirements from the large variety of practicum courses offered.
For specific requirements of programmes offered by Kinesiology and Health Science, see the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes and Science section V for BSc programmes.

## Courses in Kinesiology and Health Science

Academic courses in Kinesiology and Health Science offered by the School of Physical Education have the prefix "KINE". Practicum courses have the prefix "PKIN".
Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the Kinesiology and Health Science mini-calendar.

## 1000-Level Courses

AS/SC/KINE 1000 4.0 Foundations of Kinesiology and Health Science. This
course introduces the field of kinesiology and health science in all its forms and parameters. It focuses on the subfields of study and disciplines that provide concepts and methods describing and explaining the effects of human movement. One and one half lecture hours, alternating weekly with three lecture hours. Two terms.
Degree credit exclusions: AS/SC/KINE 1000 3.0, AS/SC/PHED 1000 3.0.

AS/SC/KINE 1020 4.0 Fitness Assessment and Training. An analysis of the basic elements of fitness including their assessment and training. Topics such as athlete assessment, employee fitness programmes, home fitness programmes, private clubs, fitness assessment certification and government fitness programmes are also covered. One and one half lecture hours per week, two laboratory hours in alternate weeks. Two terms.
Degree credit exclusions: AS/SC/KINE 1020 3.0, AS/SC/PHED 1020 3.0.

## 2000-Level Courses

AS/SC/KINE 2010 3.0 History of Kinesiology. This course defines and examines sociohistorical factors critical in developing the methods, forms, concepts, and issues in kinesiology. Three lecture hours per week. One term

Degree credit exclusions: AS/SC/PHED 1010 3.0, AS/SC/PHED 2010 3.0.

AS/SC/KINE 2020 3.0 Introduction to Health. This course provides an introduction to factors that influence health status. Included are health definitions, health promotion, chronic diseases, disease prevention and basic epidemiological principles. Three lecture hours per week. One term.
Degree credit exclusions: AS/SC/KINE 3080 3.0, AS/SC/PHED 3080 3.0.

AS/SC/KINE 2031 3.0 Human Anatomy. An overview of the organization and structure of the human body. Each of the following systems is examined with respect to cell morphology, cell and tissue arrangement, and inter-systems organization: skeletal, muscular, nervous, circulatory, lymphatic, respiratory, urinary, reproductive, and endocrine. Three lecture hours per week, two laboratory hours in alternate weeks. One term.
Degree credit exclusions: AS/SC/KINE 3070 3.0, AS/PHED 2030 3.0, SC/PHED 2030 4.0, AS/SC/PHED 2070 3.0, SC/PHED 2070 4.0, AS/PHED 3070 3.0, SC/PHED 3070 4.0, SC/ NATS 1650 6.0.

AS/SC/KINE 2049 4.0 Research Methods in Kinesiology. This course introduces students to the procedures utilized to design and conduct research in the discipline of kinesiology. Three lecture hours and two laboratory hours per week. One term.

AS/SC/KINE 2050 3.0 Analysis of Data in Kinesiology. An introduction to scientific method and the statistical analysis of experimental data. The conduct of simple experiments, techniques of naturalistic observation and the analysis of resulting data using fundamental concepts of descriptive and inferential statistics. Three lecture hours and one laboratory/tutorial hour per week. One term.
Prerequisite: AS/SC/KINE 2049 4.0.
Degree credit exclusions: SC/BIOL 3090 3.0, AS/ECON 2500 3.0, EN/ENVS 2010 3.0, ES/ ENVS 2010 6.0, ES/ENVS 2010 3.0, AS/SC/ GEOG 2420 3.0, AS/SC/AK/MATH 1131 3.0, AS/SC/MATH 1132 3.0, AS/SC/AK/MATH 2500 3.0, AS/SC/AK/MATH 2560 3.0, AS/SC/ PHED 2050 3.0, AS/SC/PSYC 2020 6.0, AS/ SC/PSYC 2021 3.0, AS/SOCI 2030 6.0, AS/ SOCI 3030 6.0.

AS/SC/KINE 20606.0 (2060 3.0) Special Topics. Specialized subjects are offered by members of the School of Physical Education, as announced annually. Not all Special Topics courses are eligible for Science (SC) credit

AS/KINE 2380 3.0 Introduction to Sport Administration. This course is designed to introduce students to the knowledge and skills needed to be successful in sport management. Topics include leadership styles, communication and change management skills, creative problem-solving and an introduction to event management and marketing. Three lecture hours per week. One term.

AS/SC/KINE 2470 6.0 Introduction to the Art and Science of Coaching. This course is an introduction to facets of coaching athletics. Topics include philosophy of coaching, personality and performance factors, fitness and training, nutrition, growth and development, athletic injuries, psychology of coaching, socialization in athletics, and a variety of special topics. Three lecture hours per week. Two terms.

Degree credit exclusions: AS/SC/KINE 2475 3.0, AS/SC/KINE 3610 3.0, AS/SC/KINE 4600 3.0, AS/SC/PHED 2470 6.0, AS/SC/PHED 3610 3.0, AS/SC/PHED 4600 3.0. Not open to students majoring in Kinesiology and Health Science.
Note: Successful completion of this course results in certification (Level I and Level II Theory) by the National Coaching Certification Program.

AS/SC/KINE 2475 3.0 Coaching: The Art and Science. This course introduces the fundamental principles involved in the coaching process. Background and philosophic issues related to the coach and the athlete are explored. Three lecture hours per week. One term.

Degree credit exclusions: AS/SC/KINE 2470 6.0. Not open to students who have completed or are taking any 3000- or 4000-level course in coaching.
Note: Upon successful completion of this course, students receive Level I Theory certification of the National Coaching Certificate Program.

AS/KINE 2480 6.0 Introduction to Leisure. Leisure as a medium for human expression is examined from an interdisciplinary and professional delivery service system perspective. Critical thinking, writing, research and service system analysis are emphasized in the course. Three lecture hours per week. Two terms.
Degree credit exclusion: AS/PHED 2480 6.0.
AS/SC/KINE 2490 3.0 Sport Therapy I. The purpose of the course is to provide students with a broad spectrum of knowledge relating to the physiological, psychosocial and pathological aspects of participation in sport with an emphasis on the management factors in injury prevention and remediation. Three lecture hours per week. One term.

Prerequisite or corequisite: AS/SC/KINE 2031 3.0.

Degree credit exclusion: AS/SC/PHED 2490 3.0.

## 3000-Level Courses

AS/SC/KINE 3011 3.0 Human Physiology I. The focus of this course is the cellular basis of human physiology. Basic principles of physiology are presented from the viewpoint of the simplest structural unit - the cell, in order to provide a sound basis for understanding complex multicellular organisms in subsequent courses. Three lecture hours per week. One term.

## Prerequisite: AS/SC/KINE 2031 3.0.

Degree credit exclusions: AS/SC/KINE 3070 3.0, AS/SC/PHED 2070 3.0, SC/PHED 2070 4.0, AS/ SC/PHED 3010 3.0, SC/PHED 3010 4.0, AS/ PHED 3070 3.0, SC/PHED 3070 4.0.

AS/SC/KINE 3012 3.0 Human Physiology II. The principles of homeostasis and physiological regulation are studied in relation to the cardiorespiratory, renal, locomotor, reproductive and digestive systems. Laboratory work is an essential part of the course. Three lecture hours per week, two laboratory hours in alternate weeks. One term.

Prerequisite: AS/SC/KINE 3011 3.0. Introductory biology or life science is highly recommended.
Degree credit exclusions: AS/SC/KINE 3070 3.0, AS/SC/PHED 2070 3.0, SC/PHED 2070 4.0, AS/ SC/PHED 3010 3.0, SC/PHED 3010 4.0, AS/ PHED 3070 3.0, SC/PHED 3070 4.0.

AS/SC/KINE 3020 3.0 Skilled Performance and Motor Learning I. An introduction to the analysis and development of skilled performance and the use of behaviour modification techniques to teach and modify it. Two lecture hours and two laboratory hours per week. One term
Prerequisites: AS/SC/KINE 2050 3.0; AS/SC/ PSYC 1010 6.0.
Degree credit exclusion: AS/SC/PHED 3020 3.0.
AS/SC/KINE 3030 3.0 Introduction to Biomechanical Analysis of Human Movement. Human movement is investigated with particular reference to the laws of physics (mechanics) and anatomical concepts as applied to joint motion and muscular action. Application of biomechanics to sports skills execution and laboratory exposure to contemporary analysis are included. Three lecture hours and one laboratory hour per week. One term.
Prerequisite: AS/SC/KINE 2031 3.0.
Degree credit exclusions: AS/SC/PHED 2040 3.0, AS/SC/PHED 3030 3.0.

AS/SC/KINE 30506.0 (3050 3.0) Special Topics. Seminars in specialized subjects are offered by members of the School of Physical Education, as announced annually. Not all Special Topics courses are eligible for Science (SC) credit.

AS/SC/KINE 3090 3.0 Psychology of Sport and Physical Activity. The theories and research of major topics in sport psychology are presented. Three lecture hours per week. One term.
Prerequisites: AS/SC/KINE 2050 3.0; AS/SC/ PSYC 1010 6.0.

Degree credit exclusion: AS/SC/PHED 3090 3.0 .

AS/KINE 3240 3.0 Behavioural Approach to Administration of Fitness and Sport. The focus of this course is on 'working with people'. Students learn the theory and practice of team building, communication and counselling skills. Three lecture hours per week. One term.
Prerequisite: Students must be in the Sport Administration Certificate Programme or the Fitness Assessment and Exercise Counselling Certificate Programme. Other students may be accepted with the permission of the course director.

Degree credit exclusion: AS/PHED 2420 3.0.
AS/KINE 3250 3.0 Business Management in Sport, Fitness and Allied Health. An overview of the key business management practices in the sport, fitness and allied health fields. The main emphasis is the development of an understanding of the theory, practices and skills which are essential to effective management. Three lecture hours per week. One term.

Prerequisites: AS/SC/KINE 10004.0 or AS/ SC/KINE 1000 3.0; AS/SC/KINE 10204.0 or AS/SC/KINE 1020 3.0.

Degree credit exclusions: AS/KINE 4430 3.0. Not open to students enrolled in the Fitness Assessment and Exercise Counselling Certificate Programme or the Sport Administration Certificate Programme.

AS/SC/KINE 3340 3.0 Physical Growth and Development. The major purpose of this course is to examine and discuss the literature and research studies in those aspects of physical growth and development that directly concern educators. Individual differences in growth and development are stressed throughout. Three lecture hours per week. One term.

Degree credit exclusion: AS/SC/PHED 3340 3.0.
AS/SC/KINE 3350 3.0 Physical Activity, Health and Aging. The course examines the aging process, lifestyle changes and the effect of physical activity on the health of aging adults. Three lecture hours per week. One term.

Prerequisites: AS/SC/KINE 10204.0 or AS/SC/ KINE 1020 3.0; AS/SC/KINE 2020 3.0.

Note: Internet use is required for this course.
AS/SC/KINE 3400 3.0 Current Trends in Fitness Assessment and Exercise Leadership. Detailed theoretical and practical instruction on exercise leadership and the administration and interpretation of the Canadian Physical Activity Fitness and Lifestyle Appraisal with a focus on health-related fitness. Two lecture hours and two laboratory hours per week. One term.
Prerequisites: AS/SC/KINE 10204.0 or AS/SC/ KINE 1020 3.0; AS/SC/KINE 2031 3.0; AS/SC/ PKIN 7500 2.0; permission of the course director.
Corequisite: AS/SC/KINE 30113.0 or AS/SC/ KINE 3070 3.0.
Degree credit exclusion: AS/SC/PHED 3400 3.0.
AS/KINE 3420 6.0 Creativity in Dance. This course develops creative approaches in dance through technical training and improvisational
sessions. Key topics include an awareness of movement, critical analysis of movement forms and techniques, personal development of rhythm, space, design, energy flow and expression. Four combined lecture and studio hours per week. Two terms.
Degree credit exclusion: AS/PHED 3420 6.0.
AS/KINE 3430 3.0 Sports in Canadian Life. A historical examination of sports in Canadian society, including their origin, introduction to North America, and development in Canada up to the present. The influence of Canadian culture as a whole on the development of the selected sports is considered. Three lecture hours per week. One term.
Degree credit exclusion: AS/PHED 3430 3.0.
AS/KINE 3440 3.0 International Physical Education and Sport. A comparative analysis of recent developments and characteristics of physical education and sports in representative nations and world regions. The course covers objectives, methods, personnel, and facilities in physical education, and evaluation of selected national sports programmes. Three lecture hours per week. One term.
Degree credit exclusion: AS/PHED 3440 3.0.
AS/SC/KINE 3450 3.0 Athletic Injuries. An introductory examination of prevention, recognition and treatment of common athletic injuries. Follow-up remedial procedures and therapeutic modalities to enhance healing are also studied. Two lecture hours and two laboratory hours per week. One term.
Prerequisite: AS/SC/KINE 2031 3.0.
Degree credit exclusion: AS/SC/PHED 3450 3.0.

AS/SC/KINE 3460 3.0 Regional Human Anatomy I. A comprehensive study of the structures of the human body. This course includes an examination of the upper limb, lower limb, and back. Two lecture hours and two laboratory hours per week. One term.
Prerequisite: AS/SC/KINE 20313.0 or AS/SC/ KINE 3070 3.0.
Degree credit exclusion: AS/SC/PHED 3460 3.0.

AS/SC/KINE 3465 3.0 Regional Human Anatomy II (formerly AS/SC/KINE 3050C 3.0 - before Summer, 1998). This course examines, in detail, the anatomical regions of the head, neck, back and thorax. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 2031 3.0.
Degree credit exclusion: AS/SC/KINE 3050C 3.0 .

AS/SC/KINE 3480 3.0 Outdoor and Experiential Education. This course introduces fundamental principles and practices of outdoor and experiential education. Current theories, issues, trends, and practices are discussed and the objectives of a range of outdoor programmes are considered. Three lecture hours per week. One term.

Degree credit exclusion: AS/SC/PHED 3480 3.0.

AS/KINE 3490 3.0 Politics and Policy in the Sport Industry. Discussions about power, politics and ethics as they relate to current sport policy issues are explored. Policy development and policy analysis skills are learned and applied to issues in professional sport, amateur sport and university athletics. Three lecture hours per week. One term.
Degree credit exclusion: AS/PHED 3490 3.0.
AS/KINE 3510 3.0 Sport Marketing and Event Management. The purpose of this course is to provide students with both the theory and practical skills required to organize and manage events. Additionally, students have the opportunity to learn from seasoned professionals working in this unique field. Three lecture hours per week. One term.

Degree credit exclusion: AS/PHED 3510 3.0.
AS/KINE 3520 6.0 Physical Activity and the Young Child. Introduction to the study of children's movement and development of skill in various forms of physical activity. It acquaints students with the development of elementary school physical education and provides a rationale for physical education in the total educational framework. Three hours per week. Two terms.

Degree credit exclusion: AS/PHED 3520 6.0.
AS/KINE 3530 3.0 Theories of Play. A
critical analysis of definitions, concepts, philosophies and assumptions of classical, recent and modern theories of play with implications for macro and micro programming and planning for play service systems. Three lecture hours per week. One term.

Prerequisite: A 1000-level Social Science course.
Degree credit exclusion: AS/PHED 3530 3.0.
AS/KINE 3540 3.0 Play Environments. The role of play environments from both a macro and micro theoretical and applied perspective. How does the cultural, political, economic, ecological and psycho-social environment shape play behaviour? Three hours per week. One term.
Degree credit exclusion: AS/PHED 3540 3.0.
AS/SC/KINE 3570 3.0 Theory and Methodology of Training. The course provides an intensive examination of the scientific and methodological theories, techniques, and planning methods utilized in the training of the skilled athlete, with practical application to selected sports. Three lecture hours per week. One term.
Prerequisites: AS/SC/KINE 10004.0 or AS/ SC/KINE 1000 3.0; AS/SC/KINE 10204.0 or AS/SC/KINE 1020 3.0.

Degree credit exclusion: AS/PHED 3570 3.0.
AS/KINE 3580 3.0 Coaching: The Strategy and Tactics of Sport. This course investigates the conceptual basis of strategic and tactical planning for sports performance. An emphasis is placed on analyzing the variety
of sources that contribute to the conceptual framework a coach may use in formulating strategic and tactical plans. Three lecture hours per week. One term.
Prerequisites or corequisites: AS/SC/KINE 3570 3.0; AS/SC/KINE 3610 3.0.
Degree credit exclusions: AS/PHED 3050N 3.0, AS/PHED 3580 3.0.

AS/SC/KINE 3585 3.0 Clinical Placement in Sport Therapy. This course provides students with the opportunity to gain practical experience in clinical situations within the profession of sport therapy. Students integrate theory and practice in actual workplace situations by working directly with sports medicine specialists. Ten hours clinical placement per week, five one-and-a-half hour seminars. One term.
Prerequisites: Open only to Sport Therapy Certificate students, with permission of the Sport Therapy Programme Coordinator.

AS/SC/KINE 3600 3.0 Sport Therapy II. This course provides students with a broad spectrum of knowledge relating to the physiological and pathological aspects of participation in sport with an emphasis on detection and human factors in injury prevention and remediation. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 2490 3.0.
Degree credit exclusion: AS/SC/PHED 3600 3.0.

AS/SC/KINE 3610 3.0 Coaching: Psychological and Sociological Aspects. The course focuses upon the application of principles of psychology to coaching. An examination of philosophy of coaching, legal liability, socialization and team dynamics is also undertaken with a view to establishing effective coaching methodology. Three lecture hours per week. One term.
Prerequisites: AS/SC/KINE 2031 3.0; AS/SC/ PSYC 1010 6.0. Beginning 2000/2001: AS/SC/ KINE 2031 3.0; AS/SC/KINE 2475 3.0; AS/SC/ PSYC 1010 6.0.
Degree credit exclusions: AS/SC/KINE 2470 6.0, AS/SC/PHED 2470 6.0, AS/SC/PHED 3610 3.0.

AS/KINE 3620 3.0 Sociology of Sport I. Sociological analysis of sport in contemporary society with particular emphasis on issues relating to children, gender, and the Canadian scene. Three lecture hours per week. One term.
Degree credit exclusion: AS/SC/PHED 3620 3.0 .

AS/KINE 3630 3.0 Race and Sport. The purpose of the course is to explore the concepts of "race" and its ideologies applied to sport, the unique conditions of minority athletes, and historical transformations. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 2010 3.0.

AS/SC/KINE 3640 3.0 Epidemiology of Physical Activity, Fitness and Health (formerly AS/SC/KINE 3050B 3.0 - before 1998/99). This course provides an in-depth assessment of the epidemiology of physical activity, fitness and health. General concepts of epidemiology are covered, as well as associations among activity, exercise, fitness and disease/risk factors. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 20203.0 or AS/SC/ KINE 3080 3.0.
Degree credit exclusion: AS/SC/KINE 3050B 3.0.

AS/KINE 3650 3.0 Gender and Sport. This course examines sociohistorical links between gender and social power expressed in sporting contexts, normally considered a male domain. The resistance to such notions by women and girls challenges received values, practices, and scholarship. Does any sport have a gender? Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 2010 3.0.
Degree credit exclusions: AS/KINE 4350 6.0, AS/PHED 4050A 6.0, AS/PHED 4350 6.0.

## 4000-Level Courses

Note: Only Honours standing students may register in 4000-level Kinesiology and Health Science courses.

AS/SC/KINE 4010 3.0 Physiology of Exercise. The study of the physiological mechanisms involved during physical activity. The course covers the physiological effects of exercise and training upon the neuromuscular, cardiovascular, respiratory, and metabolic systems. Three lecture hours per week, two laboratory/tutorial hours in alternate weeks. One term.
Prerequisite: AS/SC/KINE 30113.0 or AS/SC/ KINE 3070 3.0.
Degree credit exclusion: AS/SC/PHED 4010 3.0.

AS/SC/KINE 4020 3.0 Human Nutrition I. Basic energy and regulatory nutrients are examined, followed by an applied nutrition section in weight control, eating disorders, sport nutrition, food as drugs and food safety. Metabolic interrelationships and health associations are applied throughout. Three lecture hours per week. One term.
Prerequisites: AS/SC/KINE 2020 3.0; AS/SC/ KINE 3011 3.0.
Degree credit exclusions: AS/SC/KINE 3080 3.0, AS/SC/KINE 4470 3.0, AS/SC/PHED 3080 3.0, AS/SC/PHED 4470 6.0, AS/SC/ PHED 4470 3.0.

AS/SC/KINE 40506.0 (4050 3.0) Special Topics. Seminars in specialized subjects are offered by members of the School of Physical Education, as announced annually. Not all Special Topics courses are eligible for Science (SC) credit.

AS/SC/KINE 40606.0 (4060 3.0) Independent Studies in Kinesiology and Health Science. Students undertake a research project under the supervision of a faculty member. This should include a library investigation, and may include laboratory and/or field investigations. A substantial paper and a poster presentation are part of the course requirements.
Prerequisite: Normally only available to students after completion of 84 credits.
Note: See the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for Faculty of Arts regulations on independent reading courses. Not all Independent Studies topics are eligible for Science (SC) credit.

AS/KINE 4350 3.0 Women and Sport in the Twentieth Century. This course examines the accelerating emergence of women and girls in sport traditionally organized as exclusive male domain. The dynamics between women's aspirations in competitive sport, and cultural/ systemic barriers to equality, are studied. Three lecture/discussion hours per week. One term.
Prerequisites: AS/SC/KINE 2010 3.0; AS/SC/ KINE 3650 3.0.
Degree credit exclusions: AS/KINE 4350 6.0, AS/ PHED 4050A 6.0, AS/PHED 4350 6.0.
Note: Internet use is required for this course.
AS/SC/KINE 4400 6.0 Advanced Fitness/ Lifestyle Assessment and Counselling. Students receive supervised, practical experience in designing, administering and interpreting fitness assessments along with the follow-up exercise counselling for athletes and the general public. Two lecture hours and three laboratory hours per week. Two terms.
Prerequisites: AS/SC/KINE 3400 3.0; permission of the course director.
Prerequisite or corequisite: AS/SC/KINE 4010 3.0.

Degree credit exclusion: AS/SC/PHED 4400 6.0.
SC/KINE 4410 3.0 Cellular and Molecular Physiology for the Health Sciences. An
overview of mammalian gene expression, membrane biochemistry, molecular neuroscience and techniques in molecular biology, with an emphasis on health, disease, exercise and adaptation. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 3012 3.0.
AS/KINE 4420 3.0 Relaxation: Theory and Practice. This course focuses on an understanding of the physiological and psychological basis of relaxation as a self-management procedure and in the utilization of relaxation strategies in sport, health and physical activity. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 30113.0 or AS/SC/ KINE 3070 3.0; or permission of the course director.
Degree credit exclusion: AS/PHED 4420 3.0.
AS/KINE 4430 3.0 Business Skills for Sport and Fitness Professionals. This course includes theory and detailed practical instruction about key management/
organizational processes and their successful application to sport and fitness-related business initiatives. Three lecture hours per week. One term.
Prerequisite: Students must be in the Sport Administration Certificate Programme or the Fitness Assessment and Exercise Counselling Certificate Programme.
Degree credit exclusions: AS/KINE 3250 3.0, AS/PHED 4430 3.0.

AS/SC/KINE 4440 3.0 Advanced Exercise Physiology I: Muscle. Advanced topics in exercise physiology and biochemistry, including energy metabolism, fatigue, skeletal muscle physiology, adaptations to exercise and training. Applications of exercise to disease states, animal laboratories, and discussions of original research articles in exercise physiology. Three class hours (lectures/laboratories/tutorials) per week. One term.
Prerequisite: AS/SC/KINE 4010 3.0.
Degree credit exclusion: AS/SC/PHED 4440 3.0.

AS/SC/KINE 4450 3.0 Advanced Exercise Physiology II: Cardiovascular.

An overview of the cardiovascular physiology of exercise at both the central (heart) and peripheral (blood vessels, capillaries) levels, with an emphasis on health, disease, exercise and adaptation. Physiology adaptations at the molecular level are emphasized. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 4010 3.0.
AS/SC/KINE 4451 3.0 Advanced Biomechanical Analysis of Human Movement (Part I - Kinematics). An examination of human motion, including the fundamentals of motion description, mechanics, and investigative techniques in biomechanics with an emphasis on the kinematics of movement. Special topics and problems relevant to students' interests are covered in seminars and small group laboratory sessions. Two lecture hours per week, plus laboratory hours. One term.
Prerequisite: AS/SC/KINE 3030 3.0.
Degree credit exclusion: AS/SC/PHED 4450 6.0.
AS/SC/KINE 4452 3.0 Advanced Biomechanical Analysis of Human Movement (Part II - Kinetics). An examination of human motion, including the fundamentals of motion description, mechanics, and investigative techniques in biomechanics with an emphasis on the kinetics of movement. Special topics and problems relevant to students' interests are covered in seminars and small group laboratory sessions. Two lecture hours per week, plus laboratory hours. One term.
Prerequisite: AS/SC/KINE 4451 3.0.
Degree credit exclusion: AS/SC/PHED 4450 6.0.
AS/SC/KINE 4460 3.0 Occupational Biomechanics (formerly AS/SC/KINE 4050A 3.0 - before 1999/2000). Use of biomechanics in the occupational setting is introduced. Topics include workplace assessment techniques, injury mechanisms, tissue mechanics, and the (re)design of tools and workplace. Specific
disorders and issues involving the upper extremity and lower back are addressed. Two lecture hours and two laboratory hours per week. One term.
Prerequisite: AS/SC/KINE 3030 3.0.
Degree credit exclusion: AS/SC/KINE 4050A 3.0.

AS/KINE 4480 3.0 Sociology of Sport II. This course focuses on social problems in sport. Topics include inequality, sport as work, sport as a spectacle, and sport and the state. Three lecture hours per week. One term.
Prerequisite: AS/KINE 36203.0 or permission of the course director.
Degree credit exclusion: AS/PHED 4480 3.0.
AS/KINE 4490 3.0 Philosophy and Issues in Physical Education and Sport. Examination of the philosophical foundations of physical education; their manifestation and other influences on development of physical education programmes; identification and critical analysis of current issues in physical education and sport. Three lecture hours per week. One term.
Prerequisites: 90 credits completed; permission of the course director.
Degree credit exclusion: AS/PHED 4490 3.0.
AS/SC/KINE 4500 3.0 Skilled Performance and Motor Learning II. Current experimental and theoretical issues relevant to motor control and motor learning, including the role of perception in sensory-motor coordination. Two lecture hours and two laboratory hours per week. One term.
Prerequisite: AS/SC/KINE 30203.0 or permission of the course director.
Degree credit exclusion: AS/SC/PHED 4500 3.0.

AS/SC/KINE 4510 3.0 Cellular and Molecular Basis of Muscle Physiology. Topics include muscle development, musclespecific gene expression, molecular basis of muscle contraction, biochemical plasticity of muscle, sarcolemmal and nuclear signal transduction in muscle. (Same as SC/BIOL 4510 3.0.) Three lecture hours per week. One term.
Prerequisite(s): AS/SC/KINE 3011 3.0, or AS/ SC/KINE 3070 3.0, or both SC/BIOL 20204.0 and SC/BIOL 2021 4.0.
Degree credit exclusions: AS/SC/PHED 4510 3.0, SC/BIOL 4510 3.0.

AS/SC/KINE 4520 3.0 Advanced Seminar in Sport Psychology. The course provides an in-depth examination of selected topics in sport psychology: motivation, imagery, self-regulation and attention. The emphasis is on the application of mental training skills in sport settings. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 30903.0 or permission of the course director.
Degree credit exclusion: AS/SC/PHED 4520 3.0.

AS/KINE 4530 3.0 Sport Administration Fieldwork Placement. Students spend a minimum of 40 hours working in an administrative setting related directly to the area of sport administration. The practical experience is supported by lectures, seminars, reports and readings. Three hours per week. One term.
Prerequisites: AS/KINE 3490 3.0; students must be in the Sport Administration Certificate Programme.
Degree credit exclusion: AS/PHED 4530 3.0.
AS/SC/KINE 4545 6.0 Sport Administration Applied Research Perspectives. This
course provides students with an overview of selected current issues facing organizations in the sport industry as well as a grounding in social research methods. Students conduct applied research addressing problems faced by sport organizations. Three lecture hours per week. Two terms.
Prerequisites: AS/SC/KINE 20503.0 or equivalent; AS/KINE 2380 3.0; AS/KINE 3240 3.0; AS/KINE 3490 3.0; AS/KINE 3510 3.0.

AS/SC/KINE 4550 6.0 Coaching Field Experience. The student works with a mentor coach for a complete sport season and submits a comprehensive log book. The field experience includes physiological testing, videotape analysis and three other coaching tasks. Three hours per week. Two terms.
Prerequisites or corequisites: AS/SC/KINE 4610 3.0. Open only to students in the Coaching Certificate Programme.
Degree credit exclusion: AS/SC/PHED 4550 6.0.

AS/SC/KINE 4570 3.0 Sports Injury Assessment. An advanced course in the recognition and assessment of common athletic injuries. The course emphasizes a detailed understanding of surface anatomy and landmarking, injury mechanics and assessment techniques, and the implications of injury to a body part. Two lecture hours and one laboratory session per week. One term.
Prerequisites: AS/SC/KINE 3450 3.0; AS/SC/ KINE 3600 3.0; current CPR and First Aid; clinical and field experience. Open only to students in the Sport Therapy Certificate stream.
Prerequisite or corequisite: AS/SC/KINE 3460 3.0.

Degree credit exclusion: AS/SC/PHED 4570 3.0.

AS/SC/KINE 4580 3.0 Treatment and Rehabilitation of Sports Injuries. An advanced course in the treatment and rehabilitation of common athletic injuries including generalized body reactions to injury, specific tissue responses to trauma, the immediate treatment of injuries, the long-term rehabilitation of injuries, and the use of modalities. Two lecture hours and two laboratory hours per week. One term.

Prerequisites: AS/SC/KINE 4570 3.0; current $C P R$ and First Aid; clinical and field experience. Open only to students in the Sport Therapy Certificate stream.
Degree credit exclusion: AS/SC/PHED 4580 3.0.

AS/SC/KINE 4590 6.0 Sport Therapy Seminar. An advanced level course in sport therapy applying theoretical background to sport-related injuries and rehabilitation. Two seminar hours per week plus extra out-of-class hours. Two terms.

Prerequisites: AS/SC/KINE 3450 3.0; AS/SC/ KINE 3460 3.0; AS/SC/KINE 3600 3.0.

Prerequisites or corequisites: AS/SC/KINE 3585 3.0; AS/SC/KINE 4570 3.0; AS/SC/KINE 4580 3.0
Degree credit exclusion: AS/SC/PHED 4590 6.0.

AS/SC/KINE 4600 3.0 Coaching: Science and Methodology. The course focuses on coaching methodology and scientific principles applied to coaching. Methodology includes planning, conducting and evaluating training sessions, and time, stress and team management. Systems of training, scientific conditioning methods and other influences on conditioning and performance are included. Three lecture hours per week. One term.
Prerequisites: AS/SC/KINE 30113.0 or AS/ SC/KINE 3070 3.0; AS/SC/KINE 3610 3.0.
Degree credit exclusions: AS/SC/KINE 2470 6.0, AS/SC/PHED 2470 6.0, AS/SC/PHED 46003.0

Note: Levels I, II and III Theory of the National Coaching Certification Programme are granted with the successful completion of AS/SC/KINE 36103.0 and AS/SC/KINE 4600 3.0.

AS/SC/KINE 4610 3.0 Advanced Coaching Seminar. The course consists of selected topics in coaching. A review of the literature with an application to coaching is presented from the areas of psychology, physiology, sociology, sports management, etc. Guest lecturers and symposiums are featured. Three hours per week. One term.
Prerequisites: AS/SC/KINE 3610 3.0; AS/SC/ KINE 4600 3.0.

Degree credit exclusion: AS/SC/PHED 4610 3.0 .

AS/KINE 4620 3.0 Counselling for Sport and Leisure. This course provides a theoretical basis of behaviour, attitude change and motivation as it pertains to counselling in sport, fitness and leisure. Practice of the counselling skills with supervised auditory and visual feedback is provided. Three hours per week. One term.

Prerequisite: AS/SC/PSYC 1010 6.0.
Degree credit exclusion: AS/PHED 4620 3.0.
AS/KINE 4630 3.0 The Olympic Movement and Its Influence on Canadian Sport. This course analyzes the historical origin and evolution of the world's largest sport spectacle. The Olympics have blended political games and secularized ideals with athletics. Students
assess the consequences of its domination over Canadian high-performance sport. Three lecture hours per week. One term.
Prerequisites: AS/KINE 3430 3.0; AS/KINE 3440 3.0.

Degree credit exclusion: AS/PHED 4630 3.0.
AS/SC/KINE 4640 3.0 Lifestyle and Current Health Issues. This course explores the relationship between health knowledge, health attitudes and health actions of individuals in modern society. Decision-making processes are investigated relative to levels of growth and development and the quality of interactions in a variety of environments. Three lecture hours per week. One term.
Prerequisite: AS/SC/KINE 20203.0 or AS/SC/ KINE 3080 3.0.
Degree credit exclusion: AS/SC/PHED 4640 3.0.

AS/SC/KINE 4650 6.0 Honours Thesis. A thesis involving empirical or bibliographic research. Students arrange for supervision by a member of the School of Physical Education. Contact the Undergraduate Office for details.
Prerequisites: Permission of the School of Physical Education; students must be in a Specialized Honours programme in Kinesiology and Health Science and have completed 84 credits.

AS/SC/KINE 4660 3.0 Exercise and Addictive Behaviours. This course examines a variety of topics in the area of exercise and health psychology with a particular emphasis on the adaptive and maladaptive aspects of exercise, as well as on issues concerning body image, food intake, and eating disorders. Three lecture hours per week. One term.
Prerequisites: AS/SC/PSYC 1010 6.0; AS/SC/ KINE 20203.0 or AS/SC/KINE 3080 3.0.

AS/SC/KINE 4710 3.0 Psychology of Health and Chronic Disease (formerly AS/SC/KINE 4050D 3.0 - before 1997/98). This course explores the role of psychological variables in the development, progression, and treatment of chronic diseases such as coronary heart disease, cancer and AIDS. Other critically reviewed topics include stress, substance abuse (smoking and alcohol), and injury and violence. Three lecture hours per week. One term.
Prerequisite: AS/SC/PSYC 1010 6.0.
Degree credit exclusions: AS/SC/KINE 4050D 3.0, AS/SC/PSYC 3440 3.0.

## Kinesiology and Health Science Practicum Programme

Each BA and BSc student with a major or minor in Kinesiology and Health Science is required to successfully complete the practicum programme. The practicum activities are grouped into the following areas: gymnastics/dance, aquatics, and individual, dual, and team sports. A detailed description of the course offerings and requirements is available from the School of Physical Education.

All students enrolled in Kinesiology and Health Science programmes must complete the practicum core, which consists of 2 practicum credits in each of the following six areas: gymnastics/dance, aquatics, team sports, individual and dual sports, track and field, and emergency care, for a total of 12 practicum credits. Students in the Health and Kinesiology Stream must complete an additional 6 credits for a total of 18 practicum credits. Students in the Applied Certificate Stream must complete an additional 4 credits for a total of 16 practicum credits. Students in the Discipline Specialization Stream must complete an additional 2 credits for an overall total of at least 14 practicum credits.

## Practicum Course List

While these courses are required of all Kinesiology and Health Science students in order to graduate, they are not applied towards the academic degree requirements in Kinesiology and Health Science.
In the case of practicum courses, the first digit of the course number indicates the practicum area, not the level of the course. The number which follows the four-digit course number indicates the number of practicum credits in the course. One practicum credit represents a total of 12 contact hours of sports activity or equivalent.
Practicum courses provide professional preparation for Kinesiology and Health Science students and as such may require vigorous physical activity. It is strongly recommended that every student in the practicum programme have a medical examination prior to participating. Disabled students are considered on a case-by-case basis and could be given waivers for activities which cannot be completed.
Practicum courses are open to both men and women unless otherwise specified.

## Gymnastics Courses

AS/SC/PKIN 1000 2.0 Basic Gymnastics. AS/SC/PKIN 1001 2.0 Gymnastics I.
AS/SC/PKIN 1040 2.0 Rhythmic Gymnastics I (Women).
AS/SC/PKIN 19002.0 (3.0, 4.0, 6.0) Special Topics: Gymnastics.

## Aquatics Courses

AS/SC/PKIN 2000 2.0 Swimming I. AS/SC/PKIN 2010 2.0 Swimming II. AS/SC/PKIN 2040 2.0 Lifesaving I.
AS/SC/PKIN 2050 2.0 Lifesaving II: Advanced Lifesaving.
AS/SC/PKIN 2070 2.0 Skin and Scuba Diving.
AS/SC/PKIN 2080 2.0 Synchronized Swimming I (Women).
AS/SC/PKIN 2120 2.0 Water Polo I.
AS/SC/PKIN 29002.0 (3.0, 4.0, 6.0) Special Topics: Aquatics.

## Team Sports Courses

AS/SC/PKIN 3000 2.0 Basketball I. AS/SC/PKIN 3005 3.0 Basketball I. AS/SC/PKIN 3010 2.0 Basketball II. AS/SC/PKIN 3015 3.0 Basketball II. AS/SC/PKIN 3020 2.0 Basketball III. AS/SC/PKIN 3040 2.0 Field Hockey I. AS/SC/PKIN 3050 2.0 Field Hockey II. AS/SC/PKIN 3080 2.0 Football I. AS/SC/PKIN 3090 2.0 Football II.

AS/SC/PKIN 3120 2.0 Hockey I.
AS/SC/PKIN 3130 2.0 Hockey II.
AS/SC/PKIN 3140 2.0 Hockey III.
AS/SC/PKIN 3240 2.0 Rugby I.
AS/SC/PKIN 3280 2.0 Soccer I.
AS/SC/PKIN 3290 2.0 Soccer II.
AS/SC/PKIN 33202.0 Volleyball I.
AS/SC/PKIN 33302.0 Volleyball II.
AS/SC/PKIN 3360 2.0 Beach Volleyball I.
AS/SC/PKIN 3400 2.0 Softball.
AS/SC/PKIN 3500 2.0 Team Handball I.
AS/SC/PKIN 39002.0 (3.0, 4.0, 6.0) Special Topics: Team Sports.

Individual and Dual Sports Courses
AS/SC/PKIN 41002.0 Golf I.
AS/SC/PKIN 4110 2.0 Golf II.
AS/SC/PKIN 4150 2.0 Court Games.
AS/SC/PKIN 4210 2.0 Squash II.
AS/SC/PKIN 4350 2.0 Tennis I.
AS/SC/PKIN 4360 2.0 Tennis II.
AS/SC/PKIN 4365 2.0 Tennis III.
AS/SC/PKIN 4370 2.0 Badminton I.
AS/SC/PKIN 4380 2.0 Badminton II.
AS/SC/PKIN 4500 2.0 Alpine Skiing I (Downhill).
AS/SC/PKIN 4510 2.0 Alpine Skiing II (Downhill).
AS/SC/PKIN 4520 2.0 Cross-Country Skiing I.
AS/SC/PKIN 4530 2.0 Cross-Country Skiing II: Skating Technique.
AS/SC/PKIN 49002.0 (3.0, 4.0, 6.0) Special Topics: Individual Sports.

## Dance Courses

AS/SC/PKIN 5000 2.0 Basic Movement.
AS/SC/PKIN 5070 2.0 Ballroom Dancing I. AS/SC/PKIN 5075 2.0 Ballroom Dancing II. AS/SC/PKIN 5080 2.0 Folk and Social Dance. AS/SC/PKIN 5085 2.0 Country Dancing. AS/SC/PKIN 5090 2.0 Jazz Dance I. AS/SC/PKIN 5100 2.0 Introduction to Dance. AS/SC/PKIN 5110 2.0 Modern Dance I. AS/SC/PKIN 59002.0 (3.0, 4.0, 6.0) Special Topics: Dance.

## Track and Field Courses

AS/SC/PKIN 6000 2.0 Track and Field I.
AS/SC/PKIN 6010 2.0 Track and Field II.
AS/SC/PKIN 69002.0 (3.0, 4.0, 6.0) Special Topics: Track and Field.

## Independent Studies Course

AS/SC/PKIN 7000 2.0 Independent Studies.

## Emergency Care Course

AS/SC/PKIN 7500 2.0 Emergency Care.

## Additional Courses

AS/SC/PKIN 8030 2.0 Weight Training.
AS/SC/PKIN 8040 2.0 Elementary and Recreational Games.
AS/SC/PKIN 8060 4.0 Personal Training.
AS/SC/PKIN 8080 2.0 Mountain Biking.
AS/SC/PKIN 8110 2.0 Outdoor Pursuits: Canoeing I.
AS/SC/PKIN 8120 2.0 Outdoor Pursuits: Canoeing II: White-Water Canoeing.
AS/SC/PKIN 8130 2.0 Outdoor Pursuits: Bicycle Touring.
AS/SC/PKIN 8140 2.0 Outdoor Pursuits: Camping I.
AS/SC/PKIN 8200 2.0 Tai Chi I.

AS/SC/PKIN 8210 2.0 Tai Chi II.
AS/SC/PKIN 83002.0 Yoga I.
AS/SC/PKIN 8400 2.0 Karate-Do I.
AS/SC/PKIN 89002.0 (3.0, 4.0, 6.0) Special Topics.

## Labour Studies - Arts

Programme Office (Division of Social Science):
S741 Ross (416) 736-5054
Coordinator of the Programme:
P. Craven, S759 Ross, (416) 736-5678

The Labour Studies Programme allows students to explore the world of work and workers and to better prepare themselves for employment in the labour movement, private industry, government service, journalism, social work, law, teaching, and many other settings. Labour Studies courses are offered in the Division of Social Science and elsewhere in the University.
Students may enrol in an Honours (Interdisciplinary Double Major) programme in the Faculty of Arts, leading to an Honours B.A. Labour Studies is normally linked to a major in Anthropology, Economics, History, Political Science, Psychology, Sociology, or Women's Studies. Links to certain other programmes may be arranged.
After the B.A., students may go on to postgraduate work in Labour Studies, Industrial Relations or Human Resource Management, or to professional training in Law and other fields.
Students majoring in Labour Studies should meet with the Programme Coordinator annually (usually in March/April) to arrange their study lists. Students who do not take advising appointments cannot be assured places in Labour Studies courses.
Note: For specific programme requirements, please consult the Programmes of Study section, Faculty of Arts. Not all courses listed in this section will necessarily be offered in any given year. Consult the division of Social Science's supplemental calendar for details on annual course offerings.

## Divisional and Departmental Courses in Labour Studies

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.

## Core Courses (required):

AS/SOSC 2210 9.0 Labour Relations in Canada: An Introduction.
AS/SOSC 4210 6.0 Collective Bargaining Simulation.

Optional Labour Studies Courses (choose at least 12 credits from the following list):
AS/SOSC 3130 6.0 Women and Work: Production and Reproduction (Cross-listed to: AS/AK/GL/WMST 3510 6.0, AK/SOSC 3380 6.0).

AS/SOSC 3210 6.0 The Working Class in Canadian Society. (Cross-listed to: AS/HIST 3531 6.0)
AS/SOSC 3240 3.0 Labour and Globalisation I: North American Perspectives.
AS/SOSC 3241 3.0 Labour and Globalisation II: Comparative Perspectives.
AS/SOSC 3380 6.0 Law, Labour and the State. AS/SOSC 3990Q 3.0 Unions, Workers and Democracy.

Optional Related Courses (choose no more than twelve credits; additional courses from "Optional Labour Studies" list may be substituted):
Faculty of Arts
AS/ANTH 3450 3.0 Negotiations and Bargaining.
AS/ECON 3069 3.0 Canadian Economic Development to 1870 (Degree credit exclusion: AS/HIST 3560 3.0).
AS/ECON 3079 3.0 Canadian Economic Development since 1870 (Degree credit exclusion: AS/HIST 3561 3.0).
AS/ECON 3200 3.0 The Economics of Industry.
AS/ECON 3240 3.0 Labour Economics: Theory.
AS/ECON 3250 3.0 Labour Economics: Institutions.
AS/ECON 4240 3.0 Further Topics in Labour Economics.
AS/HIST 3560 3.0 Canadian Economic Development to 1870 (Degree credit exclusion: AS/ECON 3069 3.0).
AS/HIST 3561 3.0 Canadian Economic Development: 1870-1985 (Degree credit exclusion: AS/ECON 3079 3.0).
AS/HIST 3670 3.0 U.S. Business History since 1880: The Origins and Consequences of Managerial Capitalism.
AS/POLS 3140 3.0 Political Economy of Labour in Canada (Cross-listed to: AS/SOSC 3280 3.0).
AS/POLS 4091 6.0 Contemporary Marxist Theory.
AS/POLS 4470 3.0 Working Class Politics in Capitalist Democracies (formerly AS/POLS 4710 3.0).
AS/PSYC 3570 3.0 Organizational Psychology.
AS/SOSC 3164 6.0 Political Economy of Environmental and Occupational Health.
AS/SOSC 32803.0 Political Economy of Labour in Canada (Cross-listed to: AS/POLS 3140 3.0).
AS/SOSC 4240 6.0 Labour Studies Placement.
AS/SOCI 3350 6.0 Social Movements.
AS/SOCI 3600 3.0 Sociology of Work and Industry.
AS/SOCI 3610 3.0 Sociology of Occupations and Professions.
AS/SOCI 3620 6.0 Formal Organizations.
AS/SOCI 4090C 6.0 Issues of Sociology of Work and Labour.
Atkinson College
AK/ADMS 3400 3.0 Occupational Health and Safety.
AK/ADMS 3480 3.0 Human Resource Management.
AK/ECON 3610 3.0 Labour Economics.

AK/ECON 3620 3.0 The Economics of Unemployment.
AK/ECON 4160 3.0 Theory and Practice of Arbitration.
AK/SOSC 3300 6.0 New Technology and Social Change.
AK/SOSC 3380 6.0 Women and Work: Production and Reproduction (Cross-listed to: AS/AK/GL/WMST 3510 6.0, AS/SOSC 3130 6.0).

AK/SOSC 3410 6.0 Work and the Workplace.

## Glendon College

GL/HIST 4220 6.0 Canadian Labour \& Immigration History.
GL/WMST 2605 6.0 Femmes, familles et travail au Canada 1550-1995 (en français)
GL/WMST 3510 6.0 Women and Work: Production and Reproduction (Cross-listed to: AS/AK/WMST 3510 6.0, AS/SOSC 3130 6.0, AK/SOSC 3380 6.0).
GL/WMST 3970 3.0 Gender Dynamics of Work.

## Schulich School of Business

Any undergraduate Industrial Relations course (permission required).
Students are advised to check departmental and divisional calendars for up-to-date listings, descriptions and prerequisites, and to discuss current course offerings and programme requirements with the Labour Studies Programme Coordinator annually.

## Languages, Literatures and Linguistics - Arts

Department Office:
S561 Ross, (416) 736-5016
Web Address:
http://dIII.yorku.ca/languages.html
Associate Lecturer and Chair of the Department: N. Elson

Faculty Members Emeriti: D. Holoch, M.L. Kay, L. Peña, H. Schueler Professor:
M.B. Brown, S. Ehrlich, S. Embleton, G. Guy, R. King, D. Mendelsohn, R.W.F. Pope

## Associate Professors:

W.P. Ahrens, E. Anderson, D. Armborst, R. Bahry, R. Belladonna, M. Buccheri, E. Costa, J. Dingley, R. Fink, K.J. Golby, M. Lockshin, M. Magnotta, R.B. Marcus, B. Miller, J. Picchione, C. Silva, R. Sinyor,
I. Smith, A. Testaferri, S.-Y. Tsau,
J. Vizmuller-Zocco, M.J. Webber

Assistant Professors:
P. Avery, M. Jokiniemi, R. Scott, A. Shulman, V.G. Stephens

Sessional Assistant Professor: M. Noonan

Associate Lecturers:
G. Colussi-Arthur, N. Elson, M. Frescura, L. Karumanchiri, I. Klein, N. Ota,
L. Pietropaolo, P. Valle-Garay

In addition to the language, literature and culture courses listed below, the Department offers courses in linguistics leading to the BA degree in the Ordinary and Honours
programmes. For course listings in linguistics, please see the Linguistics section.

## Courses in Language, Literature and Culture

Note: For specific requirements of degree programmes in German, Italian, Russian, and Spanish, please consult the 'Programmes of Study' section, Faculty of Arts.

## General Regulations

## 1. Entry to Language Courses

Any student may enrol in a language course at any level, subject to the conditions enumerated below.
a) Admission to a student's first course in a language at York is by placement questionnaire and/or interview, or departmental authorization slip.
b) In most cases, students who have completed a 1000-level language course with a grade of at least $C$ are automatically admissible to a course at the next level in the same language, but may be pre-tested for purposes of course or section placement.
c) Registration in any language course may be limited at the discretion of the department.
d) Students intending to major or minor in German, Italian, Russian, or Spanish are encouraged to begin study of the relevant language in their first year.

## 2. Credit for Language Courses

A language course may be taken for credit in any year of any undergraduate programme. Credit is given for a course if a grade of $D$ or better is achieved. However, to advance from one level to another level, a student must achieve at least a grade of $C$.
3. Entry to departmental literature and culture courses, and to the degree programmes in Greek and Latin Literature
a) In literature and culture courses of the department instruction is normally given in the relevant language, and entry to courses and programmes depends upon the student's ability to function in that language. The department may require a student to demonstrate language competence before granting admission to a course. For details, please consult the department's supplementary calendar.
b) For regulations concerning entry to courses in Greek or Latin literature, consult a member of the programme in Classical Studies.
Note: Not all courses will necessarily be offered in any given year; consult the department's supplementary calendar for details of courses to be offered.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

## I. Chinese

AS/CH 1000 6.0 Elementary Modern Standard Chinese. Presents three aspects of Modern Standard Chinese - pronunciation, grammar, writing system - lectures, drills, audial tapes and interactive computer programs. Pinyin (Chinese romanization) is used in teaching. Students learn approximately 500 characters by the end of the course.
Prerequisite: Permission of the Chinese Section.
Language of instruction: Chinese.
AS/CH 2000 6.0 Intermediate Modern
Standard Chinese. Continues the work of AS/ CH 10006.0 so that students can hold discussions on contemporary China and can read and write approximately 1100 characters.
Prerequisite: AS/CH 10006.0 or permission of the department.
Language of instruction: Chinese.
AS/CH 2010 6.0 Chinese for Beginners With Background. Students learn standard (Mandarin) pronunciation and the pinyin romanization system. They study basic conversational Chinese and learn to read and write enough Chinese characters to equip them for the third-year level.
Prerequisite: Permission of the instructor. Not open to those with no Chinese-speaking experience or Chinese students with formal education in Chinese.

## Language of instruction: Chinese.

AS/CH 2700 6.0 Introduction to Chinese Literature. Surveys the many genres of Chinese literature from its origins to the present to show the evolution of the literary tradition and its interplay with history, philosophy and politics. Focus is on major works and how to discover their meaning.
Prerequisite: None.
Language of instruction: English.
AS/CH 3000 6.0 Advanced Modern Standard
Chinese. Reading, writing, discussion, use of dictionaries and translation practice. The student should, with the aid of dictionaries, be able to read and translate newspaper articles from the People's Republic, modern fiction, and nonspecialist articles.
Prerequisite: AS/CH 20006.0 or AS/CH 20106.0 or permission of the department.
Language of instruction: Chinese.
AS/CH 3010 6.0 Modern Standard Chinese for Speakers of Cantonese or other Dialects. Training in the standard pronunciation, phonetic system and simplified script, and discussions of the debate on language reform and style as embodied in the classics of modern vernacular literature.
Prerequisite: Permission of the department; not open to speakers of Mandarin.

Language of instruction: Chinese.
AS/CH 3600 6.0 Lu Xun: Representative Works. This course deals with the creative works of Lu Xun, China's leading twentieth century writer. It focuses on textual analysis of his
short stories, prose poems and selected satirical essays. Modern Standard Chinese (Mandarin) is used in class.
Prerequisites: AS/CH 30106.0 or AS/CH 3000 6.0 plus any of the 2000 level literature courses or permission of the Department.
Language of instruction: Chinese.
AS/CH 3610 6.0 Oral Literature in Contemporary China. This course explores the oral stream of Chinese literature, which has a long history and a growing audience. Students learn to appreciate and analyze such genres as storytelling, pattersongs, comic dialogues and monologues that are rarely studied outside China.
Note: Classes are conducted in modern standard Chinese (Mandarin).
Prerequisite: AS/CH 30106.0 or permission of the department.
Language of instruction: Chinese.
AS/CH 3710 6.0 Women Writers in Modern China. A study of the fiction of the major women writers from the literary revolution of the early 1920 s to the present; the development of themes, forms and styles seen in the context of modern Chinese literature and against the background of China's patriarchal tradition.
Prerequisite: Any 2000-level Chinese literature course or AS/HUMA 2930 6.0-AS/SOSC 2180 6.0.

Language of instruction: English.
AS/CH 3750 6.0 Order and Chaos in China and the West: Great Ideas of Two Civilizations. Contrasting concepts - of the origin of civilization, of the forces of history, of humankind and nature, and of the relation between individual and state are revealed by comparing texts of history, literature, science and philosophy basic to each world.
Prerequisite: None.
Cross-listed to: AS/HUMA 3990G 6.0.
Language of instruction: English.
AS/CH 3790 6.0 Contemporary Chinese Culture Through Literary Texts and Film. Primarily concentrating on representative "new wave" written works and films, this course explores the relationship between ideology and art in post-Modern China and stresses new literary/cinematic sensibilities in contemporary Chinese culture.
Prerequisite: None.
Language of instruction: Chinese.
AS/CH 4010 6.0 Translation: English-Chinese/ Chinese-English. The course emphasizes the development of written translation skills by considering English and Chinese texts in a range of topics and styles. Training in translation strategies enables the production of a text equivalent to the original meaning and style.
Prerequisite: AS/CH 30006.0 or AS/CH 30106.0 or permission of the department.
Language of instruction: English.

AS/CH 4700 6.0 Modern Chinese Satire, High and Low. This course deals with a major genre of modern Chinese literature satire. Students learn the nature and characteristics of the genre through concrete analysis of representative works chosen from both written (high) and oral (low) streams of literature.
Prerequisite: Any AS/CH 3000-level course and permission of the department.
Language of instruction: English.
AS/CH 4712 6.0 Confucian or Daoist? The Skeptical Novel. Two novels - traditional: Rulin waishi (The Scholars), and early modern: Laocan youji (Travels of Lao Ts'an) - radically question the role of intellectuals and women in Chinese society. Comparison highlights the emergence of a modern worldview. Students may read in English or Chinese.
Prerequisite: Any AS/CH 3000-level course or permission of the Department.
Language of instruction: English.

## II. English as a Second Language

AS/ESL 1000 9.0 Canadian Language and Culture. This course develops the linguistic/ academic skills of students from English as a Second Language backgrounds, using themes such as, Language and Communication, Culture and Identity, the Immigrant/Refugee experience, and Multiculturalism. Course activities focus on developing English proficiency while exploring these themes. (This course is affiliated with Stong College.)
Cross-listed to: AS/HUMA 1220 9.0.
Note: This course is normally open only to students in their first academic session.

AS/ESL 2000 6.0 English in Use. This course provides opportunities for students to develop their English language skills while learning more about the varieties of written and spoken English. Students learn to analyze both spoken and written texts as connected discourse and become familiar with some of the ways in which literary and nonliterary texts can be examined.
Prerequisite: AS/ESL 10009.0 or permission of the department.

## III. German

AS/GER 1000 6.0 Elementary German. In this course students acquire basic functional competence in oral and written German. This course also introduces students to aspects of contemporary German culture. No previous knowledge of German is assumed.
Language of instruction: German.
AS/GER 1020 6.0 Elementary German for Reading Knowledge. A study of German grammar with the aim of developing a reading knowledge of the language. Translation practice from German into English of texts drawn from a variety of disciplines. No previous knowledge of German is assumed.
Note: This course does not qualify as a prerequisite for AS/GER 10406.0 or AS/GER 1050 6.0.

Language of instruction: English.
AS/GER 1050 6.0 Intermediate German. This course continues the communicative approach used in AS/GER 10006.0 and helps students acquire a level of competence in oral and written German which enables them to function comfortably in a German speaking environment. The cultural component of the course is designed to broaden students' understanding of contemporary German society.
Prerequisite: AS/GER 10006.0 or OACGerman (or equivalent) with appropriate score on departmental placement test.
Note: May be taken in conjunction with AS/ GER 2200 6.0.
Language of instruction: German.
AS/GER 2040 6.0 Advanced German, Level I. This course aims to develop further the student's ability to write and speak correct and idiomatic German. Through reading and discussion, in German, of materials on current affairs, the student is also given an understanding of the cultural context of modern German.
Prerequisite: AS/GER 1050 6.0; or AS/GER 10406.0 and permission of the department; or permission of the department.
Language of instruction: German.
AS/GER 2200 6.0 Introduction to German Literature and Culture. An introduction to German literary texts in their cultural context. The course provides the basis for further work in German Literature and the broader field of German Studies
Prerequisite: AS/GER 10006.0 with a minimum grade of " $B$ " and concurrent registration in AS/GER 1050 6.0; or AS/GER 1040 6.0, or AS/GER 1050 6.0, or permission of the department.
Language of instruction: German.
AS/GER 3040 6.0 Advanced German, Level II. Brief review of important aspects of German grammar. Introduction to the principles and practice of essay writing. Some training in translation. Discussions deal with topics of general interest as well as with contemporary Germany.
Prerequisite: AS/GER 20406.0 or permission of the department.
Language of instruction: German.
AS/GER 3100 3.0 German Regional Linguistic Varieties. Different German regional linguistic varieties or dialects are examined and their similarities to and differences from modern standard German are analyzed. The course also gives an overview of the historical development of the German dialects.
Prerequisite: AS/GER 30406.0 or coenrolment in AS/GER 3040 6.0.
Degree credit exclusion: AS/GER 4100 3.0.
Language of instruction: English.

AS/GER 3130 3.0 Words and meaning in German and English. This course deals with the elements of meaning: how they are combined into word-level structures in German and English and how words are structured as entries in bilingual dictionaries.
Pre/Co-requisites: AS/GER 30406.0 or permission of the Department.

## Language of instruction: German.

AS/GER 3310 3.0 A Survey of German Literature From 1400-1700. The literature of German Humanism, from the Reformation period and from the time of the Thirty Years' War. Representative authors such as Luther, Sachs, Gryphius, Lohenstein and Grimmelshausen will be studied.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 4310 3.0.
Language of instruction: German.
AS/GER 3580 6.0 German Prose and Poetry in the Nineteenth and Twentieth Centuries. Studies in the development of German prose and poetry from Hoffman to Gunter Grass, including the works of such authors as Kleist, Heine, Thomas Mann, Hesse, Kafka, and Rilke.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: German.
AS/GER 3590 3.0 The German Drama in the Late Eighteenth and the Nineteenth Century. A study of selected major dramas from Lessing to Hauptman, with attention to the development of the drama as a genre, and to the relation of the works to their historical background.
Prerequisite: AS/GER 22006.0 or the permission of the department.
Language of instruction: German.
AS/GER 3600 3.0 Berlin in German Literature: Texts and Contexts. Berlin's unique position at the crossroads of East and West makes it politically and socially the most interesting city in the German-speaking countries today. This course examines the presentation of Berlin in German literature from imperial capital to divided city.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 4600 3.0.
Language of instruction: German.
AS/GER 3610 3.0 The German Drama in the Twentieth Century. A study of major dramas from Wedekind to Brecht, with attention to the development of the drama as a genre, and to the relation of the works to their historical background.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 4610 3.0.
Language of instruction: German.

AS/GER 3660 3.0 The German Drama and Radio Play (since 1945). The development of the drama and radio play in all German speaking areas since the end of the Second World War.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: German.
AS/GER 3670 3.0 Contemporary German Prose and Poetry (since 1945). The
development of German prose and poetry in all German speaking areas since the end of the Second World War.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: German.
AS/GER 3790 6.0 Germany in Film: Literary and Historical Perspectives. This course examines major films of contemporary German cinema, including screen adaptations of works of German literature and films that address central concerns of recent German history
Prerequisite: None.
Cross-listed to: AS/HUMA 3990K 6.0.
Language of instruction: English.
AS/GER 4100 3.0 German Regional Linguistic Varieties. Different German regional linguistic varieties or dialects are examined and their similarities to and differences from modern standard German are analyzed. The course also gives an overview of the historical development of the German dialects.
Prerequisite: AS/GER 30406.0 or coenrolment in AS/GER 3040 6.0.
Degree credit exclusion: AS/GER 3100 3.0.
Language of instruction: English.
AS/GER 4110 3.0 Syntactic Structure of Modern German. Analysis of the linguistic structure of Modern German, especially in contrast to the structure of English. Models used for analysis are the Transformational and Case Grammar models.

Prerequisite: AS/GER 30406.0 or equivalent, or permission of the department.
Language of instruction: German.
AS/GER 4120 3.0 Theory and Practice of Translation: German-English, EnglishGerman. The course concerns itself with the theory and practice of translation, more especially, from German to English and English to German, with texts for translation drawn from general interest fields. Detailed knowledge of syntactic differences between German and English, modern German usage, stylistics, and semantics are applied to practical translation experience.
Prerequisite: AS/GER 30406.0 or equivalent, or permission of the department.
Co-requisite: AS/GER 30406.0 with permission of the department.
Language of instruction: German.

AS/GER 4250 6.0 The Artist and the Intellectual in German Literature from Goethe to Grass. Exploration of a central theme in German literature from the late eighteenth to the twentieth century. Analysis of the literary depiction of problems preoccupying the creative person and the intellectual in relationship to self, calling, and society.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: English.
AS/GER 4260 6.0 Studies in the Development of the German Novel. An examination of the history and theory of the German novel, following its development from Goethe's Wilhelm Meisters Lehrjahre through to the works of the leading novelists of contemporary German literature in both West and East Germany.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: English.
AS/GER 4290 3.0 The Drama of the German Democratic Republic. This course provides an overview of the drama of the former G.D.R. and includes not only a study of the formal aspects of the works in question but of their social and political context as well.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: English.
AS/GER 4300 3.0 Medieval German Literature. An introduction to the Middle High German language. Reading of representative works of the period such as the Nibelungenlied and the poetry of Walther von der Vogelweide.
Prerequisite: AS/GER 20406.0 or permission of the department.
Language of instruction: English.
AS/GER 4310 3.0 A Survey of German Literature from 1400 to $\mathbf{1 7 0 0}$. The literature of German Humanism, from the Reformation period and from the time of the Thirty Years' War. Representative authors such as Luther, Sachs, Gryphius, Lohenstein and Grimmelshausen are studied.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 3310 3.0.
Language of instruction: German.
AS/GER 4510 3.0 Goethe's Faust. Close textual analysis of Goethe's Faust. The relation of the work to its historical background. Introduction to the Faust legend and the varied history of the Faust theme in German literature.
Prerequisite: AS/GER 22006.0 or permission of the department.
Language of instruction: English.
AS/GER 4600 3.0 Berlin in German Literature and Culture: Texts and Contexts. Berlin's unique position at the crossroads of East and West makes it politically and socially the most interesting city in the German-speaking countries
today. This course examines the presentation of Berlin in German literature from imperial capital to divided city.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 3600 3.0.
Language of instruction: German.
AS/GER 4610 3.0 The German Drama in the Twentieth Century. A study of major dramas from Wedekind to Brecht, with attention to the development of the drama as a genre, and to the relation of the works to their historical background.
Prerequisite: AS/GER 22006.0 or permission of the department.
Degree credit exclusion: AS/GER 3610 3.0.
Language of instruction: German.
AS/GER 4620 3.0 Bertolt Brecht: Literature, Culture, and Politics (in Translation).
Using an interdisciplinary approach, the course examines Brecht's understanding of the interplay of literature, culture and politics, as shown in his dramatic, poetical and theoretical works.

Prerequisite: AS/GER 22006.0 or permission of the department.
Cross-listed to: AS/HUMA 4881 3.0.
Language of instruction: English.
AS/GER 4700 3.0 The Works of Franz Kafka (in Translation). Through an extensive and intensive study of Kafka's novels, stories, diaries and letters, as well as a consideration of relevant works by other authors (e.g. Buber, Dostoevsky, Nietzsche), the course seeks to arrive at a balanced and coherent understanding of Kafka's work.
Degree credit exclusion: AS/GER 4700 6.0, AS/ VC 4040 6.0, AS/HUMA 4880D 6.0.
Cross-listed to: AS/HUMA 4880D 3.0.
Language of instruction: English.
Note: As the course is taught in translation, no knowledge of the German language is required. Students taking the course for Major or Minor degree credit in German will be required to do some work in German. For these students AS/ GER 22006.0 is a prerequisite.

## IV. Greek

AS/GK 1000 6.0 Elementary Classical Greek. This course is an introduction to Classical Greek. No knowledge of the language is assumed.
Note: Further courses in Greek Literature are listed under Classical Studies.
Language of instruction: English.

## V. Hebrew

Entry to Hebrew courses: Students will be placed in classes at a level that suits their previous experience. No student may take both AS/HEB 10006.0 and AS/HEB 1010 6.0.

AS/HEB 1000 6.0 Elementary Modern Hebrew, Level I. A course in beginning Hebrew, teaching elementary speaking and writing skills, emphasizing oral production and comprehension.

This course is not open to anyone who has studied Hebrew before, either formally or informally.
Language of instruction: Hebrew.
AS/HEB 1010 6.0 Elementary Modern Hebrew, Level II. This course is for students who have at some time in the past learned to read and write Hebrew, but who have not pursued their previous studies to the point where they have a basic command of the language. It teaches elementary oral and writing skills.
Prerequisite: One year of high school level Hebrew or equivalent.
Language of instruction: Hebrew.
AS/HEB 1030 3.0 Elementary Biblical Hebrew, Level I. This course introduces students to the basic vocabulary, grammar, and syntax of Biblical Hebrew. The class also reads simple narrative prose from the Bible, such as segments from the Joseph story in Genesis.
Prerequisite: None.
Language of instruction: English.
AS/HEB 1040 3.0 Elementary Biblical Hebrew, Level II. This course builds on the skills that the students acquired in HEB 1030 3.0. More advanced issues of grammar and syntax are addressed and students acquire a much larger vocabulary thus allowing more extensive readings of biblical texts.
Prerequisite: AS/HEB 10303.0 or equivalent. Language of instruction: English.

AS/HEB 2010 6.0 Intermediate Modern Hebrew. Review and consolidation of grammar topics to achieve a balance in the students' competence in written and oral skills. Further development in speaking, reading and writing. Course material deals with everyday situations, Jewish history, culture and aspects of life in Israel.

Prerequisite: AS/HEB 10006.0 or AS/HEB 1010 6.0, or equivalent; not normally open to students with more than two years of high school level Hebrew or equivalent
Language of instruction: Hebrew.
AS/HEB 3000 6.0 Advanced Modern Hebrew. A course in modern Hebrew, emphasizing the study of contemporary Israeli language as seen in a wide variety of writings (education, business, military, and religious literature, as well as newspapers, periodicals, and some belles lettres). This course includes practice in writing and composition.
Prerequisite: AS/HEB 20106.0 or equivalent. Not normally open to students with three or more years of high school level Hebrew, or to native speakers.
Language of instruction: Hebrew.

AS/HEB 3210 3.0 Selections from Hebrew Legal-Religious Texts: Reading and Analysis. This course presents the structure of the core texts of the Jewish legal and religious traditions, using selections from major Hebrew legal codes, responsa literature and exegetical texts.
Prerequisite: AS/HEB 30006.0 or permission of the department.
Language of instruction: Hebrew.
AS/HEB 3220 3.0 Hebrew Liturgical Texts: Origins, Contexts and Analysis. This course introduces a specialized genre of Hebrew literature: liturgical texts. The texts analyzed include a variety of ancient, medieval and modern Jewish liturgies.
Prerequisite: AS/HEB 30006.0 or permission of the department.
Language of instruction: Hebrew.
AS/HEB 3230 3.0 The Literature of Celebration and Commemoration. This course analyzes a variety of texts, classical and modern, in which aspects of major Jewish festivals and memorial days are explored.
Prerequisite: AS/HEB 30006.0 or permission of the department.
Language of instruction: Hebrew.
AS/HEB 3320 3.0 Exodus: Text and Classical Interpretation. A close textual analysis of the book of Exodus in the original Hebrew and of interpretations of the book written in Hebrew throughout the ages. Language of instruction and readings: Hebrew. Prerequisite: AS/HEB 30006.0 or equivalent. Language of instruction: Hebrew.

AS/HEB 3330 3.0 Deuteronomy: Text and Classical Interpretation. A close textual analysis of the book of Deuteronomy and of interpretations of the book written in Hebrew throughout the ages. Language of instruction and readings: Hebrew.
Prerequisite: AS/HEB 30006.0 or equivalent. Language of instruction: Hebrew.

AS/HEB 3360 3.0 Prophetic Literature: Text and Classical Interpretation. A close textual analysis of selected passages from the biblical literary prophets and of interpretations of these passages written in Hebrew throughout the ages. Language of instruction and readings: Hebrew.
Prerequisite: AS/HEB 30006.0 or equivalent. Language of instruction: Hebrew.

AS/HEB 3370 3.0 The Hagiographical Literature: Text and Classical Interpretation. Text and Classical Interpretation. A close textual analysis of selected passages from the later books of the Bible - Esther, Lamentations and Ecclesiastes - and interpretations of these books written in Hebrew throughout the ages. Language of instruction and readings: Hebrew.
Prerequisite: AS/HEB 30006.0 or equivalent.
Language of instruction: Hebrew.

AS/HEB 3500 6.0 The Hebrew Revival: Language and Literature. Readings and discussion of the language and literature of the Hebrew Revival of the eighteenth and nineteenth centuries. Readings and discussions are in Hebrew.
Prerequisite: AS/HEB 30006.0 or equivalent.
Language of instruction: Hebrew.
AS/HEB 3600 6.0 Themes in Modern Israeli Literature and Society. An examination of some major intellectual questions and literary currents of modern Israel Canaanism; the cult of the strong; the kibbutz; the Holocaust; the clash of East and West. Included is a study of literary, historical, philosophical and sociological writings. Classes are conducted in Hebrew.

Prerequisite: AS/HEB 30006.0 or equivalent. Language of instruction: Hebrew.

AS/HEB 4000 6.0 Advanced Modern Hebrew, Level II. An intensive course designed to acquaint students with advanced aspects of Hebrew grammar, to improve their reading skills and their ability to express themselves fluently in conversation and in written form.

Prerequisite: AS/HEB 30006.0 or equivalent. Not open to native speakers who have completed Grade 9 in Israel.
Language of instruction: Hebrew.
AS/HEB 4300 6.0 Talmudic Literature. A literary, historical and philosophical analysis of the classics of rabbinic law and legend in the original Hebrew from the Mishnah to early modern times. Particular emphasis is placed on the problem of turning an oral law into works of literature. Classes are conducted in Hebrew.

Prerequisite: AS/HEB 30006.0 or equivalent.
Language of instruction: Hebrew.

## VI. Italian

Note: Students may take only one of AS/IT 10006.0 and AS/IT 1010 6.0; only one of AS/ IT 1040 6.0, AS/IT 10506.0 and AS/IT 1060 6.0; one of AS/IT 20406.0 and AS/IT 2060 6.0.

AS/IT 1000 6.0 Elementary Italian. This course uses pattern drills, dialogues, and other techniques to enable the student to acquire a functional competence in elementary spoken and written standard Italian.

Note: No previous knowledge of Italian or any dialect is assumed.
Degree credit exclusion: AKIIT 0200 6.0.
Language of instruction: English.
AS/IT 1010 6.0 Elementary Italian for Dialect Speakers. This course is intended for native speakers of an Italian dialect who wish to learn Standard Italian. Dialogues, pattern drills, and guided and free conversation help the student acquire fluency in and mastery of oral and written Italian.
Prerequisite: Admission by placement test.
Degree credit exclusion: AK/IT 0200 6.0.
Language of instruction: Italian.

AS/IT 1040 6.0 Intermediate Italian. In this course, pattern drills, guided and free conversation and some written work are stressed in order to improve speaking and writing skills through the acquisition of a broader grammatical knowledge and a more articulate vocabulary.
Prerequisite: AS/IT 1000 6.0, or OAC-Italian (or equivalent) with an appropriate score on the departmental placement test.
Degree credit exclusion: AK/IT 1200 6.0. Language of instruction: Italian.

AS/IT 1050 6.0 Development of Italian Language Skills. This course is intended for students who need to improve their knowledge of Italian grammar. Pattern drills, guided and free conversation and written exercises are used in order to improve speaking and writing skills.
Prerequisite: OAC-Italian (or equivalent) with an appropriate score on the departmental placement test.
Degree credit exclusion: AK/IT 1200 6.0.
Language of instruction: Italian.
AS/IT 1060 6.0 Italian Language in Context, Level I. Intensive study of grammar through oral and written activities. Structural and lexical work geared toward the elimination of interferences from Italian dialects.
Prerequisite: AS/IT 10106.0 or high school Italian with an appropriate score on the placement test.
Degree credit exclusion: AKIIT 1200 6.0.
Language of instruction: Italian.
AS/IT 2040 6.0 Advanced Italian, Level I. Study of grammar aimed at improving written and oral fluency. Readings from contemporary sources plus compositions and conversations based on these readings. Introduction to problems of translation. Essays in Italian.
Prerequisite: AS/IT 10506.0 or permission of the department.
Language of instruction: Italian.
AS/IT 2060 6.0 Italian Language in Context, Level II. This course is designed to provide students with further study of grammar with particular emphasis on the structure of subordinate clauses. Readings from contemporary sources will enable students to improve both their active and passive vocabulary, while providing a basis for discussions, resumes and short essays.
Prerequisite: AS/IT 10406.0 or AS/IT 10606.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 2200 6.0 Introduction to Italian Literature. General historical and thematic survey from the medieval period to the present. The basic tools of literary analysis are emphasized. The languages of instruction are Italian and English.
Prerequisite: AS/IT 10006.0 or AS/IT 1010 6.0, or permission of the Department.

Language of instruction: Italian.

AS/IT 2751 9.0 Aspects of Italian Culture. This course aims to present and analyze some of the most interesting themes underlying the development of Italian intellectual life from the fourteenth century to the nineteenth century. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/IT 2751 6.0, AS/ HUMA 2990A 6.0.
Cross-listed to: AS/HUMA 2990A 9.0.
Note: No knowledge of Italian is required. Students taking Italian as their major or minor subject may take this course, but it does not count towards a major or minor in Italian nor does it fulfil the Faculty of Arts elective requirements of students in Italian.
Language of instruction: English.
AS/IT 2761 9.0 Italian Cinema, Literature and Society. The course focuses on twelve of the most significant films since World War II in the context of the radical changes that have taken place in Italy from the fall of Fascism to the present, and as critical statements on the phenomena connected with the rapid transformation of Italian society: industrialization and the "economic miracle", urbanization, the crisis of traditional values, and postmodern fragmentation. (This course is affiliated with Founders College.)
Cross-listed to: AS/HUMA 2761 9.0.
Language of instruction: English.
AS/IT 2791 9.0 Italian: A Minority Culture and Language in North American Society. This course investigates the effects North American culture and language have on the lives of Italian immigrants and their descendants. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/SOSC 2990C 6.0, AS/IT 27916.0 and AS/IT 2790 6.0.
Cross-listed to: AS/SOSC 2960 9.0.
Language of instruction: English.
AS/IT 3040 6.0 Advanced Italian, Level II. The course concentrates on the study of vocabulary and style. Different levels of language use (academic, formal, colloquial, slang) and different "specialized languages" are explored through readings from contemporary sources. Advanced training in composition. Extensive use of videos and feature films.
Prerequisite: AS/IT 20406.0 or AS/IT 20606.0 or equivalent, or permission of the Department.
Language of instruction: Italian.
AS/IT 3120 6.0 Written Translation, Italian-English/English-Italian. Translation from and into Italian of non-literary texts on a variety of topics (politics, economics, arts, music, psychology, travel).
Prerequisite: AS/IT 20406.0 or AS/IT 20606.0 or equivalent.
Language of instruction: Italian.
AS/IT 3130 3.0 Linguistic Structures in Italian and English. The aim of this course is to describe and analyze those aspects of linguistic structure of Italian which differ from English. This
is not a translation course: students analyze differences between structures of the two languages
Prerequisite: AS/IT 20406.0 or AS/IT 20606.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 3150 3.0 Italian Regional Linguistic Varieties. This course deals with the complex linguistic situation of Italy. The different languages or dialects are analyzed and classified with respect to their similarities to and differences from the standard language.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 3200 6.0 Italian Opera from Monteverdi to Puccini. This course is studies selected librettos by the most celebrated Italian dramatic poets from the early Baroque to the early twentieth century, in the context of the theatrical and aesthetic developments in Europe, and against the background of the cultural and political history of the chief centres of theatrical life.

## Language of instruction: English.

AS/IT 3201 6.0 Italian Philosophical and Political Thought: From Pre-Humanism to Postmodernism. An exploration of Italian philosophical and political thought from the medieval to the contemporary period. Topics include humanism, cosmology, philosophy of history, Marxism, existentialism, phenomenology and postmodernism.
Language of instruction: English.
AS/IT 3210 3.0 Twentieth Century Italian Theatre. Study of modern Italian theatre with special emphasis on authors such as D'Annunzio, Pirandello and Betti.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 3340 3.0 Italian Humanism. The main aspects of Quattrocento thought from Petrarch to the age of Lorenzo de' Medici; its importance in the development of Renaissance culture as manifested in the new concepts of humanity, history, politics, education and art.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 3350 6.0 The Literature of the Italian Renaissance. Study of main authors and literary trends from the age of Lorenzo de' Medici to the death of Tasso. This may include the revolutionary political concepts elaborated by Machiavelli and Guicciardini, as well as new approaches to literary theory and practice.
Prerequisite: AS/IT 22006.0 or permission of the Department.

Language of instruction: Italian.
AS/IT 3360 6.0 Petrarch: Love, Women and Power in the Middle Ages. An exploration of Petrarch's Canzoniere and its influence on European poetry. This courses analyzes the way
the life of women at the end of the Middle Ages is represented by Petrarch and by the different traditions of European poetry.
Note: This course counts for Italian major/ minor credit.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Degree credit exclusions: AS/IT 3360 3.0, AS/ IT 3361 6.0.
Language of instruction: English.
AS/IT 3361 6.0 Petrarch: Love, Women and Power in the Middle Ages (in Translation). An exploration of Petrarch's Canzoniere and its influence on European poetry. This courses analyzes the way the life of women at the end of the Middle Ages is represented by Petrarch and by the different traditions of European poetry.
Note: This course does not count for Italian major/minor credit.
Degree credit exclusions: AS/IT 3360 3.0, AS/ IT 3360 6.0.
Language of instruction: English.
AS/IT 3370 6.0 The Italian Short-Story From Boccaccio to Basile. This course examines the development of the Italian novella from the Middle Ages to the Baroque period. Among the authors studied are: Boccaccio, Bandello and Basile.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Note: This course counts for Italian major/ minor credit.
Degree credit exclusions: AS/IT 3371 6.0, AS/ IT 3370 3.0.
Language of instruction: English.
AS/IT 3371 6.0 The Italian Short-Story from Boccaccio to Basile (in Translation). This course examines the development of the Italian novella from the Middle Ages to the Baroque period. Among the authors studied are: Boccaccio, Bandello and Basile.
Note: This course does not count for Italian major/minor credit.
Degree credit exclusions: AS/IT 3370 3.0, AS/ IT 3370 6.0.
Language of instruction: English.
AS/IT 3550 6.0 Nineteenth Century Italian
Literature. The main trends in Italian literature of the nineteenth century from the Pre-Romantics to Verismo. Works by major authors such as Foscolo, Leopardi, Manzoni, Carducci and Verga are studied in depth.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 3721 6.0 Mapping the Italian Experience in Canada: The Literary and Cultural Perspective. The study of the Italian experience in Canada as expressed in representative works from various genres: narrative, poetry, theatre and film. The significance of these works is examined in the social and political context.

Cross-listed to: AS/EN 3721 6.0.
Language of instruction: English.
AS/IT 3750 6.0 Modern Italian Culture. This course introduces students to cultural, social, and political issues which form the fabric of Italian civilization from unification to the present.
Prerequisite: No knowledge of Italian necessary
Degree credit exclusion: AS/IT 3250 6.0.
Note: Students who are taking Italian as a major or minor subject are required to do the readings and assignments for this course in Italian. Students may take only one of the following courses for credit towards a degree in Italian: AS/IT 37506.0 or AS/IT 37906.0 or the combination of AS/IT 37603.0 and AS/IT 3770 3.0.

Language of instruction: English.
AS/IT 3760 3.0 Italian Medieval and Renaissance Civilization. The main elements of Italian civilization from the age of the republican city-states to the end of the Renaissance. The arts, literature and society; changing concepts of the state; the papacy, the Reformation and Counter-Reformation.
Degree credit exclusion: AS/IT 3250 6.0, AS/IT 3761 3.0.
Note: Students who are taking Italian as a major or minor subject are required to do the readings and assignments in Italian. Students may take only one of the following courses for credit towards a degree in Italian: AS/IT 3750 6.0 or AS/IT 37906.0 or the combination of AS/ IT 37603.0 and AS/IT 3770 3.0.
Language of instruction: English.
AS/IT 3761 3.0 Italian Medieval And Renaissance Civilization. The main elements of Italian civilization from the age of the republican city-states to the end of the Renaissance. The arts, literature and society; changing concepts of the state; the papacy, the Reformation and Counter-Reformation.
Degree credit exclusion: AS/IT 3250 6.0, AS/IT 3760 3.0.
Note: Knowledge of Italian not necessary. Students who are taking Italian as a major or minor subject are required to do the readings and assignments in Italian. Students may take only one of the following courses for credit towards a degree in Italian: AS/IT 37506.0 or AS/IT 37906.0 or the combination of AS/IT 37603.0 and AS/IT 3770 3.0.

Language of instruction: English.
AS/IT 3770 3.0 Modern and Contemporary Italian Culture. Key issues in contemporary Italian society are studied in their historical development, with the focus on the following: unification and its aftermath; regionalism; Fascism and the Resistance; political parties and intellectuals; the Church; art and literature.
Degree credit exclusion: AS/IT 3750 6.0, AS/IT 3771 3.0.
Note: Students who are taking Italian as a major or minor subject are required to do the readings and assignments for this course in

Italian. Students may take only one of the following courses for credit towards a degree in Italian: AS/IT 37506.0 or AS/IT 37906.0 or the combination of AS/IT 37603.0 and AS/IT 3770 3.0 .

Language of instruction: English.
AS/IT 3771 3.0 Modern and Contemporary Italian Culture. Key issues in contemporary Italian society are studied in their historical development, with the focus on the following: unification and its aftermath; regionalism; Fascism and the Resistance; political parties and intellectuals; the Church; art and literature.
Degree credit exclusion: AS/IT 3750 6.0, AS/IT 3770 3.0.
Note: Knowledge of Italian not necessary.
Language of instruction: English.
AS/IT 4140 3.0 Sociopragmatic Competence in Italian. This course deals, both at the theoretical and applied level, with some important aspects of sociolinguistic interaction in Italian. Students learn about rules of speaking, speech acts, the notion of "face," pragmatic transfer, and pragmatic failure as they apply to the Italian language.
Prerequisite: AS/IT 2040 6.0, or AS/IT 2060 6.0, or equivalent.

Language of instruction: Italian.
AS/IT 4150 3.0 The Study of the Italian Lexicon: A Course in Applied Semantics.
The course examines the Italian lexicon using the concepts and analytical tools of modern Semantics.

Prerequisite: AS/IT 30406.0 or AS/IT 31206.0 or permission of the instructor.
Language of instruction: Italian.
AS/IT 4180 3.0 Selected Topics in Italian Linguistics. The purpose of this course is to acquaint students with a selected number of topics in Italian linguistics. Topics may include selected areas of phonetics, phonology, morphology, syntax, English-Italian contrastive grammar and pragmatics.
Prerequisite: AS/IT 20406.0 or AS/IT 20606.0 or permission of the Department.

Language of instruction: Italian.
AS/IT 4190 3.0 History of the Italian Language. This course traces the history of the Italian language from its Indo-European roots to the present. Topics analyzed include, among others, linguistic aspects of pre-Roman Italy, the transformation of Latin, the 16th century linguistic controversy ("la questione della lingua"), borrowings from other languages, the standardization of modern Italian.
Note: Not open to students who took either AS/ IT 31803.0 or AS/IT 4190 3.0.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.

AS/IT 4200 6.0 Modern Literary Criticism In Italy. The methodologies of literary criticism as they have developed in Italy through a theoretical and practical approach. Emphasis is given to the stylistic, structural, sociological and psychoanalytical methods.
Prerequisite: AS/IT 22006.0 or permission of the Department.

## Language of instruction: English.

AS/IT 4210 3.0 Renaissance Theatre. A study of the major works of the Italian Renaissance theatre in its development from classical forms; tragedy, comedy and the theoretical discussions related to them; the pastoral drama and Tasso's Aminta.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 4330 6.0 Dante and Medieval Italian Literature. This course centres on the Divine Comedy, its roots in the European literary and philosophical tradition, and the critical problems of the medieval mind. Key aspects of that tradition through selected readings. Some of Dante's minor works are also studied.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 4350 3.0 Women Poets of the Italian Renaissance. In this course emphasis is placed on the self-awareness of Sixteenth Century women writers in a predominately male world, and their intellectual and social self-understanding in relation to the Renaissance concept of the individual.

## Language of instruction: English.

AS/IT 4550 3.0 Seventeenth Century Italian Literature. The poetry and prose of the seventeenth century, focusing on Marino and the "marinisti;" selections from the theoretical texts of the period; the links, where appropriate, with the visual arts.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.
AS/IT 4620 6.0 Twentieth-Century Italian Poetry. Modern Italian poetry from Pascoli to the present. Outstanding works of authors such as D'Annunzio, Gozzano, Ungaretti, Montale, Quasimodo, Pasolini, Sanguineti, Zanzotto, Rosselli, Niccolai and others.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Degree credit exclusion: AS/IT 4620 3.0.
Language of instruction: Italian.
AS/IT 4650 6.0 Twentieth-Century Italian
Novel. The modern Italian novel from D'Annunzio to the neo-avant-garde. Outstanding works of authors such as Svevo, Moravia, Vittorini, Pavese, Calvino and Pasolini.
Prerequisite: AS/IT 22006.0 or permission of the Department.
Language of instruction: Italian.

## VII. Japanese

AS/JP 1000 6.0 Elementary Modern Standard Japanese. Basics of spoken Japanese, with strong emphasis on immediate practical usefulness in everyday situations, the two kana syllabaries, approximately 150 Kanji (SinoJapanese characters) and elementary reading are covered. Simple sentence grammar is focused on. No previous knowledge of the language is assumed.
Language of instruction: Japanese.
AS/JP 2000 6.0 Intermediate Modern Standard Japanese. Further study of common grammatical forms and structures; items covered in AS/JP 10006.0 are reviewed and expanded. Situation and task oriented conversation, strategy-centered reading and structure-based writing are involved with emphasis on complex sentence grammar. Approximately 300 additional Kanji (Sino-Japanese characters) are introduced. Prerequisite: AS/JP 10006.0 or equivalent. Language of instruction: Japanese.

AS/JP 3000 6.0 Advanced Modern Standard Japanese. The course focuses on continuous texts; edited texts on various topics are read, summarized, translated and discussed with emphasis on discourse grammar. All Kanji (SinoJapanese characters) in Education Characters (881) will be covered.

Prerequisite: AS/JP 20006.0 or equivalent. Language of instruction: Japanese.

AS/JP 3720 6.0 Japanese Culture, Literature and Film. By comparing works by Japanese authors with related films, this course explores basic patterns and themes of Japanese culture.

## Prerequisite: None.

Cross-listed to: AS/HUMA 3420 6.0, FA/FILM 3710 6.0.
Language of instruction: English.
AS/JP 4000 6.0 Advanced Reading in Contemporary Japanese. Readings in unannotated original essays and articles on current issues taken from periodicals; interpretation, translation, summarization and discussion of readings enable students to use a wide variety of Japanese materials independently. Recognition of Characters for Daily Use $(1,945)$.
Prerequisite: AS/JP 30006.0 or equivalent. Language of instruction: Japanese.

AS/JP 4100 6.0 Teaching of Japanese as a Foreign/Second Language. This course offers comprehensive teacher education and training for the Japanese language. The main objective is to familiarize teachers with current theories, methodologies, and their practical applications developed in the relevant areas, with strong focus on the communicative approach, and computer assisted language learning and teaching.
Prerequisites: AS/JP 40006.0 or equivalent (for non-native speakers of Japanese); TOEFL score: 580 or equivalent (for non-native speakers of English); BA or BA expected within a year (may
be waived at the instructor's discretion); teaching experience preferred; AS/LING 32303.0 strongly recommended.
Language of instruction: Japanese.
A concentration in Japanese can fulfill the degree requirements for the East Asian Studies Programme. Please consult the 'Programmes of Study' section, Faculty of Arts.

## VIII. Latin

AS/LA 1000 6.0 Elementary Latin. This course is intended for students with no previous training in Latin.

Language of instruction: English.
Note: Further courses in Latin are listed under Classical Studies.

## IX. Linguistics

For a list of course offerings, see Linguistics.

## X. Portuguese

AS/POR 1010 6.0 Elementary Portuguese. This course is intended for students who have some understanding but no formal training in Portuguese. Development of reading, speaking, writing and grammar; oral and written exercises; written compositions; guidance in basic problems of interference from English.
Prerequisite: Some understanding of Portuguese or permission of the Department.
Language of instruction: Portuguese.

## XI. Russian

Note: In AS/RU 2700 6.0, AS/RU 2750 6.0AS/ RU 3720 3.0, AS/RU 3730 3.0, AS/RU 3740 6.0, AS/RU 3770 6.0, AS/RU 3780 3.0, AS/RU 3790 6.0, AS/RU 4740 6.0, AS/RU 47706.0 and AS/RU 4760 3.0, students majoring in Russian who are at the 3000-language level or above will be required to do a portion of the reading in Russian, the amount depending on their language level.

AS/RU 1000 6.0 Elementary Russian. Basic elements of Russian for beginners. Students receive training in the four skills of listening comprehension, speaking, reading and writing, by means of dialogues, drills and language laboratory sessions.
Note: Students from a Russian-speaking background are ineligible for this course.
Language of instruction: Russian.
AS/RU 2000 6.0 Intermediate Russian. The aim of this course is to develop students' reading skills, oral comprehension and ability to express themselves in Russian both in written and in oral form. Special attention is devoted to a review and further study of grammar, vocabulary building, translation from and into Russian and conversation.

Prerequisite: AS/RU 1000 6.0, or OAC-Russian (or equivalent) with appropriate score on departmental placement test, or permission of the department.
Note: Students from a Russian-speaking background are ineligible for this course.

Language of instruction: Russian.
AS/RU 2700 6.0 The Russian Novel in the Nineteenth Century. A survey of Russian literature from its beginnings until 1880 with special emphasis on Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Dostoevsky, and Tolstoy. The relationship of Russian literature to other important European literatures of the nineteenth century is discussed.
Note: No knowledge of Russian required. Russian majors normally begin their literature studies with this course.
Language of instruction: English.
AS/RU 2750 6.0 Russian Culture: Continuity and Conflict (in translation). This course examines Russian culture in an historical and social context focusing on Kievan Rus', the rise of Muscovy, the expansion of the Russian Empire and its revolutionary mutation into the Soviet Union, and the post-Soviet contemporary scene.
Prerequisite: No knowledge of Russian required. (Same as AS/HIST 23106.0 and AS/ HUMA 2990D 6.0)
Language of instruction: English.
AS/RU 3000 6.0 Advanced Russian, Level I. A systematic review of grammar and an introduction to prose composition and translation. Conversation and discussion will be based on reading materials presenting various aspects of Russian culture.
Prerequisite: AS/RU 20006.0 or equivalent. Language of instruction: Russian.

AS/RU 3720 3.0 Tolstoy. Detailed examination of the major fiction of Tolstoy, with special stress on the novels War and Peace and Anna Karenina.

Note: No knowledge of Russian required. Language of instruction: English.

AS/RU 3730 3.0 Dostoevsky. Detailed examination of the major fiction of Dostoevsky, with special stress on the novels Crime and Punishment, The Idiot, The Possessed and The Brothers Karamozov.

Note: No knowledge of Russian required.
Language of instruction: English.
AS/RU 3740 6.0 Chekhov and his Contemporaries: Russian Literature from 1880-1917. A survey of Russian literature of the Silver Age featuring Chekhov (stories and plays), Tolstoy, Gorky, Bunin, and the great Russian symbolists, Sologub and Bely.
Note: No knowledge of Russian required.
Degree credit exclusion: AS/RU 4740 6.0. Language of instruction: English.

AS/RU 3770 6.0 Russian Literature After 1917. A survey featuring such writers as Gorky, Mayakovsky, Zamiatin, Babel, Olesha, Bulgakov, IIf and Petrov, Zoshchenko, Evtushenko, Voznesensky, and the Nobel prize winners Sholokhov, Pasternak, and Solzhenitsyn, plus Five-year Plan novels and works of socialist realism.

Note: No knowledge of Russian required. Degree credit exclusion: AS/RU 4770 6.0. Language of instruction: English.

AS/RU 3790 6.0 Russian and East Central European Film and Culture. A study of the film masterpieces of the countries of Eastern Europe and the former U.S.S.R. from silent cinema to the present. The films are examined in their aesthetic and cultural context, thereby introducing students to the culture and society of this area.

Cross-listed to: AS/HUMA 3990H 6.0.
Note: all readings, lectures and written work are in English; English sub-titles on films.
Language of instruction: English.
AS/RU 4000 6.0 Advanced Russian, Level II. Intensive review of the more difficult areas of morphology; further study of syntax; additional training in translation and free composition; an introduction to practical stylistics; and discussions based on assigned readings on a wide range of topics.
Prerequisite: AS/RU 30006.0 or equivalent. Language of instruction: Russian.

AS/RU 4550 3.0 Russian Prose of the Nineteenth Century. A thematic and stylistic analysis of Russian prose works in the original, including selections from Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, etc.

Prerequisite: (or Corequisite with permission of the department) AS/RU 40006.0 with a minimum grade of $C$ or equivalent.
Language of instruction: Russian.
AS/RU 4560 3.0 Russian Poetry of the Nineteenth Century. A study of themes and techniques of Russian poetry in the original, including works by Pushkin, Lermontov, Tyutchev, Nekrasov, Fet and others.
Prerequisite: (or Corequisite with permission of the Department) AS/RU 30006.0 with a minimum grade of $C$.

Language of instruction: Russian.
AS/RU 4650 3.0 Russian Prose of the Twentieth Century. A thematic and stylistic analysis of Russian prose works in the original, including selections from such authors as Bely, Sologub, Gorky, Andreev, Bunin, Zamyatim, Babel, Olesha, Leonov, Sholokhov, Bulgakov, Pasternak and Solzhenitsyn.
Prerequisite: (or Corequisite with permission of the Department) AS/RU 40006.0 with a minimum grade of $C$ or equivalent.

Language of instruction: Russian.
AS/RU 4660 3.0 Russian Poetry of the Twentieth Century. A study of themes and techniques of Russian poetry in the original, including works by Blok, Akhmatova, Mandel'shtam, Mayakovsky, Esenin, Tsvetaeva, Pasternak, Brodsky and others.
Prerequisite (or corequisite with permission of the department): AS/RU 40006.0 with a minimum grade of $C$ or equivalent.
Language of instruction: Russian.

AS/RU 4740 6.0 Chekhov and his Contemporaries: Russian Literature from 1880-1917. A survey of Russian literature of the Silver Age featuring Chekhov (stories and plays), Tolstoy, Gorky, Bunin, and the great Russian symbolists, Sologub and Bely.
Note: No knowledge of Russian required.
Degree credit exclusion: AS/RU 3740 6.0.
Language of instruction: English.
AS/RU 4760 3.0 Solzhenitsyn. Detailed examination of the writings of one of the twentieth century's great Russian writers, including such works as First Circle, Cancer Ward and Gulag Archipelago.
Note: No knowledge of Russian required.
Language of instruction: English.
AS/RU 4770 6.0 Russian Literature After 1917. A survey featuring such writers as Gorky, Mayakovsky, Zamiatin, Babel, Olesha, Bulgakov, IIf and Petrov, Zoshchenko, Evtushenko, Voznesensky, and the Nobel prize winners Sholokhov, Pasternak, and Solzhenitsyn, plus Five-year Plan novels and works of socialist realism.
Note: No knowledge of Russian required.
Degree credit exclusion: AS/RU 3770 6.0.
Language of instruction: English.

## XII. Spanish

AS/SP 1000 6.0 Elementary Spanish. This is an intensive introductory course to the language and culture of the Hispanic world. Equal attention will be paid to the four skills: listening, speaking, reading and writing. In addition, students will acquire a command of all the essential grammatical structures of Spanish and a vocabulary of a minimum of 2,500 items. This course is designed for students with no knowledge of Spanish.
Language of instruction: Spanish.
AS/SP 1050 6.0 Intermediate Spanish. This course is an extensive review of the fundamentals of Spanish grammar and emphasizes the four skills, listening, speaking, reading and writing through compositions, written exercises, oral presentations and conversations.

Prerequisite: AS/SP 1000 6.0, or OACSpanish, or equivalent, or placement through testing.
Language of instruction: Spanish.
AS/SP 2040 6.0 Advanced Spanish Language and Grammar. This course develops the student's command of Spanish grammar through the writing of multiple drafts of essays, the discussion of advanced and subtle aspects of grammar and style, and the analysis of selected readings.
Prerequisite: AS/SP 10506.0 with a minimum grade of $C$, or equivalent.
Language of instruction: Spanish.

AS/SP 2200 6.0 Introduction to Spanish Literature. This course provides a general background in literature from the medieval period to the twentieth century and in literary criticism. It is required for all students who intend to major or minor in Spanish. Students should take this course during their first 10 courses.
Prerequisite: AS/SP 10506.0 or equivalent, or AS/SP 10006.0 with a minimum grade of $A$ and concurrent enrolment in AS/SP 1050 6.0, or permission of the Department.

## Language of instruction: Spanish.

AS/SP 3040 6.0 A Sociolcultural Approach to Spanish for Commerce. This course examines the cultural concepts that inform the world of business within Spanish-Speaking Societies. Short stories, journalistic prose and historical and geographic materials are read and communicative skills appropriate for a Spanish-Speaking commercial environment are developed.

Prerequisite: AS/SP 20406.0 with a minimum grade of " $B$ " or permission of the Department. Language of instruction: Spanish.

AS/SP 3110 3.0 Spanish Stylistics. This course is designed to teach students of the Spanish language some basic aspects of stylistics and to provide practice in stylistic analysis of both literary and non-literary texts. The language of instruction is Spanish.
Prerequisite: AS/SP 20406.0 (preferably with a minimum grade of $B$ ) or permission of the Department.

Language of instruction: Spanish.
AS/SP 3120 3.0 English-Spanish and Spanish-English Translation. This course helps students to learn some of the skills necessary for accurate written translation from English to Spanish and vice-versa.
Prerequisite: AS/SP 20406.0 (preferably with a minimum grade of $B$ ) or permission of the Department.
Language of instruction: Spanish.
AS/SP 3210 6.0 Introduction to SpanishAmerican Literature. An intensive study of prose and poetry from colonial times to the twentieth century, with some reference to historical and social influences on the development of literature.
Prerequisite: AS/SP 22006.0 or permission of the department.
Language of instruction: Spanish.
AS/SP 3360 3.0 Spanish Poetry of the Golden Age. A study of selected poetry from the Renaissance and Baroque periods. Works by Garcilaso, Fray Luis de Leon, Herrera, Ercilla y Zuniga, San Juan de la Cruz, Gongora, Lope de Vega and Quevedo.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.

AS/SP 3370 3.0 Spanish Theatre of the Golden Age. The rise and development of the Spanish theatre in the Renaissance and Baroque periods. Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 3540 3.0 Nineteenth-Century Spanish
Poetry. A study of representative works of the more important Spanish poets from the Romantic period to the end of the nineteenth century.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 3560 3.0 Nineteenth-Century Spanish Theatre. A study of representative works of the most important Spanish playwrights of the Romantic, Post-Romantic and Realistic schools.
Prerequisite: AS/SP 22006.0 or permission of the Department.

Language of instruction: Spanish.
AS/SP 3570 6.0 Nineteenth- and Early Twentieth-Century Spanish Prose. A study of novels and short stories by outstanding Spanish writers including Larra, Valera, Galdos, Blasco Ibanez and Unamuno.

Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 3580 6.0 The Generation of 1898 and Modern Spain. A study of major Spanish writers and thinkers from the generation of 1898 up to the present and their response to the problems facing the Spanish nation. Among the authors to be studied are Unamuno, Machado, Baraja, Zorin, Lorca, J. Ortega y Gasset, and contemporary women writers.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 3660 6.0 Twentieth-Century Spanish Poetry and Theatre. This course explores the development of poetry and theatre in twentieth century Spain and acquaints students with the literary and aesthetic values of poetic and dramatic works of the period.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4150 6.0 History of the Spanish Language. The evolution of the Spanish language from Vulgar Latin to the present time. First Spanish texts. Spanish as a Romance language. Arabic and other foreign influences on the formation of Spanish.
Prerequisite: AS/SP 20406.0 and AS/SP 2200 6.0 or permission of the Department.

Language of instruction: Spanish.
AS/SP 4220 6.0 The Spanish-American Essay and Short Story. Close reading of the SpanishAmerican essay and short story mainly of the twentieth century including among the essayists Rodo, Mariategui, Pedro Henriquez Urena,

Vasconcelos, Reyes, and among the cuentistas Dario, Borges, Rulfo, Garcia-Marquez and Carpentier.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4250 3.0 Twentieth-Century SpanishAmerican Poetry. A survey of the trends of twentieth-century Spanish-American poetry and of the social and literary milieu of the different countries out of which the poetry grew. Among the poets included are Gabriela Mistral, Nicolas Guillen, Pablo Neruda and Octavio Paz.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4300 6.0 Medieval Spanish Literature (from 1100 to 1400). An exploration of the origins and development of Medieval Spanish Poetry and Prose with particular emphasis on major works such as Poema de Mio Cid, Los Milagros, and El Libro de Buen Amor.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4350 6.0 Spanish Prose of the Golden Age. This course covers important aspects of Spain's intellectual life during the Golden Age. While most of the texts to be read are works of literature, some are expository works which reflect religious, philosophical and political ideas of the period.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4580 3.0 Spanish-American Modernismo. A survey of the poetry of the major Spanish-American modernists Jose Marti, Ruben Dario, Julian del Casal and Manuel Gutierrez Najera. In addition, the course considers the social and literary milieu of the period.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4640 6.0 The Spanish-American Novel of the Twentieth Century. A close study of the novel in twentieth-century Spanish America, based on works of some of the major novelists.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.
AS/SP 4660 6.0 Contemporary Spanish Prose (Since 1939). Detailed examination of the Spanish novel and short story written after the Civil War (1936-1939), including such authors as Cela, Delibes, Matute, Ayala Martin-Gaite.
Prerequisite: AS/SP 22006.0 or permission of the Department.
Language of instruction: Spanish.

## XIII. Special Topics

AS/XX 1800 6.0, AS/XX 1800 3.0, AS/XX 2800 6.0, AS/XX 2800 3.0, AS/XX 3800 6.0, AS/XX 3800 3.0, AS/XX 4800 6.0, AS/XX 4800 3.0, AS/XX 4810 3.0, AS/XX 48203.0 Special Topics in Languages, Literatures and Linguistics. Under this heading the department will, from time to time, offer courses in languages, literatures or linguistics which are not usually taught in the department. These courses may focus on new aspects of, or approaches to, subject matter which is already being taught.

## XIV. Individualized Reading Courses

AS/XX 4900 3.0, AS/XX 49006.0 Individualized Reading Courses in Languages and Literatures. This course will only be offered under special circumstances and by agreement among a faculty member, the department, and the student.
Note: Please consult the Enrolment and Registration section, Faculty of Arts, for regulations on independent reading courses.

## Latin American and Caribbean Studies - Arts

Programme Office:
217 Founders, (416) 736-2100 ext. 66909 Coordinator of the Programme:

## E. Canel

Faculty Members:
W.W. Anderson, D. Barndt, F. Birbalsingh, J. Buttrick, R.E. Chace, R. Cox, H.E. Daugherty, E. Dosman, G.V. Doxey, C. Duran, Z. Ellis, M. Feliciano, W.C. Found, D. Freeman, K. Golby, G. Gold, L. Goldring, M.J. Goodman, R.W. Grant, R. Grinspun, J.A. Hellman, F. Henry, M. Kellman, P. Landstreet, S. Lanfranco, L. Lefeber, J. Lliambias-Wolff, P.E. Lovejoy, M. Magnotta, J.M. Maiguashca, R. Marcus, E. Melville, L.L. North, L. Pena, A. SekyiOtu, M. Silverman, A. Simmons, D. Smaller, P.D.M. Taylor, D. Trotman, P. Valle-Garay, D. Yon

The Latin American and Caribbean Studies Programme (LACS) allows students interested in the Latin American/Caribbean area to pursue this interest by taking a set of carefully Programmed courses taught in different Departments and Divisions in the Faculty of Arts. The LACS Programme offers introductory core courses in Latin American and Caribbean Studies as well as other introductory and upper-level courses in the area. The purpose of the core courses is to introduce and develop interdisciplinary ways of looking at the regions while at the same time integrating knowledge obtained in other courses. Programme courses provide shared intellectual meeting grounds for LACS majors and other students. The interdisciplinary nature of the LACS Programme ensures a broader and deeper understanding of the Latin American and Caribbean regions.

The LACS Programme works together with Founders College and the Center for Research on Latin America and the Caribbean (CERLAC) to offer students a wide variety of events related to the Latin American and Caribbean regions. These include guest lectures by internationally renowned academics, workshops and conferences, and cultural and social events. Events are announced in classes or in special mailings to Majors, and are regularly posted on the LACS bulletin board (besides the LACS Programme office). Students are encouraged to participate in these events. LACS majors may also use the Documentation Centre of the Centre for Research on Latin America and the Caribbean (CERLAC, 240 York Lanes).
LACS is housed at Founders College, which is also the home of two other interdisciplinary area studies Programmes, African Studies and East Asian Studies. The Development Studies Resource Centre, which LACS co-sponsors with African Studies, Founders College and the Faculty of Arts, is also located at Founders (202C Founders College). We strongly recommend that LACS majors become members of Founders College, so that they can fully participate in the events co-sponsored by the area studies Programmes and the College.
LACS majors are also encouraged to join the LACS Students Association (LACSA), which provides students with an opportunity to meet together and set their own agenda. Its office is in 201B Founders College.
Study Abroad Programmes: York University has a formal Student Exchange Agreement with the University of the West Indies (UWI) which allows York students to study at UWI and get credit from York. LACS Majors may also get academic credit for other courses taken at other universities in the Latin American and Caribbean area. For further information contact York International or the LACS Coordinator.
Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.

## Departmental and Divisional Courses in Latin American and Caribbean Studies

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
Note: Not all courses listed will be offered in any one academic year. For information about specific offerings and special topics courses on Latin America and the Caribbean, students should consult the supplementary calendars available in the spring.
AS/ECON 3310 3.0 Development Economics I.

AS/ECON 3320 3.0 Development Economics II.

AS/EN 4230D 3.0 Studies in Post-Colonial Literature: Derek Walcott.
AS/FR 2052 3.0 Music \& Identity in the French West Indies.

AS/FR 2053 3.0 Literature and Identity in the French Caribbean.
AS/GEOG 3020 6.0 Geography of the Caribbean.
AS/HIST 2700 6.0 The Making of the South Atlantic World.
AS/HIST 3730 6.0 Mexican History from the Aztecs to the Mexican Revolution (13251911).

AS/HUMA 2310 9.0 Introduction to Caribbean Studies.
AS/HUMA 4300 6.0 Aspects of Modern Latin American and Caribbean Studies. (Crosslisted to: AS/SOSC 4450 6.0)
AS/POLS 3790 6.0 The Political Economy of Latin America and the Caribbean.
AS/POLS 4225 3.0 Canada and the Americas. AS/POLS 4540 6.0 Caribbean Politics.
AS/SOSC 2460 6.0 Contemporary Latin America.
AS/SOSC 2470 6.0 Caribbean Society in Transition: Emancipation to Independence.
AS/SOSC 3270 6.0 The Caribbean Experience in Multi-Cultural Canada.
AS/SOSC 3410 6.O/POLS 32906.0 Imperialism and Dependency in Africa, Latin America and the Caribbean.
AS/SOSC 4450 6.0 Aspects of Modern Latin American and Caribbean Studies. (Crosslisted to: AS/HUMA 4300 6.0)
AS/SOCI 3330 6.0 Politics and Society in Latin America.
AS/SOCI 43503.0 Sociology of International Migration.
AS/SP 3210 6.0 Introduction to SpanishAmerican Literature.
AS/SP 4220 6.0 The Spanish American Essay and Short Story.
AS/SP 4580 3.0 Spanish-American Modernismo.
AS/SP 4640 6.0 The Spanish-American Novel of the Twentieth Century.

## Note: The following courses provide the

 opportunity for advanced students to undertake directed reading and/or research projects under the guidance of a member of the Latin American and Caribbean Studies programme. Please consult the 'Enrolment and Registration' section, Faculty of Arts, for regulations on independent reading courses.AS/HUMA 4050 6.0 Independent Studies.
Prerequisite: Permission of the Humanities division.
AS/SOSC 4090 6.0 Directed Reading.
Prerequisite: Permission of the Social Science division.
Note: The following courses are offered through Atkinson College. Students should consult the Atkinson calendar for details.
AK/ECON 3550 3.0 The Economics of Developing Countries, Part I.
AK/ECON 3560 3.0 The Economics of Developing Countries, Part II.
AK/POLS 3460 6.0 Latin America and the Caribbean: Development and Underdevelopment.
AK/POLS 36206.0 Racism and Colonialism. AK/SOSC 24306.0 Introduction to Comparative Third World Studies.

AK/SOCI 25606.0 Introduction to comparative Third World Studies.
AK/SOCI 4240 6.0 Health Society and Human Resources.

## Other Courses

Courses that are not listed above as part of the LACS Programme (i.e. courses in the Faculty of Arts, Faculty of Atkinson College, Faculty of Environmental Studies, Fine Arts, etc.) but that have enough Latin American and/or Caribbean content may be counted for credit in the LACS Programme subject to approval by the LACS coordinator. Please consult the Atkinson College Calendar for further information about Atkinson College courses, or talk to the LACS coordinator.

## Law and Society - Arts

Programme Office (Division of Social Science):

## S741 Ross, (416) 736-5054

Associate Professor and Coordinator of the Programme:
Richard Weisman, Sociology/Social Science e-mail: rweisman@yorku.ca

## Advisors:

M. Beare, Department of Sociology; P. Harries-Jones, Department of Anthropology; J. Landa, Department of Economics; P. Oliver, Department of History; L. Jacobs, Department of Philosophy; I. Greene, Department of Political Science; R. Schuller, Department of Psychology

Law is one of the most significant expressions of a society's social and political development. In recent years social scientists from many disciplines have begun to analyze the interplay between law and society. We live in a period of widespread public interest in law that arises from a concern with problems of social justice, social control, and social deviance. The academic disciplines - anthropology, economics, history, philosophy, political science, psychology, sociology - have increasingly focused on such issues as the nature and origin of law; law-making and lawbreaking; rights and obligations; freedom and responsibility and law as social policy. These are matters of increasing concern to teachers, social workers, businessmen, doctors, and public servants whose professional responsibilities demand a knowledge of the relationship of law to their own fields.
The goals of the programme may be stated briefly: to affirm the intellectual importance of the study of law and society and law in society; to provide a framework within which faculty and students may explore, within disciplines and between them, descriptive and analytic approaches to the subject; and to sharpen the appreciation of law as part of the active daily life of the student.

The programme must be seen within the context of a liberal education. It is not a pre-law school programme or a prerequisite for law school admission. It is designed for interested undergraduate students, whatever their future career orientation.

Note: For a list of degree requirements please consult the Programmes of Study section, Faculty of Arts.
Students should note that in particular the lists of courses from which at least two must be chosen to satisfy part of the degree requirements of the Law and Society Programme.

## Departmental and Divisional Courses in Law and Society

Descriptions of the content and format of these courses are contained in the appropriate departmental and divisional listings in this Calendar. Not all courses will necessarily be offered in any given year; details of courses to be offered, as well as complete descriptions and reading lists are available in the Law and Society section of the supplementary calendar for Interdisciplinary Programmes available each spring from the Division of Social Science, Faculty of Arts
AS/ANTH 4200 M 6.0 A Socio-Cultural Perspective on Local-Level Politics.
AS/ECON 3240 3.0 Labour Economics - Theory. AS/ECON 3250 3.0 Labour Economics Institutions.
AS/ECON 4309 3.0 Law and Economics.
AS/HIST 2500 6.0 Canadian History.
AS/HIST 3591 6.0 Politics, Law and the Constitution in Modern Canada.
AS/HIST 4050B 6.0 Treaty-Making in Native North American-European Relations.
AS/LING 2450 3.0 Language and the Law. AS/PHIL 2050 6.0 Philosophy of Law.
AS/PHIL 2060 3.0 Social and Political Philosophy.
AS/PHIL 2070 3.0 Introduction to Ethics.
AS/PHIL 2075 3.0 Introduction to Practical Ethics. AS/PHIL 3110 3.0 Political Philosophy.
AS/POLS 2040 6.0 Introduction to Political Theory.
AS/POLS 3075 3.0 Law, Justice and Jurisprudence.
AS/POLS 31606.0 Issues in Canadian Constitutional Law.
AS/POLS 3165 6.0 Problems in Canadian
Business Law. (Cross-listed to: AS/SOSC 3165 6.0)

AS/POLS 3600 3.0 Public Law I.
AS/POLS 3605 3.0 Public Law II.
AS/POLS 4015 3.0 Theories of Justice.
AS/POLS 4130 6.0 Federalism in Canada.
AS/POLS 4440 3.0 Human Rights in Europe.
AS/POLS 4445 3.0 European Union.
AS/POLS 4600 3.0 Politics and the Judicial Process in Canada.
AS/POLS 4605 3.0 Ethical Politics.
AS/PSYC 2120 3.0 Social Psychology.
AS/PSYC 3140 3.0 Abnormal Psychology.
AS/SOSC 2330 9.0 The Economics of Law, Policy and Organizations.

## Social Science

AS/SOSC 2350 6.0 Law and Society. This course examines the interrelationship between law and the social sciences with emphasis on types of legal thought, the function of law in society, legal systems, and a variety of specific issues involving Canadian society and law, such as the legal profession, the criminal process, civil and political rights, and family law.

Note: This course is required of students registered in the Law and Society programme, but also is open to others.
AS/SOSC 3030 6.0 Crime and Punishment in Western Societies.
AS/SOSC 3165 6.0 Problems in Canadian Business Law. (Cross-listed to: AS/POLS 3165 6.0)

AS/SOSC 3360 6.0 The Charter of Rights and Freedoms.
AS/SOSC 3370 6.0 Social Justice and Law.
AS/SOSC 3380 6.0 Law, Labour and the State.
AS/SOSC 3381 6.0 Criminal Justice System.
AS/SOSC 3390 6.0 Special Topics in Law and Society.

## Social Science

AS/SOSC 4350 6.0 Law and Society Seminar. This course, limited to and required of Law and Society students, examines theories and practice relating to the interaction of law and society, depending on student and faculty interest in one or other specific topics.

AS/SOCI 2070 6.0 Social Order and Social Organization.
AS/SOCI 3430 6.0 Race and Ethnic Relations in Western Society.
AS/SOCI 3810 6.0 Sociology of Crime and Delinquency.
AS/SOCI 4440 6.0 Race, Minorities and the Legal Order.
AS/SOCI 4810 6.0 Women and the Criminal Justice System.
AS/SOCI 4840 6.0 Sociology of Policing.
AS/SOCI 4850 3.0 Organized Crime.

## Atkinson College

AK/POLS 3209 6.0 Law and Society.
AK/PSYC 3210 3.0 Social Psychology. AK/PSYC 3215 3.0 Abnormal Psychology.
Note: Other courses may be added to this list of recognized and approved courses from time to time. For the current full list, see the supplementary calendar for Interdisciplinary Programmes available through the Division of Social Science office.
Seneca College of Applied Arts and Technology offers a one year diploma programme in Court and Tribunal Administration for York graduates who have completed the honours programme with a double major in Law and Society and one of the affiliated departments. For information about the Seneca College programme, contact the Director, Court and Tribunal Administration Programme, Seneca College, 43 Sheppard Avenue East, Toronto, Ontario, M2N 2 Z8 (416) 491-5050.
Students applying for admission to York University on the basis of their Seneca College diploma in Court and Tribunal Administration would be expected to satisfy the usual admission requirements as specified in the University Undergraduate Calendar for the session to which they are applying.

## General Certificate in Law and Society

Public Policy and Administration candidates may earn a General Certificate in Law and Society in addition to fulfilling the requirements for the PPA programme. To qualify for the General Certificate in Law and Society, PPA students must complete 24 credits in Law and Society from a list of approved courses, and the cumulative Grade Point Average in these 24 credits must be 5.0 or higher. The course requirements are: AS/SOSC 2350 6.0, Law and Society; 18 additional credits (three full course equivalents) from the courses recognized as satisfying the degree requirements in the Law and Society Programme, as listed in the University calendar and the Law and Society Programme calendar. At least 6 credits must be at the 4000 level. Up to 12 of these credits may be offered by the Department of Political science but may not be counted to fulfill both PPA degree and General Certificate requirements. Further information is available from the Coordinator of the Law and Society Programme or the Public Policy Administration Programme.

## Linguistics - Arts

Department Office:
S561 Ross, (416) 736-5016
Programme Coordinator:

## P. Avery

Linguistics is concerned with discovering the principles in terms of which natural languages are organized and applying these principles to the description of individual languages. Using systematic descriptions of language and language usage, linguists also investigate how language interacts with our intellectual life.
Because language mediates virtually all forms of human endeavour, the study of linguistics can provide new perspectives on almost every aspect of the humanities and social sciences. In addition, it has applications to primary and secondary education, speech therapy and the applied sciences of communication engineering and computer science.
Note: The Department of Languages, Literatures and Linguistics offers courses in linguistics leading to the BA degree in the Ordinary and Honours programmes. For specific requirements of these programmes, please consult the 'Programmes of Study' section, Faculty of Arts.

## Courses in Linguistics

Note: Not all courses will necessarily be offered in any given year; consult the department's supplementary calendar for details of courses to be offered.

AS/LING 1000 6.0 Introduction to Linguistics. An examination of fundamental principles of language organization in phonology, morphology and syntax from both practical and theoretical points of view with illustrations from English and a variety of other languages. Brief survey of the areas of child
language acquisition, historical linguistics and psycholinguistics.

AS/LING 2060 6.0 The Grammatical Structure of English. An investigation of the grammatical structure of modern English, including phonology, morphology, syntax and semantics, within a linguistic framework.
Cross-listed to: AS/EN 2060 6.0.
AS/LING 2110 3.0 Articulatory Phonetics. An investigation of speech sounds in terms of anatomy and physiology. Practice in discrimination and production of speech sounds.
Prerequisite: AS/LING 10006.0 or permission of the Department.

AS/LING 2120 3.0 Fundamentals of Phonological Analysis. Practical techniques of phonological analysis exemplified by data taken from a variety of languages. Practice in the use of distinctive features and rule formalisms.

Prerequisite: AS/LING 10006.0 or equivalent, with a grade of $C$.

AS/LING 2140 3.0 Fundamentals of Grammatical Analysis. Practical techniques of grammatical analysis exemplified by data taken from a variety of languages.
Prerequisite: AS/LING 10006.0 or equivalent, with a grade of $C$.

AS/LING 2400 3.0 Language in its Social Context. An introduction to the study of language as a social phenomenon. Topics covered include language varieties; stereotypes and social identity; language, culture and thought; communicative competence; bilingualism and diglossia; languages in contact; language and social deprivation; and language planning and language policy.
Prerequisite: None.
AS/LING 2410 3.0 Language and Gender. This course explores the relationship between language and sex/gender systems from a feminist perspective. The main areas dealt with are language and sex stereotypes; language, power and women's status; and male vs female communicative style in different sociocultural contexts.
Prerequisite: None.
Cross-listed to: AS/AK/GL/WMST 2501 3.0, GL/SOSC 2900E 3.0.

AS/LING 2430 3.0 Language, Power and Persuasion. This course investigates the language of power and persuasion. The language used by powerful and powerless groups is analyzed to determine how it reinforces positions of dominance and subordination. The role of language in public persuasion is also considered.
Prerequisite: None.
AS/LING 2440 3.0 Languages and Societies. The study of the distribution, spread and interaction of language varieties; language and cultural conflict; and language
and cultural change. The course surveys past and present language situations in major culture-areas, such as Europe, East Asia, the Arab world and South Asia.
Prerequisite: AS/LING 24003.0 or permission of the Department.

AS/LING 2450 3.0 Language and the Law. This course explores ways in which the discipline of linguistics can shed light on the use of language in the legal system. Topics include the special characteristics of written legal language, spoken language in the courtroom, and linguists as expert witnesses.

AS/LING 3040 3.0 Historical Linguistics. An introduction to the study of the development of language systems through time, including the principles of genetic classification of languages, comparative grammar and internal reconstruction.

Prerequisite: AS/LING 21203.0 with a grade of C+ or better, or permission of the Department.

AS/LING 3050 3.0/3050 6.0 Special Topics in Linguistics. A half-year course or full-year seminar on particular topics not ordinarily available. Requests for such offerings and information about courses or seminars available in a given year should be addressed to the departmental office.

AS/LING 3110 3.0 Topics in Phonetics. This course continues and complements the work of AS/LING 2110 3.0 Articulatory Phonetics. It includes further study of speech physiology, further practice in sound production and recognition, especially of 'exotic' sounds and lexical tone; examination of one or more complete phonetic systems; and work in linguistic phonetics.
Prerequisite: Completion of AS/LING 21103.0 Articulatory Phonetics, with a grade of at least C+, or equivalent work in phonetics satisfactory to the Department.

AS/LING 3120 3.0 Phonology. Theoretical principles and practical techniques of phonological analysis exemplified by data taken from a variety of languages.
Prerequisite: AS/LING 21103.0 and AS/LING 21203.0 or equivalent.

AS/LING 3140 3.0 Syntax. This course provides a basic introduction to generative syntax, in particular to the recent work of Noam Chomsky and his followers. Although most of the data analyzed will be English, syntactic patterns of some other languages will be discussed.
Prerequisite: AS/LING 21403.0 or equivalent.
AS/LING 3150 3.0 Semantics. This course provides an introduction to sentence-level semantics. Some topics in word-level semantics are also considered. Issues are examined primarily from the perspective of a version of Truth-Conditional Semantics.
Prerequisite: AS/LING 21403.0 or permission of the Department.

AS/LING 3210 3.0 First Language Acquisition. This course surveys first language acquisition from a variety of approaches, including social interactionist, innatist, and information processing.
Prerequisite: AS/LING 10006.0 or AS/LING 32203.0 (cross-listed to AS/PSYC 3290 3.0).

## AS/LING 3220 3.0 Psycholinguistics. A

survey of psycholinguistic research and theory; topics include language acquisition, psychological correlates of transformational grammars, information-processing approaches to language.
Prerequisite: AS/LING 10006.0 or AS/PSYC 1010 6.0.
Cross-listed to: AS/PSYC 3290 3.0.
Degree credit exclusion: AK/PSYC 3250 3.0.
AS/LING 3240 3.0 Second Language
Acquisition. This course deals with the main issues of second language acquisition. Topics treated include similarities and differences between first and second language acquisition, bilingualism, and various theories such as interlanguage, the contrastive analysis hypothesis, and the monitor model.
Prerequisite: AS/LING 10006.0 or AS/LING 3220 3.0.
Degree credit exclusion: AS/LING 3230 3.0.
AS/LING 3400 3.0 Sociolinguistic Variation and Change. This course addresses sociolinguistic variation: differences in language use by different social groups in different contexts, and changes across time; theoretical issues, e.g. locating variation in the grammar, and methodological problems, e.g. how to study language change in progress.
Prerequisite: AS/LING 2120 3.0, AS/LING 21403.0 and AS/LING 2400 3.0.

AS/LING 3410 3.0 Writing Systems. This course deals with the interaction of spoken language and writing structure; functioning and cultural spread of writing systems; historical relationships; and orthographic change, reform and design. Systems studied include Roman, Greek, Cyrillic, Arabic, and Hebrew alphabets, and systems of the Indian sub-continent, Korea, China and Japan.
Prerequisite: AS/LING 1000 6.0, or AS/LING 20606.0 or permission of the Department.

AS/LING 4050 3.0 Topics in Historical Linguistics. This course includes further study of the comparative method and internal reconstruction, the role of typology, and the weighing of different types of evidence, using these as a springboard to consideration of topics of current interest to practising historical linguists.
Prerequisite: AS/LING 30403.0 with a minimum grade of $C+$, or permission of the Department.

AS/LING 4060 3.0 Linguistic History of English. A study of the principal changes in the English language from Anglo-Saxon times to the present day.

Prerequisite: Completion of AS/LING 30403.0 with a grade of $C+$ or better, or permission of the Department.

AS/LING 4070 3.0 A History of the Romance Language Family. A study of the evolution of the various members of the Romance family from Latin to the present day, with emphasis on French, Spanish and Italian.
Prerequisite: Completion of AS/LING 30403.0 with a grade of $C+$ or better, or permission of the Department.

AS/LING 4120 3.0 Phonological Theories. This course concentrates on recent developments in phonological theory within a generative framework. Specific topics include the representation of segments, autosegmental phonology, syllable structure, metrical phonology and lexical phonology.
Prerequisite: AS/LING 31203.0 with a grade of C+ or better, or permission of the Department.

AS/LING 4140 3.0 Grammatical Theories. This course examines the metatheoretical issues and assumptions underlying the development of different linguistic theories. The foundations and formal framework of Government-Binding Theory, the most recent version of Chomsky's Extended Standard Theory, will be introduced and later compared with a competing linguistic theory.
Prerequisite: AS/LING 31403.0 with a grade of C+ or better, or permission of the Department.

AS/LING 4210 3.0 Theoretical Issues in First Language Acquisition. This course treats the acquisition of linguistic structures as seen from the perspectives of principles and parameters theory, the competition model, and current theories of phonological development.

Prerequisite: AS/LING 3120 3.0, AS/LING 3140 3.0 and AS/LING 32103.0 with grades of C+ or better, or permission of the Department.

AS/LING 4220 3.0 Acoustic Phonetics. An investigation of acoustic-phonetic aspects of speech and their relation to speech perception and recognition. Practical experience in techniques of acoustic-phonetic research.
Prerequisite: AS/LING 21103.0 and AS/LING 21203.0 with grades of $C+$ or better, or permission of the Department.

AS/LING 4230 3.0 Language Disorders. This course surveys a variety of language disorders, among them aphasia, delayed language development, dyslexia and language dissolution in old age. Specific disorders are discussed within a psycholinguistic framework. There will be some discussion of basic strategies for therapy.
Prerequisites: Completion of AS/LING 3120 3.0, AS/LING 31403.0 and AS/LING 3220 3.0(Crosslisted to: AS/PSYC 3290 3.0) with grades of C+ or better, or permission of the Department.

AS/LING 4240 3.0 Theoretical Issues in Second Language Acquisition. An examination of the relationship between linguistic theory and second language acquisition including the nature of second language learners' linguistic representations from both linguistic and
neurolinguistic perspectives, the role of Universal Grammar, and elicitation and interpretation of second language data.
Prerequisite: Completion of AS/LING 32403.0 (formerly AS/LING 3230 3.0) with a grade of B+ and AS/LING 31203.0 and AS/LING 31403.0 with grades of $B$, or permission of the Department.

AS/LING 4320 6.0 Field Methods. This course provides students with the skills and techniques necessary to conduct independent linguistic field work.
Prerequisites: Completion of AS/LING 2110 3.0, AS/LING 31203.0 and AS/LING 31403.0 with grades of C+ or better, or permission of the Department.

AS/LING 4900 3.0/4900 6.0 Independent Study. Students may arrange to undertake independent study with a member of the Linguistics Programme. This allows students and instructors to work on topics of mutual interest which lie outside the usual course offerings. Contact the undergraduate coordinator for details.
Note: Please consult the 'Enrolment and Registration' section, Faculty of Arts, for regulations on independent reading courses.

## Mass Communications - Arts

Programme Office (Division of Social Science):
301 Calumet, (416) 736-5057
Assistant Professor and Coordinator of the Programme:
B. Seaton

## Advisors:

H. Breslow, Social Science; I. Davies, Sociology; J. Durlak, Social Science; F. Fletcher, Political Science; D. Kehoe, Social Science; B. Seaton, Social Science
Mass Communications is an interdisciplinary four-year undergraduate Programme housed within the Division of Social Science (Linked Double Major) that provides students with a comprehensive understanding of the traditional forms of mass communication (print, radio, film, television). It also examines the emerging interactive tele-communications networks and computer systems which have introduced new media and services such as teleconferencing and electronic publishing.
The emphasis of the programme is academic rather than technical. Mass Communications studies cannot be viewed as providing vocational skills such as journalism. The aim is to produce graduates who have acquired skills in communications analysis and a synthesis of knowledge in the increasingly complex field of communications.
Students may combine Mass Communications with another approved discipline. The approved disciplines which students can combine with Mass Communications are: Anthropology, Computer Science, Economics, English, French Studies, German, Humanities, Italian, Linguistics, Philosophy, Psychology, Political Science, Russian, Spanish, Sociology, Women's Studies.

Students may also combine Mass Communications with one of the following approved free-standing interdisciplinary programmes: Classical Studies, Creative Writing, East Asian Studies, Religious Studies. Students who wish to pursue a double major in a discipline within the Faculty of Arts not formally linked with the Programme, must submit a statement to the Programme Coordinator and Chair or Undergraduate Director of the other discipline which outlines their proposed course of study and an argument as to how this course of study would result in a firm academic link between the theme of the Programme and the other discipline. Written approval must be attained from the Mass Communications Programme Coordinator and the Chair or Director of Undergraduate Studies of the other discipline. Note: For a list of degree requirements please consult the "Programmes of Study" section, Faculty of Arts.

## Courses in Mass Communications

Descriptions of the content and format of these courses are to be found in the appropriate divisional and departmental listings in this Calendar. For Atkinson College courses, see the Atkinson College calendar. A detailed description of Mass Communications studies appears in the mini-calendar, available from the Division of Social Science office, S748 Ross and the Mass Communications Programme Office, 301 Calumet College.
Note: Students should note in particular the core requirements in the programme at the 2000, 3000 and 4000 levels. Several additional courses will be offered as special topics. Not all courses listed here will necessarily be offered in any given year. For details of courses to be offered, consult the current Mass Communications mini-calendar.
36 Programme courses (six full course equivalents) are required which must include:

## A. The following core course:

AS/SOSC 2310 9.0 Introduction to Mass Communications.
Note: for purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
B. At least one of the following 3000level core courses:

AS/ANTH 3340 6.0 Communications Technology and Social Thought.
AS/ANTH 3350 6.0 Culture as Performance.
FA/FILM 3300 3.0 TV/Video: Theory and Criticism I.
AS/HUMA 3920 6.0 Technology \& Communication.
AS/SOSC 3300 6.0 Mass Media, Culture and Society: The Canadian Case.
Degree credit exclusion: AS/SOSC 2300 6.0.
AS/SOSC 3310 6.0 Communications for Tomorrow.
AS/SOSC 3311 6.0 Communications in Organizations.

AS/SOSC 33136.0 Issues in Communication, Education and Change.
AS/SOSC 3314 6.0 The Economic Structure of Mass Communications.
AS/SOSC 3315 6.0 Advertising and Society. AS/SOSC 3316 6.0 TV as Culture and Communication.
AS/SOSC 3320 6.0 Communication Theory.
AS/SOSC 3350 3.0 Broadcasting Policy: A Comparative Introduction.
AS/SOSC 3351 3.0 Broadcasting Policy: Current Issues and Case Studies.
AS/SOSC 3720 6.0 Visual Images in Social Inquiry.
AS/SOSC 3820 6.0 Social and Political Dimensions of Humour.
AS/SOSC 3990D 6.0 Research Methods in Mass Communications.
C. At least one of the following 4000level core courses:
AS/ANTH 4340 6.0 Advocacy and Social Movements.
AS/POLS 4180 6.0 Politics and the Mass Media in Canada.
AS/POLS 4185 6.0 Culture \& Communication. AS/SOSC 4300 6.0 Popular Culture: Explorations in Theory \& Practice.
AS/SOSC $4310 \quad 3.0$ International Communication: Introduction.
AS/SOSC $4311 \quad 3.0$ International Communication: Current Topics.
AS/SOSC 4312 6.0 The Politics of Canadian Broadcasting.
AS/SOSC 4315 6.0 Communication \& the Management of Change in Organizations.
AS/SOSC 4320 6.0 Seminar on the Electronic Network Marketplace.
AS/SOSC 4330 6.0 Seminar in Machine Mediated Human Communications.
AS/SOCI 4500 6.0 Popular Culture and Social Practice in Canada.
FA/FILM 4500 6.0 Six Genres in Search of a Theory.
FA/FILM 4600 3.0 Selected Topics in Canadian Cinema.
D. 18 additional credits ( 3 full course equivalents) in the Mass Communications Programme listed below:
Faculty of Arts Courses:
AS/SC/COSC 15203.0 Introduction to Computer Use I.
Degree credit exclusion AK/COSC 1200 3.0.
AS/SC/COSC 1530 3.0 Introduction to Computer Use II.
Degree credit exclusion AK/COSC 1210 3.0.
Note: Admission dependent on acceptance of portfolio; please refer to section in Creative Writing.
AS/HUMA 2740 6.0/FA/FILM 2401 6.0 Film, TV and Society.
AS/HUMA 2900 9.0 Introduction to Creative Writing. (formerly AS/EN 2900 6.0).
AS/HUMA 3430 3.0/FA/FILM 32103.0 American Film I.
AS/HUMA 3431 3.0/FA/FILM 32113.0 American Film II.
AS/HUMA 3920 6.0 Technology and Communication.

AS/LING 2400 3.0 Language in its Social Context.
AS/LING 2410 3.0 Language and Gender.
AS/LING 2430 3.0 Language and Power and Persuasion.
AS/LING 2440 3.0 Language and Societies.
AS/AK/SC/MATH 2560 3.0 Elementary Statistics 1.
AS/AK/SC/MATH 2570 3.0 Elementary Statistics 2.
AS/POLS 2100 6.0 Introduction to Canadian Government and Politics.
AS/POLS 3155 3.0/AK/POLS 3109H 3.0 Election Campaigns in Canada.
AS/POLS 3300 6.0/AS/SOSC 30306.0 Statistics for Social Sciences.
AS/PSYC 2020 6.0 Analysis of Psychological Data.
Prerequisite: AS/SC/PSYC 1010 6.0.
AS/PSYC 2021 3.0 Introduction to Descriptive Statistics.
AS/PSYC 2022 3.0 Introduction to Inferential Statistics.
AS/PSYC 2120 3.0 Social Psychology.
AS/SOSC 2311 6.0 Communication in Everyday Life.
AS/SOSC 2830 9.0 Music and Society.
AS/SOSC 2840 6.0 Film and Society.
AS/SOSC 2850 6.0 Theatre and Society.
AS/SOSC 2860 6.0 Interactive Multimedia.
AS/SOSC 2990R 6.0 Popular Culture in Canada.
AS/SOCI 3030 6.0/AS/POLS 33006.0 Statistics for Social Sciences.
AS/SOCI 3060 6.0 Classic Issues in Social Psychology.
AS/SOCI 3220 6.0 Cultural Sociology. AS/SOCI 3840 6.0 Mass Communication. AS/SOCI 4920 6.0 Communication and Community.

## Faculty of Fine Arts Courses:

The following two courses are open to all Mass Communications Majors, without prerequisite or permission:

FA/FILM 2120 6.0 Screenwriting II.
FA/FILM 2401 6.0/AS/HUMA 2740 6.0 Film, Television and Society.

No prerequisite is needed for the following courses for Mass Communications majors who have taken AS/SOSC 2310 6.0:

FA/FILM 2040 6.0 Video and Film-Making. FA/FILM 2401 6.0 AS/HUMA 2740 6.0 Film Television and Society
FA/FILM 3210 3.0/AS/HUMA 34303.0 American Film I.
FA/FILM 3211 3.0/AS/HUMA 34313.0 American Film II.
FA/FILM 3220 3.0 Studies in European Cinemal.
FA/FILM 3221 3.0 Studies in European Cinema II.
FA/FILM 3300 3.0 Television/Video: Theory and Criticism I.
FA/FILM 3310 3.0 Documentary.
FA/FILM 3320 3.0 The Experimental Tradition. FA/FILM 3321 6.0 Alternative Cinema.
FA/FILM 3401 3.0 Canadian Films and Television.
FA/FILM 3510 6.0 Television Workshop.

Note: Registration in FA/FILM 35106.0 requires an application through the Mass Communication office, 301 Calumet.
FA/FILM 3610 3.0/AK/FILM 3750 3.0 Studies in National Cinema I.
FA/FILM 3810 3.0/AK/FILM 3230 3.0 Women and Film.
FA/FILM 3910 3.0 Jewish Film I.
A Prerequisite of FA/FILM 14006.0 is required for the following:
FA/FILM 2400 6.0 Theories of Film Making. FA/FILM 3250 3.0 Director's Cinema.
FA/FILM 3420 3.0 Studies in Genre.
FA/INFA 2900 6.0 Arts, Societies, Histories. FA/INFA 2930B 6.0 Interactive Multimedia.

## Atkinson College Courses:

AK/COSC 1200 3.0 Introduction to Computing I.

Degree credit exclusion: AS/COSC 1520 3.0.
AK/COSC 1210 3.0 Introduction to Computing II.

Degree credit exclusion: AS/COSC 1530 3.0.
AK/FILM 2340 6.0 Video and Film Production. AK/FILM 2430 6.0 The Hollywood Cinema.
AK/FILM 3600 6.0 Television and Society.
AK/FILM 3750 3.0/FA/FILM 3610 3.0 Studies in National Cinema
AK/FILM 4500G 6.0 Race and Representation: Third Cinema.
AK/HUMA 3980 6.0 Popular Culture in the $20^{\text {th }}$ Century.
AK/MATH 2560 3.0 Elementary Statistics I. AK/MATH 2570 3.0 Elementary Statistics II. AK/POLS 3209H 3.0/AS/POLS 31553.0 Election Campaigns in Canada.
AK/POLS 3320M 6.0 Politics and the Mass Media.
AK/POLS 3420 6.0 Canadian Government and Politics.
AK/SOSC 3330 6.0 Technology Communication and the Canadian Mind.
AK/SOSC 3490 6.0 Mass Media and the Socialization of Children.
AK/SOSC 3540 6.0 Schools, Critical Pedagogy and Mass Media. (DCE: AK/POLS 3390M 6.0)
AK/SOSC 3560 6.0 Mass Media and Ideology. AK/SOSC 4770 6.0 Mass Media, The State and Freedom of Expression.
AK/SOCI 3340E 6.0 Ideology and Communication.
AK/SOCI 3391T 6.0 Images of Women.
AK/SOCI 3560 6.0 Social Interaction.
AK/STS 3500 3.0 The Global Information Society.
AK/STS 3510 3.0 Networks and Intellectual Property Rights
AK/STS 3700A 6.0 History of Technology. AK/STS 3700B 6.0 History of Computing and Information Technology.
Note: Faculty of Arts/Mass Communication Majors may NOT take AK/SOSC 24106.0 for major credit (Degree credit exclusion: AS/ SOSC 2310 6.0) except in specific years. Check with the Mass Communication Office for further details.
Please consult the appropriate departmental/ college/Faculty calendars for up-to-date
listings, course descriptions, prerequisites and degree credit exclusions.

## Mathematics and Statistics Arts, Pure and Applied Science

Department Office:
N520 Ross, (416) 736-5250
Professor and Chair of the Department:
A. Dow

Professors:
M. Abramson, R.G. Burns, S. Guiasu, C. Hruska, I. Kleiner, S. Kochman, J. Laframboise, N.N. Madras, K.R. Maltman, H. Massam, M.E. Muldoon, G.L. O'Brien, P. Olin, J. Wick Pelletier, S.D. Promislow, P. Rogers, T. Salisbury, A.D. Stauffer, J. Steprans, P.A. Taylor, W. Tholen, S. Watson, A. Weiss, W.J. Whiteley, M.W. Wong, J. Wu

Professors Emeriti:
D.A.S. Fraser, L. Lorch, R.P. McEachran, D.C. Russell, A. Shenitzer, D. Solitar

## Associate Professors:

N. Bergeron, J.-C. Bouhénic, J.M.N. Brown, R.L.W. Brown, K. Bugajska, S.R. Chamberlin, C. Czado, G.E. Denzel, R.A. Ganong, L.S. Hou, S. MacKenzie, G.A. Monette, D.H. Pelletier, P.H. Peskun, A. Pietrowski, N. Purzitsky, A.M.K. Szeto, D. Tanny, E.J.J. van Rensburg, A. Wong, Y. Wu

Associate Professors Emeriti:
D.W.T. Bean, J.H. Grant, S.W. Lee,
T. MacHenry, R.A. Schaufele

Assistant Professors:
M.D. Asgharian, D.M. Salopek

Visiting Professor:
Y. Medvedev

NSERC Women's Faculty Awardee:
F. Vinette

The Department of Mathematics and Statistics offers a wide range of courses in both pure and applied mathematics and statistics. These meet the needs of students who wish to major in mathematics or statistics as well as those who require some knowledge of mathematics or statistics in other disciplines. In addition, there are courses for those who have a general interest in these subjects
Actuarial Profession. Students interested in the actuarial profession should consult the Department of Mathematics and Statistics for guidance. The department will be glad to suggest a programme of courses which will be helpful in preparing for examinations of the Society of Actuaries.
Operations Research. The Canadian Operational Research Society (CORS) has recognized that graduation from a programme in Applied Mathematics, Mathematics, or Statistics with a prescribed set of courses will qualify a student for the Diploma in Operations Research awarded by CORS. Interested students should consult the Department of Mathematics and Statistics for guidance.
For specific requirements of programmes offered by this department, see the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes and Science section V for BSc programmes.

## Courses in Mathematics and Statistics

When selecting courses, please note the following:

1. A student taking lower-level mathematics courses may wish to make use of the services provided by the department's Mathematics Laboratory.
2. AS/SC/MATH 15106.0 is intended for students who, despite having one or more OACs in mathematics (or equivalents), have a weak mathematical background. AS/MATH 15206.0 is designed for students who do not have credit in any OACs in mathematics. Both AS/SC/MATH 15106.0 and AS/MATH 15206.0 can serve as preparation for AS/SC/MATH 15153.0 and from there entrance to further calculus courses.
3. Note on calculus courses for first-year students.
a) BBA students who wish to take only a minimum amount of mathematics should take both AS/MATH 15303.0 and AS/MATH 1540 3.0 , or AS/AK/MATH 1550 6.0. The prerequisite for these courses is AS/SC/MATH 15003.0 or AS/SC/MATH 15153.0 or OAC Calculus or equivalent
b) Science students (particularly those majoring in Biology, Geography, Kinesiology and Health Science, or Psychology) who do not require other specific calculus courses to satisfy degree requirements or as prerequisites for higher-level courses, may take SC/MATH 15056.0 to satisfy the Faculty of Pure and Applied Science 1000-level mathematics requirement.

Other students should be guided by paragraphs (c) and (d) below.
c) A student with at least one OAC in mathematics or equivalent, but without previous calculus, must begin the study of calculus with AS/SC/MATH 15153.0 (formerly AS/SC/MATH 1500 3.0).
d) A student with OAC Calculus or equivalent can begin with AS/SC/MATH 10003.0 or AS/ SC/MATH 10133.0 or AS/SC/AK/MATH 1300 3.0 and then take AS/SC/MATH 10103.0 or AS/SC/MATH 10143.0 or AS/SC/AK/MATH 1310 3.0.
4. Course numbering. Courses with second digit 5 cannot be used to satisfy departmental degree requirements except (i) by students in the Ordinary Mathematics for Commerce Programme; and (ii) by students in other programmes in a few cases as noted in programme descriptions.
With the exception of AS/MATH 1530 3.0, MATH courses with third digit 3 involve statistics.

Unless otherwise specified, courses whose numbers end in "6.0" (i.e., 6-credit courses) have three lecture hours per week for two terms, while those whose numbers end in "3.0" (i.e., 3-credit courses) have three lecture hours per week for one term. In addition, problem sessions or tutorials are scheduled for many courses.
5. Arts students should note that some Atkinson College courses are out-of-Faculty and there are restrictions on the number of out-of-Faculty courses that may be taken. Science students
should note that some Atkinson College courses are out-of-department - see the restrictions in note 2. under "Mathematics and Statistics" in Science section V.

Atkinson College MATH courses which are cross-listed with MATH courses offered by the Faculties of Arts and Pure and Applied Science are identified in the course outlines below. For a list of other Atkinson College courses which are equivalent to and/or degree credit exclusions for MATH courses in this Calendar, Arts students should consult the Lecture Schedules. Science students should consult the "Atkinson Equivalence/Exclusion Table for Science Students" available in the Office of Science Academic Services beginning in March each year.

AS/SC/MATH 1000 3.0 Differential Calculus (Honours Version). Axioms for real numbers, limits, continuity and differentiability. This course covers slightly fewer topics than AS/SC/AK/MATH 1300 3.0, but covers them in greater depth. It should be taken by all those planning an Honours degree in Mathematics or a Specialized Honours degree in Statistics.

Prerequisite: AS/SC/MATH 15003.0 or AS/ SC/MATH 15153.0 or OAC Calculus or equivalent.

Degree credit exclusions: AS/SC/MATH 1013 3.0, AS/SC/AK/MATH 1300 3.0, AS/SC/MATH 1505 6.0, AS/MATH 1530 3.0, AS/AK/MATH 1550 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ECON 15303.0

AS/SC/MATH 1010 3.0 Integral Calculus (Honours Version). Riemann integral, fundamental theorems of calculus, transcendental functions, integration techniques, sequences, series. This course covers fewer topics than AS/SC/AK/MATH 1310 3.0, but covers them in greater depth. It should be taken by all those planning an Honours degree in Mathematics or a Specialized Honours degree in Statistics.
Prerequisite: AS/SC/MATH 10003.0 or permission of the department.

Degree credit exclusions: AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0, AS/SC/MATH 1505 6.0, AS/SC/AK/MATH 3110 3.0, SC/ ACMS 1030 6.0, SC/ACMS 1050 6.0.

AS/SC/MATH 1013 3.0 Applied Calculus I. The first half of this course deals with differentiation and the second half with integration. Topics include derivatives of algebraic and transcendental functions, indefinite integrals, techniques of integration, the definite integral and its interpretation as an area.

Prerequisite: AS/SC/MATH 15003.0 or AS/ SC/MATH 15153.0 or OAC Calculus.

Degree credit exclusions: AS/SC/MATH 1000 3.0, AS/SC/AK/MATH 1300 3.0, AS/SC/MATH 1505 6.0, AS/MATH 1530 3.0, AS/AK/MATH 1550 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ECON 1530 3.0.

AS/SC/MATH 1014 3.0 Applied Calculus II. Applications of differential and integral calculus (e.g., maxima and minima, areas, volumes of revolution, moments and centroids,
etc.), indeterminate forms, improper integrals, Taylor series, simple ordinary differential equations and an introduction to multivariate calculus.

Prerequisite(s): One of AS/SC/MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/AK/MATH 1300 3.0, or, for non-Science students only, one of AS/MATH 15303.0 and AS/MATH 1540 3.0, AS/AK/MATH 1550 6.0, AS/ECON 1530 3.0 and AS/ECON 1540 3.0.

Degree credit exclusions: AS/SC/MATH 1010 3.0, AS/SC/AK/MATH 1310 3.0, AS/SC/MATH 1505 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0.

AS/SC/MATH 1016 1.0 Applied Mathematics
Module I. Designed for students in Applied Mathematics to complement and enrich the material in AS/SC/MATH 1013 3.0. The module treats the theory in greater depth, and explores extended applications and modelling. One lecture hour per week. One term. One credit.

Prerequisite: OAC Calculus or AS/SC/MATH 15003.0 or AS/SC/MATH 15153.0

Corequisite: AS/SC/MATH 10133.0 (not acceptable as a prerequisite).

AS/SC/MATH 1017 1.0 Applied Mathematics
Module II. Designed for students in Applied Mathematics to complement and enrich the material in AS/SC/MATH 1014 3.0. The module treats the theory in greater depth, and explores extended applications and modelling. One lecture hour per week. One term. One credit.
Prerequisites: AS/SC/MATH 1013 3.0; AS/SC/ MATH 1016 1.0.

Corequisite: AS/SC/MATH 10143.0 (not acceptable as a prerequisite).

AS/SC/MATH 1025 3.0 Applied Linear Algebra. Topics include polar coordinates in Euclidean 3-space, general matrix algebra, determinants, vector space concepts for Euclidean n-space (e.g., linear dependence and independence, basis, dimension, linear transformations, etc.), an introduction to eigenvalues and eigenvectors.

Prerequisite: AS/SC/MATH 15253.0 or OAC Algebra and Geometry.
Degree credit exclusions: AS/SC/MATH 2000 6.0, AS/SC/MATH 2021 3.0, AS/SC/AK/MATH 2221 3.0, SC/ACMS 1020 6.0, SC/ACMS 1050 6.0.

AS/SC/AK/MATH 1090 3.0 Introduction to Logic for Computer Science. The syntax and semantics of propositional and predicate logic. Applications to program specification and verification. Optional topics include set theory and induction using the formal logical language of the first part of the course.

Prerequisite: One OAC in mathematics or equivalent, or AK/MATH 1710 6.0.
Degree credit exclusions: AS/SC/MATH 1120 3.0, AS/SC/AK/MATH 1190 3.0. This course is not open to any student who has taken or is taking any 3000- or higher-level MATH course.

AS/SC/AK/MATH 1131 3.0 Introduction to Statistics I. Displaying and describing distributions, basic concepts of time series and growth, relationships between variables, Simpson's paradox and the need for design. Experimental design and sampling design, randomization. Probability models and random variables, mean and variance. Basic laws of probability.
Prerequisite: At least one OAC in mathematics is recommended.
Degree credit exclusions: AS/SC/AK/MATH 2560 3.0, SC/BIOL 3080 3.0, SC/BIOL 3090 3.0, AS/ECON 2500 3.0, AS/SC/GEOG 2420 3.0, AS/SC/KINE 2050 3.0, AS/SC/PHED 2050 3.0,AS/SC/PSYC 2020 6.0, AS/SC/ PSYC 2021 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.

AS/SC/AK/MATH 1190 3.0 Introduction to Sets and Logic. Sets, functions, relations, induction, proof techniques, logic and logic circuits, basic combinatorics and some basic graph theory.
Prerequisite: One OAC in mathematics or equivalent, or AK/MATH 1710 6.0.
Degree credit exclusions: AS/SC/AK/MATH 1090 3.0, AS/SC/MATH 1120 3.0. This course is not open to any student who has taken or is taking any 3000- or higher-level MATH course.

Note: Students who plan to major or minor in Computer Science must take AS/SC/AK/ MATH 10903.0 instead of this course.

AS/SC/AK/MATH 1300 3.0 Differential Calculus with Applications. Limits, derivatives with applications, antiderivatives, fundamental theorem of calculus, beginnings of integral calculus.
Prerequisite: AS/SC/MATH 15003.0 or AS/ SC/MATH 15153.0 or AK/MATH 17106.0 or OAC Calculus or equivalent.

Degree credit exclusions: AS/SC/MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/MATH 1505 6.0, AS/MATH 1530 3.0, AS/AK/MATH 1550 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ECON 1530 3.0.

AS/SC/AK/MATH 1310 3.0 Integral Calculus with Applications. Transcendental functions, differential equations, techniques of integration, improper integrals, infinite series. Offered in both terms.

Prerequisite(s): One of AS/SC/MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/AK/MATH 1300 3.0, or, for non-Science students only, one of AS/MATH 15303.0 and AS/MATH 1540 3.0, AS/AK/MATH 1550 6.0, AS/ECON 1530 3.0 and AS/ECON 1540 3.0.

Degree credit exclusions: AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/MATH 1505 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0.

AS/SC/MATH 1505 6.0 Mathematics for the Life and Social Sciences. A presentation of the elements of single-variable differential and integral calculus, elementary linear algebra and introductory probability and statistics. This course is designed to provide a
comprehensive mathematical background for students of the biological and social sciences. Emphasis is placed on basic mathematical skills and their applications.
Prerequisite: At least one OAC in mathematics or AS/SC/MATH 1510 6.O.

Degree credit exclusions: AS/SC/MATH 1000 3.0, AS/SC/MATH 1010 3.0, AS/SC/MATH 1013 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/ MATH 1300 3.0, AS/SC/AK/MATH 1310 3.0, AS/MATH 1530 3.0, AS/MATH 1540 3.0, AS/ AK/MATH 1550 6.0, SC/ACMS 1020 6.0, SC/ ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ ECON 1530 3.0, AS/ECON 1540 3.0.

AS/SC/MATH 1510 6.0 Fundamentals of Mathematics. Designed for the student whose mathematical background is weak and who wishes to take further courses in mathematics. Topics include algebraic equations and inequalities; simple sequences and series; analytic geometry; trigonometry; functions, including algebraic, exponential, logarithmic and trigonometric functions.
Degree credit exclusions: AS/MATH 1520 6.0, SC/ACMS 1530 6.0. May not be taken by any student who has taken or is currently taking another university course in mathematics or statistics except for AS/SC/MATH 15003.0 or AS/SC/MATH 15153.0 or AS/SC/MATH 1525 3.0.

AS/SC/MATH 1515 3.0 Introduction to Calculus (formerly AS/SC/MATH 15003.0 before 1997/98). Elements of differential calculus, antiderivatives and integrals, with applications. Designed for students who have not taken (or have performed inadequately in) OAC Calculus.
Prerequisite: One OAC in mathematics or AS/ SC/MATH 15106.0 or AS/MATH 15206.0 or equivalent, or permission of the department. This course may be taken at the same time as the second half of AS/SC/MATH 15106.0 or AS/MATH 1520 6.0.

Degree credit exclusions: AS/SC/MATH 1500 3.0. May not be taken by any student who has taken or is currently taking another university course in calculus.

AS/MATH 1520 6.0 Fundamentals of Mathematics. Designed for the student whose mathematical background is weak and who wishes to gain some familiarity with mathematical techniques. Topics include algebraic equations and inequalities, simple sequences and series, analytic geometry, sets and functions, the binomial theorem. This course is given on a modularized, self-paced basis through the department's Mathematics Laboratory.
Degree credit exclusions: AS/SC/MATH 1510 6.0, SC/ACMS 1530 6.0. May not be taken by any student who has taken or is currently taking another university course in mathematics or statistics except for AS/SC/ MATH 15003.0 or AS/SC/MATH 15153.0 or AS/SC/MATH 1525 3.0.

AS/SC/MATH 1525 3.0 Elementary Linear Algebra. This course is designed for students who have not taken OAC Algebra and Geometry. Topics include complex numbers, mathematical induction, rudiments of linear algebra in the context of Euclidean 2-space and 3-space; e.g., vectors, equations of lines and planes, matrices and linear transformations.
Degree credit exclusion: May not be taken by any student who has taken or is taking another university course involving linear algebra.

AS/MATH 1530 3.0 Introductory Mathematics for Economists I. This course introduces and develops topics in differential calculus, integral calculus, and their applications in economics. This course or equivalent is required for all Economics majors or minors; it also satisfies the mathematics requirement for the Schulich School of Business. It is suitable for Ordinary Mathematics for Commerce, but should not be taken by those who intend to major in any other Mathematics or Statistics programme or in Computer Science. (Same as AS/ECON 1530 3.0.) Offered in both terms.

Prerequisite: AS/SC/MATH 15003.0 or AS/SC/ MATH 15153.0 or OAC Calculus or equivalent.
Prerequisite or corequisite: AS/ECON 10003.0 or AS/ECON 1010 3.0.
Degree credit exclusions: AS/SC/MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/AK/MATH 1300 3.0, AS/SC/MATH 1505 6.O, AS/AK/MATH 1550 6.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ECON 1530 3.0.

AS/MATH 1540 3.0 Introductory Mathematics for Economists II. This course introduces and develops topics, including matrix algebra, optimization, comparative statics of general function models, and their applications in economics. This course or equivalent is required for all Economics majors or minors; it also satisfies the mathematics requirement for the Schulich School of Business. (Same as AS/ ECON 1540 3.0.) Offered in both terms.
Prerequisite: One of AS/MATH 1530 3.0, AS/SC/ MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/ AK/MATH 1300 3.0, AS/ECON 1530 3.0.
Prerequisite or corequisite: AS/ECON 10003.0 or AS/ECON 1010 3.0.
Degree credit exclusions: AS/SC/MATH 1505 6.O, AS/AK/MATH 1550 6.0, SC/ACMS 1020 6.0, SC/ACMS 1050 6.0, AS/ECON 1540 3.0. May not be taken by any student who has taken or is taking AS/SC/MATH 10253.0 or AS/SC/MATH 20006.0 or AS/SC/MATH 20213.0 or AS/SC/AK/ MATH 22213.0 or equivalent.

AS/AK/MATH 1550 6.0 Mathematics with Management Applications. This course is designed to provide a mathematical background for students in the BBA programme. It is also suitable for the Ordinary Programme in Mathematics for Commerce, but should not be taken by those who intend to major in any other programme in Mathematics or Statistics or in Computer Science. It includes calculus, matrix algebra and elements of optimization with applications to management.
Prerequisite: AS/SC/MATH 15003.0 or AS/SC/ MATH 15153.0 (may also by taken as a first-term corequisite) or OAC Calculus or equivalent.

Degree credit exclusions: AS/SC/MATH 1000 3.0, AS/SC/MATH 1013 3.0, AS/SC/AK/MATH 1300 3.0, AS/SC/MATH 1505 6.0, AS/MATH 1530 3.0, AS/MATH 1540 3.0, SC/ACMS 1030 6.0, SC/ACMS 1050 6.0, AS/ECON 1530 3.0, AS/ ECON 1540 3.0. This course may not be taken by any student who has taken or is taking AS/SC/ MATH 10253.0 or AS/SC/MATH 20006.0 or AS/ SC/MATH 20213.0 or AS/SC/AK/MATH 22213.0 or equivalent.

AS/SC/MATH 1580 3.0 The Nature of Mathematics I. Designed to create a positive attitude towards mathematics through an examination of topics relevant to the study of mathematics at the elementary school level. Topics include numeral systems, number theory, nature of algebra and geometry. Intended primarily, but not exclusively, for Education students in the P/J stream.
Degree credit exclusion: Not open to any student who has taken or is taking another university mathematics course unless permission of the course coordinator is obtained.

AS/MATH 1581 3.0 Business Mathematics I. This course is an introduction to interest rates (simple, compound), annuities (ordinary, due, deferred), amortization (mortgages, other debts), sinking funds, bonds (face value, bond rate, price, yield rate), and depreciation (straight line, constant percentage).
Prerequisite: Ontario Grade 12 Mathematics or equivalent.
Degree credit exclusion: AS/AK/MATH 2580 6.0.

AS/SC/MATH 1590 3.0 The Nature of Mathematics II. A continuation of some of the themes explored in AS/SC/MATH 1580 3.0. Further topics include elements of probability and statistics, the nature of computers, elementary set theory and logic.
Prerequisite: AS/SC/MATH 15803.0 or permission of the course coordinator.
Degree credit exclusion: Not open to any student who has taken or is taking another university mathematics course (except AS/SC/ MATH 1580 3.0) unless permission of the course coordinator is obtained.

AS/SC/MATH 2010 3.0 Vector Differential Calculus. Power series, partial derivatives, linear maps, differentiability of maps from $n$ space to m -space, chain rule, gradients, tangent lines to curves, tangent planes to surfaces, cross product, implicit function theorem, multidimensional Taylor's theorem with remainder, extrema, quadratic forms, Hessian, Lagrange multipliers.
Prerequisite: AS/SC/MATH 10103.0 or permission of the department.

Degree credit exclusions: AS/SC/MATH 2015 3.0, AS/SC/AK/MATH 2310 3.0.

AS/SC/MATH 2015 3.0 Applied Multivariate and Vector Calculus. Topics covered include grad, div, curl and Laplacian in polar coordinates; line and surface integrals; theorems of Gauss and Stokes; double and triple integrals in various
coordinate systems; extrema and Taylor series for multivariate functions; differential geometry in Euclidean 3-space.
Prerequisite: One of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0, or AS/SC/MATH 15056.0 plus permission of the course coordinator.
Degree credit exclusions: AS/SC/MATH 2010 3.0, AS/SC/AK/MATH 2310 3.0.

AS/SC/MATH 2018 1.0 Applied Mathematics Module III. Designed for students in Applied Mathematics to complement and enrich material in AS/SC/MATH 2015 3.0. The module treats the theory in greater depth, and explores extended applications and modeling. One lecture hour per week. One term. One credit.
Prerequisites: AS/SC/MATH 1014 3.0; AS/SC/ MATH 1017 1.0.
Corequisite: AS/SC/MATH 20153.0 (not acceptable as a prerequisite).

AS/SC/MATH 2021 3.0 Linear Algebra I (Honours Version). Linear equations, matrices, determinants, vector spaces and inner product spaces. This course covers material similar to that in AS/SC/AK/MATH 22213.0 but at a more advanced level. It is required in Honours Mathematics degrees.
Prerequisite: OAC algebra or any university mathematics course.
Degree credit exclusions: AS/SC/MATH 1025 3.0, AS/SC/AK/MATH 2221 3.0, SC/ACMS 1020 6.0.

AS/SC/MATH 2022 3.0 Linear Algebra II (Honours Version). Linear transformations, eigenvalues, diagonalization, quadratic forms, Markov chains and isometries. This course covers material similiar to that in AS/SC/AK/ MATH 22223.0 but at a more advanced level. It is required in Honours degrees in Mathematics and in Specialized Honours degrees in Statistics.
Prerequisite: AS/SC/MATH 20213.0 or permission of the course coordinator.
Degree credit exclusion: AS/SC/AK/MATH 2222 3.0.

AS/SC/AK/MATH 2030 3.0 Elementary Probability. Introduction to the theory of probability as preparation for further study in either mathematical or applied probability and statistics. Topics include probability spaces, conditional probability, independence, random variables, distribution functions, expectation, Chebyshev's inequality, common distributions, moment-generating functions and limit theorems.
Prerequisite: One of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0.
Degree credit exclusion: AS/SC/MATH 2030 6.0.

AS/SC/MATH 2041 3.0 Symbolic Computation Laboratory I. An introduction to symbolic computing in the Maple environment. Topics from single-variable differential and integral calculus, including
simple ordinary differential equations, are covered. Both mathematical understanding and applications are emphasized. Three lecture hours, open laboratory hours. One term. Three credits.
Prerequisites: AK/AS/SC/COSC 15403.0 or equivalent computing experience; AS/SC/ MATH 10103.0 or AS/SC/MATH 10143.0 or AS/SC/AK/MATH 1310 3.0.
Degree credit exclusion: AS/SC/MATH 2040 6.0.

AS/SC/MATH 2042 3.0 Symbolic Computation Laboratory II. Advanced symbolic computing with Maple. Topics from linear algebra, differential equations, multivariate calculus, integral theorems, are covered. Both mathematical understanding and applications are emphasized. Three lecture hours, open laboratory hours. One term. Three credits.
Prerequisites: AS/SC/MATH 2041 3.0; AS/SC/ MATH 20103.0 or AS/SC/MATH 20153.0 or AS/SC/AK/MATH 2310 3.0; AS/SC/MATH 10253.0 or AS/SC/MATH 20213.0 or AS/SC/ AK/MATH 2221 3.0.
Prerequisites or corequisites: AS/SC/AK/ MATH 2270 3.0; AS/SC/MATH 20223.0 or AS/ SC/AK/MATH 2222 3.0.
Degree credit exclusion: AS/SC/MATH 2040 6.0.

AS/SC/AK/MATH 2090 3.0 Applications of Logic to Discrete Mathematics.
A continuation of AS/SC/AK/MATH 1090 3.0, this course uses formal logic to study topics in discrete mathematics, including sets, relations, functions, induction, the integers. Optional topics include program specification, sequences, recurrence relations.
Prerequisite: AS/SC/AK/MATH 10903.0 taken after Summer, 1998.

AS/SC/AK/MATH 2131 3.0 Introduction to Statistics II. This course is a continuation of AS/SC/AK/MATH 20303.0 (Elementary Probability). It provides students with an introduction to statistical methods with an emphasis on applications using continuous probability models.
Note: Computer/Internet use may be required to facilitate course work.
Prerequisite: AS/SC/AK/MATH 2030 3.0.
Degree credit exclusion: Not open to any student who has passed or is taking AS/SC/ AK/MATH 3131 3.0.

AS/SC/AK/MATH 2221 3.0 Linear Algebra with Applications I. Systems of linear equations, linear and affine subspaces of Euclidean n-space, the Gauss-Jordan algorithm, matrices and matrix algebra, determinants, vector space concepts for Euclidean $n$-space (linear dependence and independence, basis, dimension, etc.), various applications.
Prerequisite: OAC algebra or any university mathematics course.
Degree credit exclusions: AS/SC/MATH 1025 3.0, AS/SC/MATH 2021 3.0, SC/ACMS 1020 6.0.

AS/SC/AK/MATH 2222 3.0 Linear Algebra with Applications II. Linear transformations and their representation by matrices, change of basis and similarity, eigenvalues and eigenvectors, diagonalization, inner product spaces, orthogonality, the Gram-Schmidt algorithm, least squares approximations, abstract vector spaces, various applications.
Prerequisite: AS/SC/MATH 10253.0 or AS/ SC/AK/MATH 2221 3.0.
Degree credit exclusion: AS/SC/MATH 2022 3.0 .

AS/SC/MATH 2260 6.0 An Introduction to Combinatorics. Basic graph theory, permutations, combinations, inclusionexclusion principle, recurrence relations, generating functions, occupancy problems, application to probability theory, geometry of the plane, maps on the sphere, colouring problems, finite structures, systems of distinct representatives, existence problems, magic squares, Latin squares.
Prerequisite: One OAC in mathematics or equivalent.

AS/SC/AK/MATH 2270 3.0 Differential Equations. Introduction to differential equations, including a discussion of the formation of mathematical models for real phenomena; solution by special techniques; applications; linear equations; solutions in series; other topics if time permits.
Prerequisites: AS/SC/MATH 20103.0 or AS/ SC/MATH 20153.0 or AS/SC/AK/MATH 2310 3.0; AS/SC/MATH 10253.0 or AS/SC/MATH 20213.0 or AS/SC/AK/MATH 2221 3.0.

AS/SC/MATH 2280 3.0 The Mathematical Theory of Interest. Topics include measurement of interest, annuities, amortization of loans, bonds, sinking funds and depreciation. The course is at a level which will prepare students for the interest theory portion of the Society of Actuaries examinations.
Prerequisite: AS/SC/MATH 10103.0 or AS/ SC/MATH 10143.0 or AS/SC/AK/MATH 1310 3.0 .

Degree credit exclusions: AS/AK/MATH 2580 6.0, AS/MATH 2581 3.0.

AS/SC/AK/MATH 2310 3.0 Calculus of Several Variables with Applications. Vector functions, partial derivatives, gradient, multiple integrals, line integrals, optimization, applications. Offered in both terms.
Prerequisite: AS/SC/MATH 10103.0 or AS/ SC/MATH 10143.0 or AS/SC/AK/MATH 1310 3.0 .

Degree credit exclusions: AS/SC/MATH 2010 3.0, AS/SC/MATH 2015 3.0.

AS/SC/AK/MATH 2320 3.0 Discrete Mathematical Structures. This course covers the algebraic and combinatorial structures that are needed in computer science. Topics include set theory, functions, relations, combinatorics, elements of graph theory, posets, lattices, Boolean algebras,
moniods, groups, morphisms, congruence relations. Intended primarily, but not exclusively, for students in Computer Science.
Prerequisite: AS/SC/AK/MATH 1090 3.0, or any 2000-level MATH course without second digit 5 , or permission of the course coordinator.

AS/SC/AK/MATH 2500 3.0 An Introduction to the Basic Practice of Statistics. This course provides an introduction to the concepts of statistics with an emphasis on developing a critical attitude towards the use and misuse of statistics in business, health sciences and other areas.
Note: Computer/Internet use may be required to facilitate course work.
Degree credit exclusions: AS/SC/KINE 2050 3.0, AS/SC/PSYC 2020 6.0, AS/SC/PSYC 2021 3.0, AS/SC/PSYC 2022 3.0. May not be taken by students who have taken or are taking any university course in statistics.

AS/SC/AK/MATH 2560 3.0 Elementary Statistics I. Displaying and describing distributions, normal distibution. Relationships between variables, regression and correlation. The need for design, experimental design and sampling design. Sampling distributions, bias, variability. Probability models, random variables, probability laws.
Prerequisite: Ontario Grade 12 Advanced Mathematics.
Degree credit exclusions: AS/SC/AK/MATH 1131 3.0, SC/BIOL 3080 3.0, SC/BIOL 3090 3.0, AS/ECON 2500 3.0, AS/SC/GEOG 2420 3.0, AS/SC/KINE 2050 3.0, AS/SC/PHED 2050 3.0, AS/SC/PSYC 2020 6.0, AS/SC/ PSYC 2021 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.

AS/SC/AK/MATH 2570 3.0 Elementary Statistics II. Binomial distribution, sampling distribution of sample proportions and means, central limit theorem. Confidence intervals, tests and decisions, abuse of tests. Inference for a single mean, comparing two means, and for spread. Contingency tables. Simple regression and basic analysis of variance.
Prerequisite: AS/SC/AK/MATH 25603.0 or AS/SC/AK/MATH 1131 3.0.
Degree credit exclusions: AS/SC/MATH 1132 3.0, SC/BIOL 3080 3.0, SC/BIOL 3090 3.0, AS/ ECON 3210 3.0, AS/ECON 3500 3.0, AS/SC/ GEOG 2420 3.0, AS/SC/PSYC 2020 6.0, AS/ SC/PSYC 2022 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.

AS/AK/MATH 2580 6.0 Mathematics of Investment and Actuarial Science. Theory of interest; annuities certain; amortization and sinking funds; evaluation of bonds and other investments; depreciation, depletion and capital cost; insurance, including mortality tables, principles of life annuities, premiums and reserves.
Prerequisite: One full university mathematics course.
Degree credit exclusions: AS/MATH 1581 3.0, AS/SC/MATH 2280 3.0, AS/MATH 2581 3.0.

AS/MATH 2581 3.0 Business Mathematics II.
Spreadsheets and their application to business mathematics; deepening of topics in Business Mathematics I, including continuous compound interest, perpetuities, annuities where payments vary, callable bonds, bond yield rate, capital budgeting; mortality tables, life annuities, life insurance.
Prerequisites: AS/MATH 1581 3.0; AK/AS/SC/ COSC 15203.0 or permission of the course coordinator.
Degree credit exclusions: AS/SC/MATH 2280 3.0, AS/AK/MATH 2580 6.0.

AS/SC/AK/MATH 3010 3.0 Vector Integral Calculus. Integrability of continuous functions over suitable domains, iterated integrals and Fubini's theorem, counterexamples, change of variables, Jacobian determinants, polar and spherical coordinates, volumes, vector fields, divergence, curl, line and surface integrals, Green's and Stokes' theorems, differential forms, general Stokes' theorem.
Prerequisite: AS/SC/MATH 2010 3.0, or AS/SC/ AK/MATH 2310 3.0, or AS/SC/MATH 20153.0 and written permission of the Mathematics Undergraduate Director (normally granted only to students proceeding in Honours programmes in Mathematics or in the Specialized Honours Programme in Statistics).
Prerequisite or corequisite: AS/SC/MATH 2022 3.0 or AS/SC/AK/MATH 2222 3.0.

AS/SC/AK/MATH 3020 6.0 Algebra I. Introduction to the basic concepts of abstract algebra, with applications: groups (cyclic, symmetric, Lagrange's theorem, quotients, homomorphism theorems); rings (congruences, quotients, polynomials, integral domains, principal-ideal and unique-factorization domains); fields (field extensions, constructions with ruler and compasses, coding theory).
Prerequisite: AS/SC/MATH 20223.0 or AS/SC/ AK/MATH 2222 3.0.

AS/SC/MATH 3033 3.0 Classical Regression Analysis. General linear model. Properties and geometry of least-squares estimation. General linear hypothesis, confidence regions and intervals. Multicollinearity. Relationship between ANOVA models and linear models. Residual analysis, outliers, partial and added variable plots.
Prerequisites: For 1999/2000: AS/SC/MATH 1132 3.0, or an average of $B$ or higher in AS/SC/ AK/MATH 25603.0 and AS/SC/AK/MATH 2570 3.0; AS/SC/MATH 20223.0 or AS/SC/AK/MATH 2222 3.0. For 2000/2001: AS/SC/AK/MATH 2131 3.0 or permission of the course director; AS/SC/ MATH 20223.0 or AS/SC/AK/MATH 2222 3.0.
Corequisite: For 1999/2000: AS/SC/AK/MATH 31313.0 or permission of the course coordinator. For 2000/2001: No corequisite.
Degree credit exclusions: AS/SC/AK/MATH 3330 3.0, AS/SC/GEOG 3421 3.0, AS/SC/PSYC 3030 6.0.

AS/SC/AK/MATH 3034 3.0 Applied Categorical Data Analysis. Regression using categorical explanatory variables, one-way and two-way analysis of variance. Categorical response data, two-way and three-way contingency tables, odds
ratios, tests of independence, partial association. Generalized linear models. Logistic regression. Loglinear models for contingency tables.
Note: Computer/Internet use may be required to facilitate course work.
Prerequisite: AS/SC/MATH 30333.0 or AS/SC/ AK/MATH 3330 3.0.
Degree credit exclusion: Not open to any student who has passed or is taking AS/SC/MATH 4130G 3.0.

AS/SC/AK/MATH 3050 6.0 Introduction to Geometries. Analytic geometry over a field with vector and barycentric coordinate methods, affine and projective transformations, inversive geometry, foundations of Euclidean and non-Euclidean geometry, applications throughout to Euclidean geometry.
Prerequisite: AS/SC/MATH 20223.0 or AS/SC/ AK/MATH 22223.0 or permission of the course coordinator.

AS/SC/MATH 3100 3.0 Famous Problems in Mathematics. An attempt to foster an appreciation of the history, the personalities and some of the content of different areas of mathematics, by means of a study of some specific problems which have exercised the minds of mathematicians.
Prerequisites: At least 12 credits from 2000level MATH courses without second digit 5, or permission of the course coordinator.

AS/SC/AK/MATH 3110 3.0 Introduction to Mathematical Analysis. Proofs in calculus and analysis. Topics include sets, functions, axioms for R , applications of the completeness axiom, countability, sequences and their limits, monotone sequences, limits of functions, continuity.
Prerequisite: AS/SC/AK/MATH 13103.0 or AS/SC/MATH 1014 3.0.
Prerequisites or corequisites: AS/SC/AK/ MATH 23103.0 or AS/SC/MATH 20103.0 or AS/SC/MATH 2015 3.0; AS/SC/MATH 2021 3.0 or AS/SC/AK/MATH 22213.0 or AS/SC/ MATH 1025 3.0.
Degree credit exclusion: AS/SC/MATH 1010 3.0.

AS/SC/AK/MATH 3131 3.0 Mathematical Statistics I. Topics include common density functions, probability functions, principle of likelihood, the likelihood function, the method of maximum likelihood, likelihood regions, tests of hypotheses, likelihood ratio tests, goodness of fit tests, conditional tests, and confidence sets with a view towards applications.
Prerequisite: For 1999/2000: AS/SC/AK/MATH 20303.0 or permission of the course coordinator. For 2000/2001: AS/SC/AK/MATH 21313.0 or permission of the course coordinator.

AS/SC/AK/MATH 3132 3.0 Mathematical Statistics II. Important examples and methods of statistical estimation and hypothesis testing are discussed in terms of their mathematical and statistical properties. Topics include sufficiency, Bayesian statistics, decision theory, most powerful tests, likelihood ratio tests.
Prerequisite: AS/SC/AK/MATH 3131 3.0.

AS/SC/AK/MATH 3140 6.0 Number Theory and Theory of Equations. A study of topics in number theory and theory of equations using relevant methods and concepts from modern algebra, such as Abelian groups, unique factorization domains and field extensions.
Prerequisite: AS/SC/MATH 20223.0 or AS/ SC/AK/MATH 22223.0 or permission of the course coordinator.

AS/SC/AK/MATH 3170 6.0 Operations Research I. A study of linear programming; transportation problems, including network flows, assignment problems and critical path analysis; integer programming; dynamic programming and an introduction to stochastic models. Application to a set of problems representative of the field of operations research.
Prerequisites: AS/SC/MATH 10253.0 or AS/ SC/MATH 20213.0 or AS/SC/AK/MATH 2221 3.0; AK/AS/SC/COSC 15203.0 or AK/AS/SC/ COSC 15403.0 or AK/AS/SC/COSC 10203.0 or equivalent.

AS/SC/AK/MATH 3190 3.0 Set Theory and Foundations of Mathematics. The following topics are covered: paradoxes in naive set theory; functions and relations, transfinite numbers, their ordering and their arithmetic; well-ordered sets and ordinal numbers; Zorn's lemma; an introduction to axiomatic set theory.
Prerequisite: 6 credits from 2000-level MATH courses without second digit 5 .

AS/SC/AK/MATH 3210 3.0 Principles of Mathematical Analysis. Rigorous presentation, with proofs, of fundamental concepts of analysis: limits, continuity, differentiation, integration, fundamental theorem, power series, uniform convergence.
Prerequisite: At least one of the following four courses or course combinations: (1) AS/SC/ MATH 2010 3.0, (2) AS/SC/AK/MATH 3110 3.0, (3) AS/SC/AK/MATH 23103.0 and AS/ SC/MATH 1010 3.0, (4) AS/SC/MATH 2015 3.0 and AS/SC/MATH 1010 3.0.

AS/SC/MATH 3241 3.0 Numerical Methods I. An introductory course in computational linear algebra. Topics include simple error analysis, linear systems of equations, nonlinear equations, linear least squares and interpolation. (Same as AK/AS/SC/COSC 3121 3.0.)
Prerequisites: One of AS/SC/MATH 1010 3.0, AS/SC/MATH 1014 3.0, AS/SC/AK/MATH 1310 3.0; one of AS/SC/MATH 1025 3.0, AS/ SC/MATH 2021 3.0, AS/SC/AK/MATH 2221 3.0; one of AK/AS/SC/COSC 1540 3.0, AK/AS/ SC/COSC 2011 3.0, AK/AS/SC/COSC 2031 3.0, AS/AKIITEC 2011 3.0.

Degree credit exclusion: AK/AS/SC/COSC 3121 3.0.

AS/SC/MATH 3242 3.0 Numerical Methods II. Algorithms and computer methods for solving problems of differentiation, integration, differential equations, and an introduction to systems of non-linear equations. (Same as AK/AS/SC/COSC 3122 3.0.)

Prerequisites: AS/SC/AK/MATH 2270 3.0; AS/ SC/MATH 32413.0 or AK/AS/SC/COSC 3121 3.0.

Degree credit exclusion: AK/AS/SC/COSC 3122 3.0.

AS/SC/AK/MATH 3260 3.0 Introduction to Graph Theory. Introductory graph theory with applications. Graphs, digraphs. Eulerian and Hamiltonian graphs. The travelling salesman. Path algorithms; connectivity; trees; planarity; colourings; scheduling; minimal cost networks. Tree searches and sortings, minimal connectors and applications from physical and biological sciences.
Prerequisite: At least 6 credits from 2000-level MATH courses without second digit 5.

AS/SC/MATH 3271 3.0 Partial Differential Equations. Partial differential equations of mathematical physics and their solutions in various coordinates, separation of variables in Cartesian coordinates, application of boundary conditions; Fourier series and eigenfunction expansions; generalized curvilinear coordinates; separation of variables in spherical and polar coordinates.
Prerequisites: AS/SC/AK/MATH 2270 3.0; AS/ SC/MATH 20103.0 or AS/SC/MATH 20153.0 or AS/SC/AK/MATH 2310 3.0; AS/SC/AK/ MATH 30103.0 is also desirable, though not essential, as prerequisite for students presenting AS/SC/MATH 20103.0 or AS/SC/ AK/MATH 2310 3.0.

AS/SC/MATH 3272 3.0 Special Functions. The special functions of mathematical physics: Bessel functions, Legendre functions, Gamma function, Hermite functions, Laguerre functions, Chebyshev polynomials, hypergeometric and confluent hypergeometric functions; boundary value problems, heat flow, wave motion in Cartesian and polar coordinates; Laplace and Fourier transforms.
Prerequisite: AS/SC/MATH 32713.0 or permission of the course coordinator.

AS/SC/MATH 3280 6.0 Actuarial Mathematics. Actuarial mathematics at a level appropriate for examination 150 of the Society of Actuaries. Topics include survival distributions and life tables, premiums and reserves for life insurance and annuities, multiple life functions, multiple decrement models, valuation theory of pension plans.
Prerequisites: AS/SC/AK/MATH 2030 3.0; AS/ SC/MATH 2280 3.0.

AS/SC/AK/MATH 3330 3.0 Regression Analysis. Simple regression analysis, multiple regression analysis, matrix form of the multiple regression model, estimation, tests ( $t$ and F-tests), multicollinearity and other problems encountered in regression, diagnostics, model building and variable selection, remedies for violations of regression assumptions. First term.
Prerequisites: One of AS/SC/MATH 1132 3.0, AS/SC/AK/MATH 2131 3.0, AS/SC/AK/MATH 2570 3.0, AS/SC/PSYC 2020 6.0, or equivalent; some acquaintance with matrix algebra (such as is provided in AS/SC/MATH

1025 3.0, AS/SC/MATH 1505 6.0, AS/AK/ MATH 1550 6.0, AS/SC/MATH 2021 3.0, or AS/SC/AK/MATH 2221 3.0).
Degree credit exclusions: AS/SC/MATH 3033
3.0, AS/ECON 4210 3.0, AS/SC/GEOG 3421
3.0, AS/SC/PSYC 3030 6.0.

AS/SC/AK/MATH 3410 3.0 Complex Variables. Analytic functions, the CauchyRiemann equations, complex integrals, the Cauchy integral theorem, maximum modulus theorem. Calculations of residues and applications to definite integrals, two-dimensional potential problems and conformal mappings.
Prerequisite: AS/SC/MATH 20103.0 or AS/ SC/MATH 20153.0 or AS/SC/AK/MATH 2310 3.0. (AS/SC/AK/MATH 30103.0 is also recommended as a prerequisite for students who have taken AS/SC/MATH 2010 3.0.)

AS/SC/AK/MATH 3430 3.0 Sample Survey Design. Principal steps in planning and conducting a sample survey. Sampling techniques including simple random sampling, stratified random sampling, cluster sampling, and sampling with probabilities proportional to size. Estimation techniques including difference, ratio, and regression estimation.
Prerequisite: AS/SC/AK/MATH 20303.0 or AS/SC/AK/MATH 3330 3.0.

AS/SC/MATH 3450 3.0 Introduction to Differential Geometry. Curves and surfaces in 3-space, tangent vectors, normal vectors, curvature, introduction to topology and to manifolds.
Prerequisites: AS/SC/AK/MATH 3010 3.0; AS/ SC/MATH 20223.0 or AS/SC/AK/MATH 2222 3.0; or permission of the course coordinator.

Degree credit exclusion: AS/SC/AK/MATH 4250 6.0.

AS/MATH 3500 6.0 Mathematics in the History of Culture. An introduction to the history of mathematical ideas from antiquity to the present, with emphasis on the role of these ideas in other areas of culture such as philosophy, science and the arts.
Prerequisite: 6 credits in university-level mathematics (other than AS/SC/MATH 1500 3.0, AS/SC/MATH 1510 6.0, AS/SC/MATH 1515 3.0, AS/MATH 1520 6.0, or AS/SC/ MATH 1525 3.0) is strongly recommended.
Degree credit exclusion: AS/HUMA 3990A 6.0.
AS/SC/MATH 40006.0 (4000 3.0) Individual Project. A project of a pure or applied nature in mathematics or statistics under the supervision of a faculty member. The project allows the student to apply mathematical or statistical knowledge to problems of current interest. A report is required at the conclusion of the project.
Prerequisites: Open to all students in Honours programmes in the Department of Mathematics and Statistics. Permission of the Programme Director is required. Applied Mathematics students can enroll only after they have completed the core programme in Applied Mathematics.

AS/SC/AK/MATH 4010 6.0 Real Analysis Survey of the real and complex number systems, and inequalities. Metric space topology. The Riemann-Stieltjes integral. Some topics of advanced calculus, including more advanced theory of series and interchange of limit processes. Lebesgue measure and integration. Fourier series and Fourier integrals.
Prerequisite: AS/SC/AK/MATH 32103.0 or permission of the course coordinator.

AS/SC/AK/MATH 4020 6.0 Algebra II. Continuation of Algebra I, with applications: groups (finitely generated Abelian groups, solvable groups, simplicity of alternating groups, group actions, Sylow's theorems, generators and relations); fields (splitting fields, finite fields, Galois theory, solvability of equations); additional topics (lattices, Boolean algebras, modules).
Prerequisite: AS/SC/AK/MATH 30206.0 or permission of the course coordinator.
Degree credit exclusion: AS/SC/MATH 4241 3.0.

AS/SC/AK/MATH 4030 3.0 Probability Theory. Elementary measure theory, convergence of random variables, strong law of large numbers, convergence in distribution, stable laws, conditional expectation, martingales.
Prerequisite: AS/SC/AK/MATH 20303.0 or AS/SC/AK/MATH 3030 3.0.

AS/SC/AK/MATH 4080 6.0 Topology. Topological spaces, continuity, connectedness, compactness, nets, filters, metrization theorems, complete metric spaces, function spaces, fundamental group, covering spaces.
Prerequisite: AS/SC/AK/MATH 32103.0 or permission of the course coordinator.

AS/SC/MATH 41003.0 Topics in Mathematical Education. This course consists of a series of presentations, by the students, of mathematical topics chosen in consultation with the instructor. Suitability of the material for presentation in high schools is discussed.
Prerequisite: Permission of the course coordinator.

AS/SC/MATH 4110 3.0 Topics in Analysis. Possible topics include special functions, integral transforms, Fourier series, divergent series, asymptotic expansions, approximation theory, ordinary differential equations, partial differential equations, calculus of variations, calculus on manifolds, introduction to functional analysis, difference equations.
Prerequisite: Permission of the course coordinator.

AS/SC/MATH 4120 3.0 Topics in Algebra. One or two topics which may be chosen from the following: category theory, commutative algebra, infinite Abelian groups, non-associative algebras, advanced linear algebra, presentation theory, representations of finite groups, universal algebra.

Prerequisite: Permission of the course coordinator.

AS/SC/MATH 4130 3.0 Topics in Probability and Statistics. One or two topics which may be chosen from the following: statistical decision theory, statistical inference, sequential analysis, information theory, large sample theory, design of experiments, stochastic processes, time series.
Prerequisite: Permission of the course coordinator.

AS/SC/MATH 4140 3.0 Topics in Number Theory. Topics chosen from quadratic diophantine equations and infinite continued fractions, elements of algebraic number theory, p-adic numbers, other topics selected according to student interest.
Prerequisite: Permission of the course coordinator.

AS/SC/MATH 4141 3.0 Advanced Numerical Methods. Systems of non-linear equations: Newton-Raphson, quasi Newton methods; optimization problems: steepest descents, conjugate gradient methods; approximation theory: least squares, singular value decomposition, orthogonal polynomials, Chebyshev and Fourier approximation, Padé approximation; matrix eigenvalues: power method, householder, QL and QR algorithms.
Prerequisite: AS/SC/MATH 32423.0 or AK/AS/ SC/COSC 3122 3.0.

AS/SC/MATH 4142 3.0 Numerical Solutions to Partial Differential Equations. Review of partial differential equations, elements of variational calculus; finite difference methods for elliptic problems, error analysis, boundary conditions, non-Cartesian variables, PDEeigenvalue problems; hyperbolic and parabolic problems, explicit and implicit methods, stability analysis; Rayleigh-Ritz and Galerkin method for ODEs, finite element methods.
Prerequisites: AS/SC/AK/MATH 2270 3.0; AS/ SC/MATH 32423.0 or AK/AS/SC/COSC 3122 3.0.

AS/SC/AK/MATH 4150 3.0 Topics in Geometry. One or two topics which may be chosen from the following: projective geometry, algebraic geometry, geometrical algebra, finite geometries, differential geometry, Riemannian geometry, discrete applied geometry.
Prerequisites: AS/SC/MATH 20223.0 or AS/SC/ AK/MATH 2222 3.0; 6 credits from 3000-level MATH courses without second digit 5; or permission of the course coordinator.

AS/SC/MATH 4160 3.0 Combinatorial Mathematics. Topics from algebra of sets, permutations, combinations, occupancy problems, partitions of integers, generating functions, combinatorial identities, recurrence relations, inclusion-exclusion principle, Polya's theory of counting, permanents, systems of distinct representatives, Latin rectangles, block designs, finite projective planes, Steiner triple systems.
Prerequisites: AS/SC/MATH 20223.0 or AS/SC/ AK/MATH 2222 3.0; 6 credits from 3000-level MATH courses without second digit 5; or permission of the course coordinator.

AS/SC/MATH 4170 6.0 Operations Research II. Selected topics from game theory, decision theory, simulation, reliability theory, queuing theory, non-linear programming, classification, pattern-recognition and prediction. Each chapter contains an optimization problem and methods and algorithms for solving it. The course is rich in examples.
Prerequisites: AS/SC/MATH 20103.0 or AS/SC/ MATH 20153.0 or AS/SC/AK/MATH 2310 3.0; AS/SC/MATH 11323.0 or AS/SC/AK/MATH 2030 3.0; AS/SC/AK/MATH 3170 6.0; or permission of the course coordinator.
Degree credit exclusion: AS/MATH 4570 6.0.
AS/SC/MATH 42006.0 (4200 3.0) Special Topics. The department may offer courses or seminars on particular topics not ordinarily available. Some Special Topics courses may not be eligible for Science (SC) credit. Two terms. Six credits. One term. Three credits.

Prerequisite: Permission of the course coordinator.

AS/SC/AK/MATH 4210 3.0 Complex Analysis. Development of the principal results in complex variable theory, including Taylor and Laurent series, the calculus of residues, the maximum modulus theorem and some special functions. Introduction to some more advanced topics.
Prerequisite: AS/SC/AK/MATH 34103.0 or permission of the course coordinator.

AS/SC/MATH 4230 3.0 Non-Parametric Methods in Statistics. Order statistics; general rank statistics; one-sample, two-sample, and k-sample problems; Kolmogorov-Smirnov statistics; tests of independence and relative efficiencies.
Prerequisite: AS/SC/AK/MATH 3131 3.0; AS/SC/ AK/MATH 31323.0 is recommended but not required.

AS/SC/MATH 4240 3.0 Independent Studies in Applied Mathematics. Independent studies under the direction of a faculty supervisor. Areas: applied and numerical analysis, discrete applied mathematics, operations research, mathematical physics, mathematical biology, mathematical modelling. The area is restricted by the availability of a supervisor.
Prerequisites: Permission of the Applied Mathematics Programme Director; restricted to students who have completed the Applied Mathematics programme core.
Note: Faculty of Arts students should see the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for regulations governing independent reading courses.

AS/SC/MATH 4241 3.0 Applied Group Theory. Introduction to group theory and its applications in the physical sciences. Finite groups. Compact Lie groups. Representation theory, tensor representations of classical Lie groups, classification of semi-simple Lie groups.
Prerequisites: AS/SC/MATH 2015 3.0; AS/SC/ MATH 20223.0 or AS/SC/AK/MATH 2222 3.0; AS/SC/AK/MATH 2270 3.0.

Degree credit exclusion: AS/SC/AK/MATH 4020 6.0.

AS/SC/AK/MATH 4250 6.0 Differential Geometry. Curves and surfaces in 3-space, tangent vectors, normal vectors, curvature, introduction to topology, manifolds, tangent spaces, multilinear algebra and tensors. Normally offered in alternate years.
Prerequisites: AS/SC/AK/MATH 3010 3.0; AS/ SC/MATH 20223.0 or AS/SC/AK/MATH 2222 3.0; or permission of the course coordinator.

Degree credit exclusion: AS/SC/MATH 3450 3.0.

AS/SC/MATH 4270 3.0 Integral Transforms and Equations. This course studies the Laplace, Fourier, Hankel and Mellin transforms; the solution of integral equations; and the treatment of asymptotic expansions. The applications are to problems in circuit theory, heat flow, elasticity, transport theory and scattering theory.
Prerequisites: AS/SC/AK/MATH 2270 3.0; AS/ SC/AK/MATH 3410 3.0.
Prerequisite or corequisite: AS/SC/MATH 3271 3.0.

AS/SC/AK/MATH 4271 3.0 Dynamical Systems (formerly AS/SC/AK/MATH 3270 3.0 - before 1998/99). Iterations of maps and differential equations; phase portraits, flows; fixed points, periodic solutions and homoclinic orbits; stability, attraction, repulsion; Poincaré maps, transition to chaos. Applications: logistic maps, interacting populations, reaction kinetics, forced Van der Pol, damped Duffing, and Lorenz equations.
Prerequisites: AS/SC/AK/MATH 2270 3.0; AS/ SC/MATH 20213.0 or AS/SC/AK/MATH 2221 3.0 or AS/SC/MATH 1025 3.0.

Degree credit exclusion: AS/SC/AK/MATH 3270 3.0.

## AS/SC/MATH 4280 3.0 Risk Theory.

A study of the stochastic aspects of risk with emphasis on insurance applications. Topics include an introduction to utility theory, individual and collective risk theory, compound Poisson processes, ruin theory, non-proportional reinsurance.
Prerequisite: AS/SC/AK/MATH 2030 3.0; AS/ SC/MATH 32806.0 is recommended but not required.

AS/SC/AK/MATH 4290 3.0 Mathematical Logic. Predicate logic, rules of inference, elimination of quantifiers, semantics and model theory, the completeness and compactness theorems, ultrapowers and nonstandard analysis.
Prerequisite: AS/SC/AK/MATH 20903.0 or permission of the course coordinator.

AS/SC/MATH 43006.0 (4300 3.0) Directed Readings. A student may arrange to do independent study with a member of the Mathematics and Statistics Department. Such an arrangement must have prior approval of the department Chair. Two terms. Six credits. One term. Three credits.

Note: Faculty of Arts students should see the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for regulations governing independent reading courses. Some Directed Readings topics may not be eligible for Science (SC) credit.

AS/SC/MATH 4400 6.0 The History of Mathematics. Selected topics in the history of mathematics, discussed in full technical detail but with stress on the underlying ideas, their evolution and their context.
Prerequisites: 36 credits from MATH courses without second digit 5, including at least 12 credits at or above the 3000 level. (12 of the 36 credits may be taken as corequisites.)

AS/SC/AK/MATH 4430 3.0 Stochastic Processes. Basic stochastic processes, including Markov chains, Poisson processes, and birth-death processes. Topics from queues, renewal processes, stationary processes, Brownian motion.
Prerequisite: AS/SC/AK/MATH 2030 3.0.
AS/SC/MATH 4470 3.0 Gas and Fluid Dynamics. Fundamental laws; conservation of mass, momentum and energy; vortex motion; incompressible, compressible and viscous flows; turbulent flow; surface waves. (Same as SC/PHYS 4120 3.0.)
Prerequisites: AS/SC/MATH 2015 3.0; AS/SC/ AK/MATH 2270 3.0; SC/PHYS 20103.0 or SC/ EATS 2470 4.0.
Degree credit exclusions: SC/PHYS 3180 3.0, SC/PHYS 4120 3.0.

AS/MATH 4570 6.0 Applied Optimization. Topics chosen from decision theory, game theory, inventory control, Markov chains, dynamic programming, queuing theory, reliability theory, simulation, non-linear programming.
Prerequisites: AS/SC/AK/MATH 3170 6.0; AS/ SC/AK/MATH 3330 3.0; AS/SC/AK/MATH 32303.0 or AS/SC/AK/MATH 3430 3.0.

Degree credit exclusion: AS/SC/MATH 4170 6.0.

AS/SC/MATH 4630 3.0 Applied Multivariate Statistical Analysis. The course covers the basic theory of the multivariate normal distribution and its application to multivariate inference about a single mean, comparison of several means and multivariate linear regression. As time and interest permit, further related topics may also be covered.
Prerequisites: AS/SC/AK/MATH 3131 3.0; AS/ SC/AK/MATH 30343.0 or AS/SC/AK/MATH 3230 3.0; AS/SC/MATH 20223.0 or AS/SC/ AK/MATH 2222 3.0.

AS/SC/MATH 4730 3.0 Experimental Design. An examination of the statistical issues involved in ensuring that an experiment yields relevant information. Topics include randomized block, factorial, fractional factorial, nested, Latin square and related designs. Further topics as time permits. The emphasis is on applications.

Prerequisites: For 1999/2000: A second 6 credits in statistics, including either AS/SC/ MATH 3033 3.0, or both AS/SC/AK/MATH 32303.0 and AS/SC/AK/MATH 3330 3.0; or permission of the course coordinator. For 2000/2001: AS/SC/AK/MATH 30343.0 or permission of the course coordinator.

AS/SC/MATH 4830 3.0 Time Series and Spectral Analysis. Treatment of discrete sampled data by linear optimum Wiener filtering, minimum error energy deconvolution, autocorrelation and spectral density estimation, discrete Fourier transforms and frequency domain filtering and the Fast Fourier Transform algorithm. (Same as SC/EATS 40203.0 and SC/PHYS 4060 3.0.)

Prerequisites: AK/AS/SC/COSC 15403.0 or equivalent FORTRAN programming experience; AS/SC/AK/MATH 2270 3.0; AS/ SC/MATH 20153.0 or AS/SC/AK/MATH 3010 3.0.

Degree credit exclusions: AK/AS/SC/COSC 4242 3.0, SC/EATS 4020 3.0, AS/SC/MATH 4130B 3.0, AS/SC/MATH 4930C 3.0, SC/ PHYS 4060 3.0.

AS/SC/MATH 4930 3.0 Topics in Applied Statistics. Each time this course is given, it is on a topic chosen from the following:

A statistical quality control
B simulation and the Monte Carlo method
C forecasting and applied time series D applied decision theory.
Prerequisites: AS/SC/AK/MATH 3330 3.0; AS/ SC/AK/MATH 30343.0 or AS/SC/AK/MATH 32303.0 or AS/SC/AK/MATH 3430 3.0.

## Mathematics for Commerce Arts

See Mathematics and Statistics.

## McLaughlin College - Arts

## Academic Programme Office:

237 McLaughlin, (416) 736-5128

## College Master:

David Shugarman
Academic Advisor:
Terry Conlin
Listed below are the 1000-level and 2000-level 9 credit Foundations courses which are part of the Faculty of Arts General Education requirement. These courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.

Students enrolling in McLaughlin College Foundation courses, in either the Division of Humanities or the Division of Social Sciences, will be members of McLaughlin College with access to academic advising, orientation programmes, social and co-curricular events.

## 1000-Level Courses

AS/HUMA 1950 9.0 Concepts of the "Male" and "Female" in the West. An examination of the origins of, and the interrelationships among, gender, male and female concepts and roles through myth, literature, art, and artifacts from various Western cultures, past and present.
Degree credit exclusion: AS/HUMA 1950 6.0.
AS/HUMA 2960 9.0 The Body in Western Culture. From an interdisciplinary perspective this course explores the attitudes of Western culture to the body and to entities such as soul, spirit and mind which have been contrasted with it.

AS/SOSC 1130 9.0 International Migration. The course examines why people leave their native lands and what becomes of them in the countries to which they immigrate, with particular reference to the impact of the immigrant on the host country, using Canadian examples.
Degree credit exclusion: AS/SOSC 1130 6.0.
AS/SOSC 1140 9.0 Self, Culture, and Society: The Problem of Personal Identity. The course concerns the development of concepts of culture by which individuals seek to understand themselves and the world about them, using materials from anthropology, sociology, and philosophy, and with the aim of developing a critique of our own situation.
Degree credit exclusion: AS/SOSC 1140 6.0.
AS/SOSC 1188 9.0 Women's Roles. The intersection of gender and culture is considered, with emphasis on women's issues. We explore the role of women in Canada and elsewhere, assessing how nation and culture shape gender discourses, and we examine aboriginal issues at home and abroad.

AS/SOSC 1200 9.0 Canadian Problems. The conceptual framework that has been developed out of this experience is used to examine a number of contemporary problems, selected each year on the basis of their topicality and relevance to a comprehensive understanding of current Canadian public policy.
Degree credit exclusion: AS/SOSC 1200 6.0.
AS/SOSC 1350 9.0 Women and the Law. This course explores the role of gender within the context of the legal system. Current issues that highlight the relationship between gender and law are examined by analyzing both legislation and case law. Topics include: divorce, rape, and equal pay.
Degree credit exclusion: AS/SOSC 1350 6.0.
AS/SOSC 1520 9.0 Markets and Democracy: The Development of Industrial Society. The development of industrial capitalism has entailed profound changes in ways of living. The course will consider the spread of the market economy, the
industrialization of production and the associated transformation of social and political institutions and ideas.
Degree credit exclusion: AS/SOSC 15206.0 and AS/SOSC 2510 6.0.

AS/SOSC 1535 9.0 Societies and Economic Systems. This course examines the 20th century's two dominant economic systems: Western capitalism and eastern European socialism. It provides a comprehensive understanding of the theory and practice of both systems, and discusses movement between them.

AS/SOSC 2150 9.0 Families in Crisis: Issues of Health Environments and Poverty. This course examines the crisis of the contemporary family. We use the family therapy literature to examine the crisis within the family system; and we also use the critical perspectives of Marxism, psychoanalysis and feminism to understand the position of the family in the surrounding social world.
Degree credit exclusion: AS/SOSC 2150 6.0, AS/ SOCI 3660 6.0, AS/SOSC 3150 6.0.

AS/SOSC 2200 9.0 Loyalty, Sovereignty, Democracy: Canadian Identities in the 20th Century. An introduction to the Programme in Canadian Studies. A critical assessment of the body of knowledge on Canada as it has developed in selected disciplines. Works of various scholars are examined to illustrate approaches used.
Degree credit exclusion: AS/SOSC 2200 6.0.
Note: This course is required of students in the Canadian Studies Honours programme, but also is open to others.

## Music - Fine Arts

Department Office:
225 Winters, (416) 736-5186
Associate Professor and Chair of the Department:
M. Coghlan

Professors:
T. Sankaran, J. Tenney

Professor Emeritus:
A. Clarkson

Associate Professors:
R. Bowman, B. Diamond, D. Lidov, D. Mott,
C. Petrowska, C. Sokol, P. Wait, P. Werren, R. Witmer

Associate Professor Emeritus:
R.S. Beckwith

Assistant Professors:
J. Gittins, G. Halls, S. Otto

Adjunct Professor:
O. Peterson

## Programmes of Study

The mandate of our students and faculty is to make and share music and to acquire, develop and disseminate musical knowledge. We understand musical study as interacting with nearly all studies pursued in the University - those of the humanities and the other fine arts, the social and natural sciences and the professions.

From its inception, the Music Department has emphasized the study and performance of contemporary music in all its diversity, while bringing to bear a wide range of historical and social perspectives on the music of other times and places.
Students who major in music pursue either the BA Honours or BFA Honours degree. Each of these addresses both academic and practical concerns, combining the knowledge and skills needed for professional work in music with experience that will stimulate lifelong musical and personal growth. Undergraduate studies include courses in performance, composition, music history and ethnology, theory and pedagogy, with the emphasis largely depending on the student's own interests and abilities. Many of these courses are also available to non-majors, with opportunities for participation in various performances and musical events on and off campus organized by members of the department.
Both the BA Honours and BFA Honours degree programmes comprise a total of 120 credits and may be completed in four years of full-time study or over a longer period of part-time study. The major programme in Music may be combined with a second major in the Faculty of Arts, or with a minor in the Faculty of Arts, Environmental Studies or Fine Arts. A five-year programme leading to two degrees (the BA Honours or BFA Honours in Music, and the Bachelor of Education degree) is also available. A minor in Music may be pursued by qualified honours degree students in the Faculties of Arts, Environmental Studies and Fine Arts.
Admission to the department is by audition. Further information on audition evaluations, admissions, degree requirements, and Faculty of Fine Arts regulations may be found in the Faculty of Fine Arts section of this Calendar.
In the area of performance, the qualified student may select one or more of a number of courses including chamber ensembles in Western art music (piano, percussion, winds, strings, voice, guitar), jazz, classical music of India, Philippine gong ensemble, and contemporary music both notated and improvised. Each course entails ensemble workshops, study of the history and literature of the instruments, and attention to individual problems of performance. Performance experience in large ensembles is provided by the Choir, String Orchestra, Jazz Orchestra, Jazz Choir, Wind Symphony, and Contemporary Improvisation Ensemble.
In the area of composition, instruction is given in the skills of writing in score, arranging and orchestration. In addition, fully equipped digital and MIDI studios provide facilities for learning all phases of the composition and production of music.
In the area of musical research (music history, area studies and ethnomusicology), the aim is to integrate musicianship with the history, theory, and anthropology of music. Intensive study may be pursued in the musics of Asia and the Americas as well as of Europe, past and present.

All Music Majors complete a sequence of foundational courses which equips them with essential concepts and practical skills in eartraining, sight-singing, rhythm, theory, and
awareness of the social, cultural, and historical contexts of music. These requirements include FA/MUSI 10006.0 (or 2000 6.0), FA/MUSI 1200 9.0, FA/MUSI 2200 6.0, FA/MUSI 2201 3.0 , and FA/MUSI 2202 3.0. A student may be exempted from one or more of those courses by passing proficiency exams; otherwise, students who do not maintain enrolment in the foundation courses scheduled for their first and second years may not be enrolled in performance and composition courses. These foundation courses are prerequisite for all the department's upper-level offerings for majors, and both full and part-time students must complete them within their first 60 credits. All Music majors must complete 30 upper level Music credits (at or above the 3000 level), including at least 18 credits in studies courses for the BA Honours degree, and at least 12 credits in studies courses and at least 12 credits in studio courses for the BFA Honours degree. (See the lists of courses below.)
In addition to courses in Music, the BA Honours and BFA Honours degrees require 18 general education credits, and 12 credits from other departments in Fine Arts. Both degrees allow elective courses in addition to the requirements listed above.

## For Degree Credit, Music Courses are Classified as Follows:

Non-Major Courses (not open to Music majors or minors):
FA/MUSI 1511 3.0, 1512 3.0, 1520 6.0, 1530 6.0 (In addition, many of the courses listed below are available to non-majors.)

## Foundation Courses:

FA/MUSI 1000 6.0, 1200 9.0, 2000 6.0, 2200 6.0, 2201 3.0, 2202 3.0. (All other 1000-and 2000-level Music courses are counted as electives.)

## Upper-Level Studies Courses:

FA/MUSI 3220 3.0, 3300 6.0, 3310 6.0, 3320 $6.0,33406.0,33506.0,33606.0,3390$ 3.0, 3390 6.0, $34703.0,42003.0,43003.0,4320$ 3.0, 4370 3.0, $43803.0,43813.0,4390$ 3.0, 4390 6.0, 4399 3.0, 4590 3.0, 4590 6.0, 4600 6.0.

## Upper-Level Studio Courses:

FA/MUSI 3000 6.0, 3010 6.0, 3020 3.0, 3024 3.0, 3025 3.0, 3028 3.0, $30296.0,30316.0$, $30326.0,30406.0,30416.0,30423.0,3051$ 6.0, 3052 3.0, 3053 3.0, 3059 6.0, 3070 3.0/ $6.0,30713.0,30806.0,31106.0,31203.0$, $31313.0,31323.0,31406.0,32013.0,3202$ 3.0, $32106.0,32406.0,34503.0,3460$ 3.0, 3900 3.0/6.0, 4020 3.0, 4024 3.0, 4025 3.0, 4028 3.0, 4029 6.0, 4031 6.0, 4032 6.0, 4040 $6.0,4041$ 6.0, 4051 6.0, 4052 3.0, 4053 3.0, 4059 6.0, 4070 3.0/6.0, 4080 6.0, 4110 6.0, 4140 6.0, 4150 6.0, 4590 3.0, 4590 6.0, 4900 3.0/6.0.

For additional courses in Music available for credit consult the Atkinson College section of the Music Department's supplementary calendar.

Note: Some courses involve additional maintenance fees. Consult the Department's supplementary calendar for details.

## Courses in Music

Note: For new courses, the list of courses offered in a given term, and detailed course descriptions, consult the supplementary calendar available from the Department office.

FA/MUSI 1000 6.0 Workshop in Musicianship I. An intensive course designed to develop musical sensitivity, imagination, and practical skills, through a variety of individual exercises in singing, playing, composing, and listening. Four hours plus tutorial.

Limited to Music majors and minors and required of all new majors. Available to students in Fine Arts Cultural Studies by entrance examination.

FA/MUSI 1020 3.0 Classical Performance: Individual Instruction. This course provides instruction in instrumental or vocal performance. Students enrol in the course corresponding to their instrument.

| A. | Flute |
| :--- | :--- |
| B. | Oboe |
| C. | Clarinet |
| D. | Bassoon |
| E. | Saxophone |
| F. | French Horn |
| G. | Trumpet |
| H. | Trombone |
| I. | Tuba |
| J. | Percussion |
| K. | Piano |
| L. | Guitar |
| M. | Voice |
| N. | Violin |
| O. | Viola |
| P. | Cello |
| Q. | Double Bass |

Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 10243.0 or FA/MUSI 10253.0 or FA/MUSI 1026 3.0.

FA/MUSI 1024 3.0 York University Concert Choir. This course is open to all qualified York University students and offers performance training in the environment of a large choir.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 1025 3.0 York University Wind Symphony. This course is open to all qualified York University students and offers performance training in the environment of a large ensemble.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 1026 3.0 Orchestra. This course is open to all qualified York University students and offers performance training in the environment of a large ensemble.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 1028 3.0 York Chamber Music Ensembles. This course provides training and experience in the performance of chamber music. Students enrol in one of the following ensembles:
A. Accompanying
B. York Brass Ensemble
G. York Guitar Ensemble
K. York Chamber Ensembles (Keyboard)
P. York Percussion Ensemble
S. York Chamber Strings
V. York Vocal Ensembles
W. York Woodwind Ensemble

Prerequisite: Permission of the course director, by audition.
Corequisite: FAMMUSI 1020 3.0.
FA/MUSI 1031 6.0 Piano Improvisation and Contemporary Styles. Designed for pianists of all backgrounds interested in exploring a variety of improvisational practices and twentieth century techniques and styles. Students learn to develop a compositional orientation to improvisation which allows the free exploration and integration of materials and processes from all periods and cultures.
Prerequisite: Permission of the course director, by audition. Open to non-majors
Prerequisites or Corequisites: FA/MUSI 1000 6.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 1032 6.0 Contemporary Musicianship and Improvisation. Designed to integrate musicianship training with work in composition and improvisation. Development of the skills, strategies and sensibilities required to achieve fluency in spontaneous solo and ensemble music making, and the development and refining of one's own musical "voice" are among the main course objectives.
Prerequisite: Permission of the course director, by audition. Open to non-majors.
Prerequisites or Corequisites: FA/MUSI 1000 6.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 1050 6.0 Introduction to Jazz Performance. Improvisation and ensemble playing in the jazz idiom, intended for students with instrumental proficiency and musical literacy, and some experience in jazz performance.
Prerequisite: Permission of the course director, by audition. All aspirants can receive further information on auditions from the Department office. Open to non-majors.
Prerequisites or corequisites: FA/MUSI 1000 6.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 1051 6.0 Jazz Workshop I. A
systematic approach to improvising, and ensemble playing in the jazz idiom. The course is designed primarily for students with instrumental proficiency and basic experience in small group jazz performance and/or jazz theory. Hours vary.
Prerequisite: Permission of the course director, by audition. Open to non-majors.
Prerequisites or corequisites: FA/MUSI 1000 6.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 1052 3.0 Jazz Orchestra I. The York Jazz Orchestra performs traditional and contemporary jazz for large ensembles, including student compositions as well as music by noted jazz composers.
Prerequisite: Permission of the course director, by audition. Open to non-majors.
Note: The Jazz Orchestra meets from September to April.

FA/MUSI 1053 3.0 Jazz Choir I. This course provides instruction in jazz choral techniques and emphasizes the development of vocal performance skills within the Jazz tradition.
Prerequisite: Permission of the course director, by audition.
Note: The Jazz Choir meets from September to April.

FA/MUSI 1059 3.0 Intermediate Jazz Theory and Musicianship I. A jazz theory course for students in the jazz performance stream. All students enrolled in FA/MUSI 10516.0 must be concurrently enrolled in FA/MUSI 1059 3.0. However, qualified students may elect to take FA/MUSI 10593.0 without concurrent enrolment in FA/MUSI 1051 6.0.
Corequisite: FA/MUSI 10006.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 1080 6.0 Classical Piano. Instruction and recital preparation in classical piano through individual lessons and master classes.

Prerequisite: Permission of the course director, by audition.

FA/MUSI 1110 3.0 Composition Studio I. An introduction to musical composition for acoustic instruments and voice, emphasizing clarity as attained by distinct decisions about all compositional variables and adequate notation of these. Students are expected to expand their idiomatic ranges.
Prerequisites or corequisites: FA/MUSI 1000 6.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0. Open to non-majors/minors by permission of the course director.

Degree credit exclusion: the former FA/MUSI 2110 3.0.

FA/MUSI 1200 9.0 Musics and Cultures I. Students are exposed to concepts underlying music as a whole, with emphasis upon the cultivation of listening skills and upon the aural recognition of particular kinds of musical materials. Topics include rhythm and meter, acoustics, melody, harmony, texture, musical
form and basic techniques of analysis. Six hours. Open only to Music majors and minors, and required of all first year full time Music majors. Available to students in Fine Arts Cultural Studies by entrance examination.

FA/MUSI 1511 3.0 The Musical Experience I. This course teaches active, creative listening skills and explores the power and significance of music in human life, using illustrations from a broad range of musical practices including jazz, popular, world, and classical musics.
Note: This course is designed for students not majoring or minoring in music. No prior training in music is required. Not open to Music majors or minors. Equivalent to the first half of AK/MUSI 2210 6.0. Materials fee required.

FA/MUSI 1512 3.0 The Musical Experience II. A continuation of FA/MUSI 1511 3.0.
Note: This course is designed for students not majoring or minoring in music. No prior training in music is required. Not open to Music majors or minors. Equivalent to the second half of AK/MUSI 2210 6.0. Materials fee applies.
Prerequisite: FA/MUSI 1511 3.0.
FA/MUSI 1520 6.0 African-American Popular Music Post World War II. This course explores in-depth the range of African-American popular musics that have come into existence since the end of World War II. All styles and genres are studied from both a musicological and sociological perspective. Designed for students not majoring or minoring in Music.
Prerequisite: None.

FA/MUSI 1530 6.0 Euro-American Popular Music Post World War II. This course explores in-depth from both a musicological and sociological perspective the range of EuroAmerican popular musics as well as some styles of British popular music that have come into existence since the end of World War II. Designed for students not majoring or minoring in Music. Prerequisite: None.

FA/MUSI 2000 6.0 Workshop in Musicianship II. A continuation of FA/MUSI 10006.0 for majors and new students with advanced standing who require further work on basic skills. Four hours.

Prerequisite: Permission of the department.
FA/MUSI 2020 3.0 Classical Performance. This course provides instruction in instrumental or vocal performance. Students enrol in the course corresponding to their particular instrument.
Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 20243.0 or FA/MUSI 2025 3.0 or FA/MUSI 2026 3.0.

FA/MUSI 2024 3.0 York University Concert Choir. Continuation of FA/MUSI 1024 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2025 3.0 York University Wind Symphony. Continuation of FA/MUSI 1025 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2026 3.0 Orchestra. Continuation of FA/MUSI 1026 3.0.

Prerequisite: Permission of the course director, by audition.

FA/MUSI 2028 3.0 York Chamber Music Ensembles. Continuation of FA/MUSI 1028 3.0.
Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 2020 3.0.
FA/MUSI 2031 6.0 Piano Improvisation and Contemporary Styles. Continuation of FA/ MUSI 1031 6.0. Hours vary.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2032 6.0 Contemporary Musicianship and Improvisation. Continuation of FA/MUSI 1032 6.0. Hours vary.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2040 6.0 South Indian Classical Music I. Practical training in performance styles, together with some of the appropriate theory, terminology and cultural background.
Prerequisite: No prior experience is necessary, but permission of the course director is required. Open to non-majors.

FA/MUSI 2041 6.0 Philippine Kolintang Ensemble I. Practical training in performance styles, together with some of the appropriate theory, terminology and cultural background.
Prerequisite: No prior experience is necessary, but permission of the course director is required. Open to non-majors.

FA/MUSI 2042 3.0 Special Options in World Music Performance. Practical instruction in non-Western and vernacular musical practices. Offerings vary from session to session. No prerequisite. Materials fee of $\$ 100$.

FA/MUSI 2051 6.0 Jazz Workshop II. Continuation of FA/MUSI 1051 6.0. Hours vary. Prerequisite: Permission of the course director, by audition.

FA/MUSI 2052 3.O Jazz Orchestra II. Continuation of FA/MUSI 1052 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2053 3.0 Jazz Choir II. Continuation of FA/MUSI 1053 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 2059 3.0 Intermediate Jazz Theory and Musicianship II. A jazz theory course for students in the jazz performance stream. All students enrolled in FA/MUSI 20516.0 must be concurrently enrolled in FA/MUSI 2059 3.0. However, qualified students may elect to take FA MUSI 20593.0 without concurrent enrolment in FA/MUSI 2051 6.0.
Prerequisite: FA/MUSI 10593.0 or equivalent.

Prerequisite or corequisite: FA/MUSI 10006.0 or FA/MUSI 2000 6.0, and FA/MUSI 1200 9.0.

FA/MUSI 2080 6.0 Classical Piano. Instruction and recital preparation in classical piano through individual lessons and master classes.
Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 2081 3.0.
FA/MUSI 2081 3.0 Piano Literature and Pedagogy. Literature and pedagogy of classical piano. Open to non-majors who have studied piano. Activities vary according to the level of skill and experience of the individual student.
Prerequisite: Permission of the course director.

FA/MUSI 2111 3.0 Composition Studio II. A continuation of work begun in FA/MUSI 1110 3.0 , emphasizing the control of variation, repetition, and development to create coherent musical thought in short compositions for small groups of acoustic instruments and voices.
Prerequisite: FA/MUSI 11103.0 (formerly FA/ MUSI 2110 3.0) or permission of the course director.

FA/MUSI 2140 6.0 Electronic Media Workshop I. Electronic music systems in composition and performance. Studio work includes classical tape composition techniques, synthesizer techniques, use of "concrete" sound sources, microphone and tape recording techniques, and creative mixing. Three hours per week plus three hours of lab time.
Prerequisites or Corequisites: For Music majors and minors, FA/MUSI 10006.0 or FA/ MUSI 2000 6.0; and FA/MUSI 1200 9.0. Limited enrolment. Open to non-majors/minors by permission of the course director.
Note: Materials fee of $\$ 100$.
FA/MUSI 2200 6.0 Musics and Cultures II. A continuation of FA/MUSI 1200 9.0. First term: topics in North American Music, with emphasis on the dissemination of musical styles and their social contexts. Second term: contemporary music styles and contemporary musical issues. Required of all music majors.
Prerequisite: FA/MUSI 1200 9.0.
FA/MUSI 2201 3.0 Counterpoint. Students master the traditional pedagogy of species counterpoint while studying examples of the Renaissance vocal polyphonic style from which it is derived. Correlated work in vocal, aural and keyboard skills is a major component of the course. Four hours plus tutorial.
Prerequisites: FA/MUSI 10006.0 or FA/MUSI 20006.0 with a minimum final grade of $C_{+}$, or equivalent score on a proficiency exam, and FA/MUSI 1200 9.0.

FA/MUSI 2202 3.0 Harmony. Students study the traditional art of selecting and connecting chords in four voices. Idioms which draw on the formulae of this texture in freer or abstract presentations are also considered, as these
are the materials of classical music which are most nearly adopted in jazz, popular, and some folk music styles. Four hours plus tutorial.
Prerequisites: FA/MUSI 10006.0 or FA/MUSI 20006.0 with a minimum final grade of $C+$, or equivalent score on a proficiency exam, and FA/MUSI 1200 9.0.

FA/MUSI 3000 6.0 Score Study, Advanced Musicianship, and Conducting. Advanced musicianship, with emphasis upon skills and methods applicable to learning and teaching music from orchestral vocal and ensemble scores. Individual and class exercises in conducting, analysis, aural recognition, keyboard harmony, sight-reading, and transposing.
Prerequisites or Corequisites: Foundation courses. Keyboard proficiency is helpful.

FA/MUSI 3010 6.0 Rhythm. A
comprehensive musicianship course, developing rhythmic skills and perception through a detailed study of Indian rhythmic theory and practice from the disciplines of music and dance. Rhythmic systems of other musical cultures are also discussed in a comparative context.
Prerequisites or Corequisites: Foundation courses or permission of the Course Director.

FA/MUSI 3020 3.0 Classical Performance. This course provides instruction in instrumental or vocal performance. Students enrol in the course number corresponding to their particular instrument.
Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 30243.0 or FA/MUSI 30253.0 or FA/MUSI 3026 3.0.

FA/MUSI 3024 3.0 York University Concert Choir. Continuation of FA/MUSI 2024 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 3025 3.0 York University Wind Symphony. Continuation of FA/MUSI 2025 3.0.

Prerequisite: Permission of the course director, by audition.

FA/MUSI 3026 3.0 Orchestra. Continuation of FA/MUSI 2026 3.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 3028 3.0 York Chamber Music Ensembles. Continuation of FA/MUSI 2028 3.0.

Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 3020 3.0.
FA/MUSI 3029 6.0 Recital and Master Class in Performance I. Advanced students in the classical performance stream may audition for an enriched performance experience in their third year. This course is designed for students who have the ability to pursue careers or graduate work in performance. Students are
required to perform a mid-year playing exam and a final, one-hour, adjudicated recital including twentieth century repertoire.
Prerequisite: At least 6 credits in classical performance at the 2000 level with a minimum grade of $B+$, or permission of the audition jury.
Corequisite: FA/MUSI 3020 3.0.
FA/MUSI 3031 6.0 Piano Improvisation and Contemporary Styles. Continuation of FA/ MUSI 2031 6.0.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 3032 6.0 Contemporary Musicianship and Improvisation. Continuation of FA/MUSI 2032 6.0.

Prerequisite: Permission of the course director, by audition.

FA/MUSI 3040 6.0 South Indian Classical Music II. A continuation of FA/MUSI 2040 6.0.
Prerequisites: FA/MUSI 20406.0 and permission of the course director.
Prerequisites or Corequisites: For Music majors, Foundation Courses.

## FA/MUSI 3041 6.0 Philippine Kolintang

Ensemble II. A continuation of FA/MUSI 2041 6.0.

Prerequisites: FA/MUSI 20416.0 and permission of the course director.
Prerequisites or Corequisites: For Music majors, Foundation Courses.

FA/MUSI 3042 3.0 Special Options in World Music Performance. FA/MUSI 30423.0 is not necessarily a continuation of FA/MUSI 2042 3.0. Students may enrol in FA/MUSI 30423.0 if the department judges that they have an appropriate background in musicology to complete, in addition to the requirements of FA/MUSI 2042 3.0, a related research paper which accounts for $35 \%$ of the course grade. Offerings vary from session to session. Materials fee.

## Prerequisite: Permission of the department.

FA/MUSI 3051 6.0 Jazz Workshop III. Advanced improvising and ensemble playing in contemporary jazz, emphasizing theoretical and practical competence in some of its main idioms. Students receive applied training in performance workshops each week.
Prerequisites: FA/MUSI 20516.0 and permission of the course director, by audition.
Corequisite: FA/MUSI 3059 6.0.
Prerequisites or Corequisites: For Music majors, Foundation Courses.

FA/MUSI 3052 3.0 Jazz Orchestra III. Continuation of FA/MUSI 2052 3.0.
Prerequisite: Permission of course director, by audition.
Prerequisites or Corequisites: For Music majors, Foundation Courses.

FA/MUSI 3053 3.0 Jazz Choir III. Continuation of FA/MUSI 2053 3.0.

Prerequisites and Corequisites: For Music majors, Foundation Courses.

FA/MUSI 3059 6.0 Advanced Jazz Theory and Musicianship I. An intensive jazz theory course for students in the jazz performance stream who through assessment at the beginning of third year, are eligible to proceed to advanced studies.
Prerequisite: FA/MUSI 20593.0 or equivalent, or permission of the course director.

Prerequisites or Corequisites: For Music majors, Foundation Courses.

FA/MUSI 3070 3.0/6.0 Electro-acoustic Orchestra. This course allows students to participate in a large electro-acoustic orchestra that will create (re-create) and perform both historical and contemporary repertoire using both the latest digital sound production hardware as well as traditional instruments. A participating student will be required to function as both performer and in at least one other capacity such as composer, arranger, improviser, or conductor.

FA/MUSI 3071 3.0 Synthesizer Performance. This course prepares the student for a career as a professional synthesizer artist. It deals with the development of specific performance techniques, style considerations, and sonic perception related to contemporary synthesizer practice.

## Prerequisite: Foundation courses.

FA/MUSI 3080 6.0 Classical Piano. Instruction and recital preparation in classical piano through individual lessons and master classes.
Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 3081 3.0.
FA/MUSI 3081 3.0 Piano Literature and Pedagogy. Literature and pedagogy of classical piano. Open to non-majors who have studied piano. Activities vary according to the level of skill and experience of the individual student.
Prerequisite: Permission of the course director.

FA/MUSI 3110 6.0 Composition Studio III. Students are encouraged to compose in contemporary idioms and to undertake exercises which expand their awareness of styles, methods, materials, notation systems. Hours vary.
Prerequisites or Corequisites: Foundation courses or permission of the course director.

FA/MUSI 3120 3.0 Song Writing and Repertoire. Students develop and explore aspects of the compositional process by dealing with melodic, rhythmic, harmonic, formal, and textural considerations as they pertain to song writing. Students are required to produce a substantial number of original songs and analyze relevant material from the literature. The use of the multi-track recording
process is studied as a compositional aid and as a means of producing pre-production demos.
Prerequisites: Foundation courses.
Note: Materials fee, \$25.
FA/MUSI 3131 3.0 Jazz Composition and Arranging (Small Ensembles). A study of jazz compositional techniques of the past and present through analysis, transcription and performance. Aims of the course are development of a basic craft, and experimentation leading towards a more personal expression. Projects for small ensembles are required and read by members of the class.
Prerequisites: FA/MUSI 2201 3.0, FA/MUSI 2202 3.0 and FA/MUSI 2051 6.0, or permission of the course director.

FA/MUSI 3132 3.0 Jazz Composition and Arranging (Large Ensembles). A study of jazz compositional techniques of the past and present through analysis, transcription and performance. Aims of the course are development of a basic craft, and experimentation leading towards a more personal expression. Projects for large ensembles are required and read by members of the class.
Prerequisites: FA/MUSI 2201 3.0, FA/MUSI 2202 3.0 and FA/MUSI 2051 6.0, or permission of the course director.

FA/MUSI 3140 6.0 Electronic Media Workshop
II. Continuation of FA/MUSI 2140 6.0.

Prerequisite: FA/MUSI 21406.0 or equivalent, or permission of the course director. Enrolment limited.
Note: Materials fee, \$/00.
FA/MUSI 3201 3.0 Fugal Style. An introduction to fugal composition including advanced work in tonal harmony and counterpoint. Students analyze compositions in fugal style, principally those of J.S. Bach with some regard to earlier and later developments, and learn to organize and execute compositions using the techniques of this genre.
Prerequisite: FA/MUSI 22013.0
Prerequisite or Corequisite: FA/MUSI 2200 6.0.
FA/MUSI 3202 3.0 Sonata Style. An
introduction to composition in sonata form and related genres in advanced tonal harmonic style. Students analyze compositions in sonata style, principally those of Haydn, Mozart and Beethoven, with some regard to earlier and later developments, and learn to organize and execute compositions using the techniques of this genre.
Prerequisite: FA/MUSI 2202 3.0.
Prerequisite or Corequisite: FA/MUSI 2200 6.0.
FA/MUSI 3210 6.0 Introduction to Sonic Architecture and Design. This course introduces students to the complex world of sonic architecture and design. Through the manipulation, control, and creation of digital instruments, the class will explore the musical and technical aspects of sonic theory and practice in the digital domain.
Prerequisite: For Music majors, Foundation courses.

FA/MUSI 3220 3.0 Introduction to Alternate Tunings. This course deals with the historical, theoretical, aesthetic and practical aspects of various alternate and microtonal tuning systems. Mathematical relationships, practical applications, sonic characteristics and compositional aesthetics will be discussed. Students will be encouraged to create original systems and to perform and compose music using various temperaments.
Prerequisite: Foundation courses.
FA/MUSI 3240 6.0 Instrumentation and Orchestration. A study of instruments, singly and in combination, with respect to their use in composition. The course emphasizes traditional instruments of the band and orchestra, though other types of instrumentation may be considered. The student's main work involves regular exercises in arranging or composing in a variety of styles.
Prerequisites: FA/MUSI 22013.0 and FA/ MUSI 2202 3.0.

FA/MUSI 3300 6.0 Music of World Cultures. An introduction, through listening and analysis, filmed or live demonstrations, and occasional field trips, to the musical traditions of specific nations and communities. The social practices, concepts and sound structures of the music, as well as the impact of contemporary recording technologies will be explored.
Prerequisite: For Music majors, foundation courses.
Degree credit exclusion: FA/MUSI 2310 6.0.
FA/MUSI 3310 6.0 Music in the Modern Era. A study of major musical developments from 1890 to 1950 in Europe and North America, with emphasis on the relationship between innovation and tradition and on problems of style and communication in an era of rapid social and cultural change.
Prerequisites: For Music majors, foundation courses. Open to non-majors/minors by permission of the course director.

FA/MUSI 3320 6.0 Music of India. Theoretical systems and contemporary performance styles in relation to one another and in the context of a number of closely related aspects of Indian culture.
Prerequisites or Corequisites: Foundation courses. Open to non-majors/minors by permission of the course director.

FA/MUSI 3340 6.0 History of European Music. A survey of the history of European music from 1590 to 1890, with particular attention to Italy, France, Austria, and Germany. Important works of major composers are examined in detail with reference to the pertinent social and historical contexts.
Prerequisite: For Music majors, foundation courses.
Degree credit exclusions: FA/MUSI 2220 6.0, AK/ MUSI 2220 6.0.

FA/MUSI 3350 6.0 Music of the Americas. A study of the various musical traditions that have been absorbed and transformed by the emerging civilizations of the New World. Topics include: the history of music in British North America; the blending of African, European, and native idioms in Latin America and the Caribbean; the rise and development of jazz, blues, and urban popular music (including rock); the music and musical culture of minority groups; New World musics in their cultural context. Equivalent to AK/MUSI 3440 6.0.

Prerequisite: For Music majors, foundation courses.
Degree credit exclusion: FA/MUSI 2350 6.0.
FA/MUSI 3360 6.0 Jazz History and Repertory Studies. Jazz history and repertory emphasizing the small group tradition in the U.S. from the mid-1930s to the late 1960s. Various paradigms for jazz history, style analysis, and criticism are examined, with attention to jazz as a repertory music as well as a musical process.
Prerequisites: For Music majors, foundation courses. Open to non-majors/minors by permission of the course director.

FA/MUSI 3390 3.0/6.0 Special Topics I. In any given year, special studies courses may be offered.

## Prerequisites: Foundation courses.

FA/MUSI 3450 3.0 Creative Applications of MIDI Technology. A major focus of the course is the mastery of MIDI technology as a means towards individual artistic expression. Class work includes regular assignments using a variety of instruments and techniques and demands both live and recorded performances. The use of MIDI-equipped mixers, effects units, and rhythm composers are explored.
Prerequisites: Foundation courses; or FA/ MUSI 21103.0 and FA/MUSI 2111 3.0.
Note: Materials fee, $\$ 25$.
FA/MUSI 3460 3.0 Music Engraving and Notation Using Computers. This course deals with aesthetic, theoretical and practical considerations involved in the production and printing of music scores, and develops skill in score layout, part extraction, preparation for publications, step time/MIDI input techniques, scanning, and other relevant techniques.
Prerequisite: Foundation courses.
FA/MUSI $3470 \quad 3.0$ Pedagogical Applications of Computer Software in the Contemporary Music Curriculum. This course explores the recent and growing use of music software in teaching subjects such as ear training and rudiments, musicianship, theory, history and analysis. Computer-aided instruction and interactive tools are considered.

## Prerequisite: Foundation courses.

FA/MUSI 3900 3.0/6.0 Special Options I. In any given year, special courses may be offered in theory, composition, or performance.

## Prerequisites: Foundation Courses.

FA/MUSI 4020 3.0 Classical Performance. This course provides instruction in instrumental or vocal performance. Students enrol in the course corresponding to their particular instrument.
Corequisite: FA/MUSI 40243.0 or FA/MUSI 40253.0 or FA/MUSI 4026 3.0.

Prerequisite: Permission of the course director, by audition.

FA/MUSI 4024 3.0 York University Concert Choir. Continuation of FA/MUSI 3024 3.0.
Prerequisites: Permission of the course director, by audition.

FA/MUSI 4025 3.0 York University Wind Symphony. Continuation of FA/MUSI 3025 3.0.

Prerequisites: Permission of the course director, by audition.

FA/MUSI 4026 3.0 Orchestra. Continuation of FA/MUSI 3026 3.0.

Prerequisites: Permission of the course director, by audition.

FA/MUSI 4028 3.0 York Chamber Music Ensembles. Continuation of FA/MUSI 3028 3.0.

Prerequisite: Permission of the course director, by audition.
Corequisite: FA/MUSI 4020 3.0.
FA/MUSI 4029 6.0 Recital and Master Class in Performance II. Continuation of FA/MUSI 3029 6.0.
Prerequisites: FA/MUSI 30296.0 with a minimum grade of $B+$, or permission of the audition jury.
Corequisite: FA/MUSI 4020 3.0.
FA/MUSI 4031 6.0 Piano Improvisation and Contemporary Styles. Continuation of FA/ MUSI 3031 6.0.
Prerequisites: Permission of the course director, by audition.

FA/MUSI 4032 6.0 Contemporary Musicianship and Improvisation. Continuation of FA/MUSI 3032 6.0. Hours vary.
Prerequisite: Permission of the course director, by audition.

FA/MUSI 4040 6.0 South Indian Classical Music. Continuation of FA/MUSI 3040 6.0.
Prerequisites: FA/MUSI 30406.0 and permission of the course director.

FA/MUSI 4041 6.0 Philippine Kolintang Ensemble. Continuation of FA/MUSI 3041 6.0.

Prerequisites: FA/MUSI 30416.0 and permission of the course director.

FA/MUSI 4051 6.0 Jazz Workshop IV. A continuation and intensification of FA/MUSI 3051 6.0. Students receive applied training in performance workshops each week.

Prerequisites: FA/MUSI 30516.0 and FA/ MUSI 3059 6.0.

Corequisite: FA/MUSI 4059 6.0.
FA/MUSI 4052 3.0 Jazz Orchestra IV. Continuation of FA/MUSI 3052 3.0.
Prerequisites: Permission of the course director, by audition.

FA/MUSI 4053 3.0 Jazz Choir IV. Continuation of FA/MUSI 3053 3.0.
Prerequisites: FA/MUSI 30533.0 and permission of the course director, by audition, and for Music majors, Foundation Courses.

FA/MUSI 4059 6.0 Advanced Jazz Theory and Musicianship II. A continuation and intensification of FA/MUSI 3059 6.0. All students in FA/MUSI 40516.0 must be concurrently enrolled in FA/MUSI 4059 6.0. Qualified students, however, may elect to take FA/MUSI 40596.0 without concurrent enrolment in FA/MUSI 4051 6.0.

Prerequisite: FA/MUSI 3059 6.0.
FA/MUSI 4070 3.0/6.0 Electro-acoustic Orchestra. This course allows students to participate in a large electro-acoustic orchestra that will create (re-create) and perform both historical and contemporary repertoire using both the latest digital sound production hardware as well as traditional instruments. A participating student will be required to function as both performer and in at least one other capacity such as composer, arranger, improviser, or conductor.

FA/MUSI 4080 6.0 Classical Piano. Instruction and recital preparation in classical piano through individual lessons and master classes.
Prerequisite: Permission of the course director, by audition.

## Corequisite: FA/MUSI 4081 3.0.

FA/MUSI 4081 3.0 Piano Literature and Pedagogy. Literature and pedagogy of classical piano. Open to non-majors who have studied piano. Activities vary according to the level of skill and experience of the individual student.

Prerequisite: Permission of the course director.

FA/MUSI 4110 6.0 Composition Studio IV. A continuation of FA/MUSI 3110 6.0. Advanced work in composition, analysis, and current music-theoretic ideas of relevance to the composer.
Prerequisites: FA/MUSI 31106.0 and permission of the course director. Prior or concurrent courses in the theory and literature of twentieth century music, such as FA/MUSI 33106.0 or FA/MUSI 4300 3.0, are strongly recommended.

FA/MUSI 4140 6.0 Electronic Media Workshop III. A continuation of FA/MUSI 3140 6.0. Advanced electro-acoustical composition studies involving composing with analogue, digital and computer based music systems. Students are expected to complete
and present several electro-acoustics compositions in the following formats tape, live and tape, acoustic instruments and tape.
Prerequisite: FA/MUSI 3140 6.0, and permission of the course director.

FA/MUSI 4150 6.0 Digital Recording, Editing and Composition. This course deals with digital composition techniques. Included are topics such as: hard disk recording, destructive and non-destructive editing, nonlinear editing, digital signal processing, digital audio sampling, multipass processing, processor smoothing, effects portamento, sample looping, crossfading, and other additional rubrics.
Prerequisite: Foundation courses and permission of the course director.

FA/MUSI 4200 3.0 Topics in Advanced Theory and Analysis. A seminar in contemporary musical analysis emphasizing the comprehensive investigation of complete musical works. Drawing on such perspectives as set theory or Schenkerian reduction, the course introduces the student to research problems in theory and analysis from various perspectives.
Prerequisite: $A$ minimum grade of $B$ in a third year theory course.

FA/MUSI 4300 3.0 Studies in Contemporary Music. Analytical and historical studies of the theory and development of contemporary music, with emphasis on the latter half of the twentieth century.
Prerequisite: FA/MUSI 3310 6.0, or permission of the course director.

FA/MUSI 4320 3.0 Honours Seminar. Researchers are motivated by problems which reflect basic issues in intellectual history, humanities, science, and social science. In this course, pilot projects will introduce the broad range of research tools which several centuries of theory and academic scholarship have made available to musical study.
Prerequisite: A minimum grade of $B$ in an upper-level studies course.

FA/MUSI 4370 3.0 Music of Canada. Canadians tend to be sharply aware of the derivative aspects of their culture; yet the physiognomy of Canadian music taken as a whole is unique. This course studies selected aspects of Canadian musical achievements which offer perspectives on our national situation.
Prerequisite: FA/MUSI 3310 6.0, FA/MUSI 3350 6.0, or permission of the course director.

FA/MUSI 4380 3.0 Historical Studies in Music. The introductory unit of the course situates the chosen topic with regard to historiographical variables and methods. Then a focused study of a period, style, or individual is devoted to the detailed assessment of continuity, influence, and change in music history.
Prerequisite: An upper-level studies course.

FA/MUSI 4381 3.0 Cultural Studies in Music.
Musical styles are shaped by their interactions with language, religion, economy, other arts, and with the whole fabric of social life. This course studies selected musical traditions with the aim of exploring their dependence on, and contribution to, the cultural matrix. When appropriate, the course may explore traditional activities in local communities.
Prerequisite: An upper-level studies course.
FA/MUSI 4390 3.0/6.0 Special Topics II. In any given year, advanced courses may be offered in history or area studies.
Prerequisite: An upper-level studies course.
FA/MUSI 4399 3.0 Special Topics in the Graduate Programme. Fourth-year undergraduates who have the necessary background may apply to take certain half courses offered in the graduate programme.
Prerequisites: Permission of both the Graduate Programme Director and the course director; a minimum grade of $B+$ in an upper-level studies course.

FA/MUSI 4590 3.0/6.0 Honours Project in Music. A special project option open to fourth year students who have shown an exceptional ability to study independently and who have designed a course that cannot be accommodated elsewhere in the department's offerings. At the end of the year, the student's work is evaluated on the basis of one or more of the following: a recital, composition, research paper, or lecturerecital.
Note: See departmental supplementary calendar for specific requirements.
Prerequisite: Permission of the Curriculum Committee.

FA/MUSI 4600 6.0 Seminar on the Sonic Enhancement of Healing and Learning. A seminar exploring the use of sound, in conjunction with colour and other subtle energies, as tools for the enhancement of healing, learning, and creative activity in the context of recent literature from the disciplines of metaphysics, physics, biology, psychology, phonology, thanatology, colour theory, and music composition.
Prerequisite: An upper level studies course, or permission of the course director.

FA/MUSI 4900 3.0/6.0 Special Options II. In any given year, advanced courses may be offered in theory, composition, or performance.
Prerequisite: A third-year theory, musicianship, composition, or performance course.

## Natural Science - Pure and Applied Science

Division Office:

110K Steacie, (416) 736-5021
Professor and Director of the Division:
C.E. Holloway

## Professors:

N. Bartel, J.J. Caldwell, J.N. Hattiangadi, J.A.M. Heddle, R.A. Jarrell, L.E. Licht, D.M. Logan, B.G. Loughton

## Associate Professors:

S. Jeffers, R.A. Koehler, I.C. McDade,
F.J. Morgan, W.J. Pietro, P.G. Potvin

Associate Professor Emeritus:
G. Hunter

Senior Lecturer:
S.B. Joshi

Associate Lecturers:
E.C. Gardonio, N. Smith

## Courses in Natural Science

The Natural Science courses are designed, as part of the general education programme, to acquaint those students not intending to be professionally concerned with science with the outlook, methods and some of the achievements of science. The individual courses offered approach this objective by selecting a particular area, problem or aspect of science in which the operations of the scientific enterprise can be studied in some detail.

The courses may be broadly classified into four areas, within which some overlap occurs, resulting in degree credit exclusions as noted. However, in certain circumstances, such exclusions are petitionable. The four categories are as follows:
a) History and Philosophy of Science and Technology (with science laboratories and/or tutorials): SC/NATS 1710 6.0, SC/NATS 1730 6.0, SC/NATS 1760 6.0;
b) Biological Science: SC/NATS 1610 6.0, SC/ NATS 1620 6.0, SC/NATS 1650 6.0, SC/NATS 1660 6.0, SC/NATS 1680 6.0, SC/NATS 1690 6.0, SC/NATS 1695 6.0, SC/NATS 1850 6.0;
c) Environmental Science: SC/NATS 1640 6.0, SC/NATS 1770 6.0, SC/NATS 1840 6.0;
d) Physical Science: SC/NATS 17206.0 (also has a psychological component), SC/NATS 1740 6.0, SC/NATS 1750 6.0, SC/NATS 17806.0 (has an environmental aspect), SC/NATS 1790 6.0, SC/NATS 1810 6.0, SC/NATS 1820 6.0, SC/ NATS 1830 6.0.

The Natural Science courses are intended primarily for non-Science majors. Courses in Biology, Chemistry, Earth and Atmospheric Science, Physics and Astronomy, and other science disciplines are described elsewhere in this section of the Calendar. Those courses are available, subject to prerequisites, as electives to students in the Faculties of Arts and Fine Arts.
Grading Procedure. Grades will be assigned in the manner described by the Faculty of Pure and Applied Science in Science section III "Regulations Governing Examinations and Academic Standards."
Not all Natural Science courses will be offered in any given year. Some may be offered during the evening, once a week, in cooperation with Atkinson College. The contact hour information in the course outlines below specifies the number of hours per week when the course is taught in the daytime in a Fall/Winter Session. If the course is offered in the evening and/or in a Summer Session, the format and scheduling may be
different, though equivalent in credit value. For all such scheduling details, students should consult the Lecture Schedules or the Natural Science mini-calendar which is published in March of each year.
The Natural Science courses all follow the Faculty of Arts sessional dates.
For a list of Atkinson College courses which are degree credit exclusions for Natural Science courses in this Calendar, Arts students should consult the Lecture Schedules. Science students should consult the "Atkinson Equivalence/Exclusion Table for Science Students" available in the Office of Science Academic Services beginning in March each year.

SC/NATS 1610 6.0 The Living Body. Some aspects of human biology, including structure and function, reproduction, physiology, genetics and a study of some human diseases. Laboratories are self-paced, scheduled audiotutorials involving demonstrations, experiments and observations. Two lecture hours, two laboratory hours. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1620 6.0, SC/NATS 1660 6.0, SC/NATS 1690 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 1620 6.0 Human Biology. Human biology is studied from the perspectives of four specialties: histology, anatomy, biochemistry and genetics. The historical development and medical significance of our current knowledge are discussed, including special topics such as AIDS and genetic engineering. Three lecture hours for two terms, two laboratory hours for one term. Six credits.

Degree credit exclusions: SC/NATS 1610 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 1640 6.0 Biology and the Environment. This course provides an understanding of the fundamental biological and ecological principles influencing the environment. The impact of the human species on the biosphere and inter-relationships with all living organisms are discussed in the context of environmental concerns. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1690 6.0, SC/NATS 1770 6.0, SC/NATS 1770 6.0A, SC/ NATS 1770 6.0B, SC/NATS 1770 6.0C, SC/ NATS 1840 6.0, ES/ENVS 1500 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 1650 6.0 Human Anatomy for the Fine Arts. An introductory course on the structure and function of the human body specifically oriented towards the needs of students in Fine Arts. Body systems are studied from anatomical, physiological and biomechanical perspectives. Included as well are on-going references to nutrition, athletic injuries, and health and wellness. Two lecture hours, two laboratory hours. Two terms. Six credits.

Degree credit exclusions: AS/SC/KINE 2031 3.0, AS/SC/KINE 3070 3.0, AS/PHED 2030 3.0, SC/PHED 2030 4.0, AS/SC/PHED 2070 3.0, SC/PHED 2070 4.0, AS/PHED 3070 3.0, SC/PHED 3070 4.0.

SC/NATS 1660 6.0 The Biology of Sex. This course investigates the role of sexual reproduction in the living world. The cellular, physiological and genetic bases of sex are discussed. Other topics include sexual behaviour and the influence of sexual reproduction on evolution. Three lecture hours for two terms, two laboratory hours for one term. Six credits.
Degree credit exclusions: SC/NATS 1610 6.0, SC/NATS 1690 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 1680 6.0 The Genetic Revolution. This course examines the impact of recent genetic discoveries on medicine, agriculture and industry. New technologies employ enzymes to cut and splice DNA from different organisms. This has the potential to benefit human society but gene manipulations raise important ethical questions. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1800J 6.0A, SC/NATS 1800J 6.OB, SC/NATS 1850 6.0, SC/BC 1850 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 16906.0 Evolution. This course concerns the origin and diversification of life forms on Earth. Students are introduced to the historical development of evolutionary theory, classification of living things and to scientific explanations of how biological diversity has arisen. Three lecture hours for two terms, two laboratory hours for one term. Six credits.
Degree credit exclusions: SC/NATS 1610 6.0, SC/NATS 1640 6.0, SC/NATS 1660 6.0, SC/ NATS 1695 6.0, SC/NATS 1770 6.0C. Not open to students enrolled in Biology programmes.

SC/NATS 1695 6.0 Evolution and the Diversity of Life. An introductory overview of some of the major issues, concepts and theories concerning evolution and the diversity of life from the rise of Darwinism in the nineteenth century, to molecular biology and global ecology in the second half of the twentieth century. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1690 6.0, AK/NATS 1770 6.0. Not open to students enrolled in Biology programmes.

SC/NATS 1710 6.0 The Nature and Growth of Scientific Thought. Science is examined as an intellectual activity. Emphasis is placed on the evolution of some key concepts to show the nature and methodology of natural science, the development of scientific ideas and their grounding in experience. Three lecture hours plus scheduled laboratory sessions. Two terms. Six credits.
Degree credit exclusion: SC/NATS 1730 6.0.

SC/NATS 1720 6.0 Light and Sound. An introduction to the physics, physiology and psychology of light and sound, together with some of the historical background and philosophical implications of these studies. Three lecture hours plus scheduled laboratory sessions. Two terms. Six credits.

SC/NATS 1730 6.0 Science as Discovery. A study of the nature of scientific discovery based on several case histories, including the Ptolemaic and Copernican planetary theories, the Newtonian mechanist system, Darwin's theory of evolution, Einstein's relativity, and Watson and Crick's discovery of the structure of DNA. Three lecture hours, one tutorial hour. Two terms. Six credits.

## Degree credit exclusion: SC/NATS 1710 6.0.

## SC/NATS 1740 6.0 Astronomy. A

discussion of our present understanding of the universe and its constituents. Topics include the structure and evolution of the planets, stars, galaxies and the universe as a whole. Three lecture hours per week, two-hour laboratory sessions every second week. Two terms. Six credits.
Degree credit exclusion: Not open to any student who has passed or is taking SC/PHYS 10704.0 or SC/PHYS 1070 3.0.

SC/NATS 1750 6.0 The Earth and Its Atmosphere. Topics addressed concerning the Earth include geochronology, seismology, geomagnetism, and plate tectonics. Topics addressed concerning the atmosphere include the general circulation, climate change, ozone depletion, weather and violent storms. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1780 6.0, SC/NATS 1800H 6.0. Not open to any student who has passed or is taking a course in Earth and Atmospheric Science.

SC/NATS 1760 6.0 Science and Technological Change. The relationship and interaction between science and technology are explored through a number of topics, both biological and physical. Specific topics discussed may vary from year to year, but most have relevance to our everyday lives and life-styles. Three lecture hours, one tutorial hour. Two terms. Six credits.

SC/NATS 1770 6.0 Technology and the Environment. This course links basic scientific principles and reasoning to problems of environmental pollution. The underlying causes of the present difficulties and current technological solutions are reviewed and analysed in scientific terms. Some ecological and societal aspects of pollution are also discussed. Three lecture hours per week, one tutorial hour every second week. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1640 6.0, SC/NATS 1770 6.0A, SC/NATS 1770 6.0B, SC/NATS 1770 6.0C, SC/NATS 1840 6.0.

SC/NATS 1780 6.0 Weather and Climate. The weather and health of our atmosphere affect us all. This course provides an overview of the Earth's atmosphere; its chemistry, physics and dynamics; an introduction to meteorology and weather forecasting; and a discussion of climate. Canada's weather and climate are emphasized. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1750 6.0, SC/NATS 1800H 6.0.

SC/NATS 1790 6.0 The Science of Flight. This course presents basic physical principles by studying various aspects of aircraft and flying. Topics include properties of air as a fluid, aero-engines, basic theory of flight, principles of aircraft instruments and navigation, and processes which influence the weather. Three lecture hours per week, two tutorial hours in some weeks. Two terms. Six credits.

SC/NATS 1800 6.0 Special Topics in Natural Science. Each year the division may offer full courses of a unique or experimental character in Natural Science. Descriptions of such courses are available in the divisional office in March of the preceding year. Two terms. Six credits.

SC/NATS 1810 6.0 Energy. Conversion technology of current and possible future energy sources is described. The extent of the resource base of each and the environmental consequences of utilization are discussed, with emphasis on nuclear power and energy policies of Ontario and Canada. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1800C 6.0, SC/BC 1810 6.0.

SC/NATS 1820 6.0 Chemistry in Modern Living. A study of the role of chemistry in contemporary society. Relevant topics are selected each year to show how chemistry impinges upon daily life. Important historical perspectives and basic concepts, such as energy and atomic/molecular structure, are introduced as background. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusion: Not open to any student who has passed or is taking SC/CHEM 10006.0 or SC/CHEM 1010 6.0.

SC/NATS 1830 6.0 Matter and Structure. From atomic structure comes molecular structure, and, in turn, come the physical properties of matter composed of atoms and molecules. The relationship between physical properties and usefulness of materials is developed. The role of science in developing new materials is discussed. Three lecture hours per week, two laboratory hours in alternate weeks. Two terms. Six credits.

SC/NATS 1840 6.0 Science and the Environment. This course provides a simplified description of the complex interactions and balances controlling the biosphere. The ways in which pollutants are produced and dispersed in the environment
are discussed, together with their effects and how they are monitored and controlled. Three lecture hours, one tutorial hour. Two terms. Six credits.
Degree credit exclusions: SC/NATS 1640 6.0, SC/NATS 1770 6.0, SC/NATS 1770 6.0A, SC/ NATS 1770 6.0B, SC/NATS 1770 6.0C.

SC/NATS 1850 6.0 Biomedical Ethics and the New Genetics. Recent developments in genetics and biotechnology are rapidly generating both medical breakthroughs and societal dilemmas. This course provides an understanding of basic principles of molecular biology and human genetics, and examines societal and bioethical implications of the new genetics. (Same as SC/BC 1850 6.0.) Three lecture/seminar hours. Two terms. Six credits.
Degree credit exclusions: SC/BC 1850 6.0, SC/ NATS 1680 6.0, SC/NATS 1800J 6.0A, SC/NATS 1800J 6.0B. Not open to students enrolled in Biology programmes.

SC/NATS 2700 9.0 Science: Fundamental Ideas and Social Dimensions. A study of key ideas in the physical, life, earth, space and environmental sciences necessary to teach the Ontario elementary science curriculum. The social dimensions of science and technology, especially relating to Canada, are integrated with the scientific material. Four lecture hours per week, twelve three-hour laboratories. Two terms. Nine credits.
Prerequisite: Normally open only to those coregistered in the Faculty of Education Primary/ Junior or Junior/Intermediate programmes or planning to apply for those programmes.
Note: This course fulfills the Faculty of Arts General Education requirement.

## Philosophy - Arts

Department Office:
S428R Ross, (416) 736-5113
Fax No. (416) 736-5114
Associate Professor and Chair of the Department:
G. Naddaf

Professors:
H. Adelman, L.B. Code, A.W. Cragg, L.J.M. Green, I.C. Jarvie

Professors Emeriti:
J. Agassi, M.B. Bakan, G.F. Cowley, W.E. Creery, C.D. MacNiven, J.D. McFarland, R. E. Simpson

Associate Professors:
M.A. Gilbert, R. Hanna, D.M. Johnson, D.A. Jopling, A. MacKenzie, N. Mackenzie, G. Naddaf, M. Schabas, E. Thompson

## Assistant Professors:

S. Dimock, L. Jacobs, E. Morera, J. Pelham
"Philosophy is to be studied, not for the sake of any definite answers to its questions, since no definite answers can, as a rule, be known to be true, but rather for the sake of the questions themselves; because these questions enlarge our conception of what is possible, enrich our intellectual imagination and diminish the dogmatic assurance which closes the mind against speculation; but above all because, through the greatness of the universe which philosophy contemplates, the mind also is
rendered great, and becomes capable of that union with the universe which constitutes its highest good." (Bertrand Russell)

## Courses in Philosophy

Note: Not all courses will be offered in any given year. The Department's mini-calendar, generally available in early March, should be consulted for specific offerings and detailed course descriptions.
Courses in Philosophy have three class hours a week unless otherwise specified. All 2000-level courses are introductory and require no previous knowledge of philosophy. For specific requirements of programmes offered by this department, please consult the Programmes of Study section, Faculty of Arts.
Note: Honours majors are strongly urged to take PHIL 2010 3.0, PHIL 2015 3.0, PHIL 2020 3.0, PHIL 2025 3.0, and PHIL 2100 3.0. All majors should consult the Undergraduate Programme Director concerning course selection and design of individual programmes.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/divisional supplemental calendars.

AS/PHIL 1000 6.0 Introduction to Philosophy. A full year introduction to the basic issues and classic writers in the Western philosophical tradition. Areas such as ethics, metaphysics, theory of knowledge, and logic are surveyed by examining the writings of philosophers such as Plato, Aristotle, Descartes, Berkeley, Hume as well as more modern writers.
Degree credit exclusion: AK/PHIL 1400 6.0.
Cross-listed to: AK/PHIL 1000 6.0.
AS/PHIL 1100 3.0 The Meaning of Life. This course explores a number of fundamental practical philosophical questions: What is the meaning of (my) life? What is happiness, and how can I achieve it? What is wisdom? What is death, and what does it mean to me?
Cross-listed to: AK/PHIL 1100 3.0.
AS/PHIL 2010 3.0 Origins of Western Philosophy. The ancient Greek philosophers are the origin of modern Western thought. How did they construe reality, knowledge, and humankind's relation to the world? Philosophers such as Hericlitus, Parmenides, Zeno and Democritus will be explored.
Cross-listed to: AK/PHIL 2010 3.0.
AS/PHIL 2015 3.0 Plato \& Aristotle. Plato and Aristotle are the pillars of Western Philosophy. Practically all modern thought has its roots in their work. This course examines their writings and philosophy.

AS/PHIL 2020 3.0 Descartes, Leibniz and Spinoza. The works of Descartes, Spinoza, and Leibniz are crucial building blocks of our contemporary understanding of the world. This course examines their work.

AS/PHIL 2025 3.0 Locke, Berkeley and Hume. Locke, Berkeley and Hume manifested an approach to philosophy that emphasized sense experience and the development of all knowledge from it. This course explores this tradition and its impact on our current world view.
Cross-listed to: AK/PHIL 2025 3.0.
AS/PHIL 2035 3.0 Asian Philosophical Traditions. This course is an introduction to the major philosophical traditions of India and China.

## AS/PHIL 2050 6.0 Philosophy of Law.

A. Crime and Punishment: What is the criminal law for? What should be prohibited and why? What excuses allowed? B. The concept of law: What is a law? What is a legal system? Positivism, realism, and Natural Law theories.
Degree credit exclusion: AK/PHIL 3530 6.0.
Cross-listed to: AK/PHIL 2050 6.0.
AS/PHIL 2060 3.0 Social and Political Philosophy. This course examines several theories of social justice including utilitarianism, social contract theory, and natural rights. How do we distinguish between right and wrong? Good and evil?
Cross-listed to: AK/PHIL 2060 3.0.
AS/PHIL 2070 3.0 Introductory Ethics. This course provides a basic introduction to the three main branches of moral theory. Normative, descriptive and theoretical ethics will be examined in order to develop a comprehensive ethical system.
Cross-listed to: AK/PHIL 2070 3.0.
AS/PHIL 2075 3.0 Introduction to Practical Ethics. What is the relevance of ethics to real problems in social and economic life? What direction can ethics offer us with regard to such problems as abortion and medical and business dilemmas?

## Cross-listed to: AK/PHIL 2075 3.0.

AS/PHIL 2080 3.0 Perception, Knowledge and Causality. Does perception give us direct knowledge of material things? Can we know anything independently of experience (a priori)? Must all events have causes? Must the same causes always produce the same effects?
Cross-listed to: AK/PHIL 2080 3.0.
AS/PHIL 2090 3.0 Philosophy of Religion. Can we prove God's existence or must we experience God directly? Is faith opposed to reason? Are miracles and revelations really possible? Do a mystic's claims count as knowledge?
Cross-listed to: AK/PHIL 2090 3.0.
AS/PHIL 2100 3.0 Introduction to Logic. Logic, in the philosophical tradition, is the study of what makes arguments valid. That is, it aims to distinguish correct reasoning from faulty reasoning. Modern symbolic logic begins this project by giving two complementary analyses
of validity. This course presents the basic elements of modern symbolic logic for the beginning student.

AS/PHIL 2110 3.0 Truth, Theory and Superstition. There are diverse views on how to improve one's understanding or to do research, even in the case of science. This course investigates the possibility of a method of science, and also recent contributions to its theory.
Cross-listed to: AK/PHIL 2110 3.0.
AS/PHIL 2120 3.0 Existentialism. This course is an introduction to some of the central themes of existentialism, for example, the individual, being, the absurd, freedom, moral choice. These themes are explored in the work of philosophers such as Kierkegaard, Nietzsche, Camus, Sartre, deBeauvoir.

AS/PHIL 2130 3.0 Philosophy of Art and Literature. Is truth relevant to art? What connections are there between art and morality? Are aesthetic judgments purely subjective or is there an objective basis for them? What is the artist's role in society?
Cross-listed to: AK/PHIL 2130 3.0.
AS/PHIL 2150 3.0 Introduction to the Philosophy of Education. Since we disagree about values, can we educate children morally without indoctrinating them? Are sociology and developmental psychology relevant to this problem? How is it connected with issues in scientific, sexual, religious and aesthetic education?
Cross-listed to: AK/PHIL 2150 3.0.
AS/PHIL 2160 3.0 Mind and Body. The phenomenon of mind, its nature and development, viewed by psychology, biology, philosophy, and theology. The interaction of mind and body, and their integration in human action. Parallels between knowing and doing, thinking and acting, will be explored.
Cross-listed to: AK/PHIL 2160 3.0.
AS/PHIL 2170 3.0 Freedom, Determinism and Responsibility. An investigation of different concepts of freedom, arguments for free will and determinism, people's responsibility for their actions and how it is adjudicated, the justification of punishment, and some related moral problems.

AS/PHIL 2200 3.0 Critical Reasoning. A systematic study of practical argument, the analysis of techniques, formal and informal fallacies, the relationship between arguing well and winning an argument. When is argument propaganda? Methods of identifying and undermining specious arguments will be explored and tried.

AS/PHIL 2240 3.0 Introduction to Philosophy of Psychology. This course examines the philosophical assumptions and framework of psychology. What can we know about the mind, including the unconscious? How can we investigate and test a psychological theory?

AS/PHIL 2250 3.0 Philosophy of Gender and Sexuality. An examination of some conceptual and normative questions about gender and the nature, forms, and regulation of human sexuality.
Cross-listed to: AK/PHIL 2250 3.0.
AS/PHIL 2500 3.0 Introduction to Feminist Philosophy. This course is an introduction to core readings and concepts in feminist philosophy including, but not limited to, essentialism vs. non-essentialism systemic and overt sexism, and key philosophical writings in feminist philosophy.
Cross-listed to: AK/PHIL 2500 3.0.
AS/PHIL 2990 6.0/3.0 Special Topics. In
any given year an additional number of courses may be offered. Information concerning these will be available at the Departmental office.

AS/PHIL 3020 3.0 Ethics. A study of different types of ethical systems represented by major figures in the history of moral philosophy from the seventeenth century to the early twentieth century such as Hobbes, Butler, Hume, Kant, Mill, Moore and Ayer.

AS/PHIL 3025 3.0 Practical Ethics. A careful examination of the role ethics plays in our daily life. Recent developments in moral theory will be applied to classical ethical problems in law, society, and medicine.

## Cross-listed to: AK/PHIL 3000V 3.0.

Degree credit exc/usions: AK/PHIL 3560 3.0, AK/PHIL 3600 6.0, AK/PHIL 3770 3.0, PHIL 3770 6.0, AK/PHIL 3774 3.0.

AS/PHIL 3030 3.0 Metaphysics. Metaphysics concerns such issues as the nature of reality, the existence of contingent and necessary truths, universals, perception and the nature of the external world.

## Cross-listed to: AK/PHIL 3030 3.0.

AS/PHIL 3035 3.0 Knowledge and Reality. Theories of knowledge, epistemology, are examined in relation to theories of reality. How does our perception of reality relate to our understanding of it? How can we come to know something is true or false?

AS/PHIL 3040 3.0 Aesthetics. An examination from a contemporary philosophical perspective of problems concerning aesthetic experience, the nature of art, the structure and properties of works of art, creativity and appreciation, reasons and standards in art criticism.

AS/PHIL 3080 3.0 Philosophy of Kant. "For the chief question is always simply this: what and how much can the understanding and reason know apart from all experience?" Kant's answer revolutionized philosophy. It is given in the Critique of Pure Reason, which will be studied in detail.

AS/PHIL 3095 3.0 Philosophy of Religion. How do theistic philosophies deal with the fact of evil? Is religious language and forms of knowing distinct from other forms? What are the moral and ethical issues inherent in religious propagation?

## Cross-listed to: AK/PHIL 3095 3.0.

AS/PHIL 3100 3.0 Classical Logic. Classical logic is that well-established part of philosophical logic which is sometimes taken as the foundation for rationality, as well as mathematics. This course begins to explore foundational concepts in metalogic, such as the notion of a logical system and the rigorous definition of a proof. It explores the ideas of the soundness and completeness of a logical system and introduces the incompleteness of arithmetic.
Prerequisite: AS/PHIL 21003.0 or AS/MATH 2090 3.0.

AS/PHIL 3101 3.0 Philosophy of Logic. This course studies issues relating the study of symbolic logic to ordinary language, including the nature of truth, the nature of sentences vs. propositions, semantics for natural language (the Liar paradox, descriptions, reference, demonstratives) syntactical conceptions of inference vs. semantic conceptions.

AS/PHIL 3105 3.0 Deviant Logics. An
exploration of several systems of non-standard logic including modal logic, many-valued logic, and relevance logic. The deductive structure, consistency and completeness of the systems will be explored.
Prerequisites: AS/PHIL 21003.0 or AS/MATH 2090 3.0.

AS/PHIL 3110 3.0 Political Philosophy. The major contemporary theories of moral justification applied to these two fundamental questions of politics and economies: Is a state (instead of anarchy) morally justified? Is private (instead of communal) property morally justified?

## Cross-listed to: AK/PHIL 31103.0

AS/PHIL 3120 3.0 Early Existentialism. A detailed study of the early existentialist thinkers such as Pascal and Kierkegaard. Emphasis is on their views concerning knowledge and faith, God and humankind, freedom and self-deception.

AS/PHIL 3125 3.0 Contemporary Existentialism. The views of such recent philosophers as Sartre, Camus, Nietchze and de Beauvoir have had a great impact on contemporary society. This course will explore their views on self, freedom, action, and personal relations.

AS/PHIL 3140 3.0 Russell and Logical Positivism. The contribution of Bertrand Russell is extensive. This course examines his philosophy along with that of the early Wittgenstein and the Vienna Circle Positivists such as Carnap, Schlick and Ayer.

AS/PHIL 3145 3.0 Wittgenstein's Philosophical Investigations. A critical examination of the philosophic writings of the later Wittgenstein through an examination of his most crucial work, The Philosophical Investigations.

AS/PHIL 3150 3.0 Philosophy of Education.
Selected problems in educational theory and practice examined in depth aims and criteria of education; teaching and training; knowledge, understanding, and the curriculum; needs, interests, and motivation; moral and emotional education; art and education.

AS/PHIL 3170 3.0 Philosophy of Science. The philosophy of science explores the fundamental assumptions and methodologies of science, as well as examining its history. Topics to be discussed may include the nature of scientific theories, the problem of induction and theories of probability, the demarcation and growth of scientific knowledge.
Prerequisites: AS/PHIL 21003.0 and AS/PHIL 21103.0 are recommended.

AS/PHIL 3200 3.0 Philosophy of Language. This course provides an introduction to basic notions of the philosophy of language. Questions to be discussed may include: How is communication in language possible? What is a language? What makes words and phrases meaningful? What is truth?
Cross-listed to: AK/PHIL 3200 3.0.
AS/PHIL 3220 3.0 Argumentation Theory. Dispute and argument have been studied by philosophers since ancient times. This course examines the nature of dispute in the context of both the history of philosophy and modern research.
Prerequisite or Corequisite: AS/PHIL 21003.0 or AS/PHIL 31006.0 or permission of instructor.

AS/PHIL 3260 3.0 Philosophical Psychology. The course considers recent philosophical writings in the area of philosophy of psychology. Discussion revolves around issues for clarification, mistaken analogies in reflection about psychology, and the implications for clarification to be derived from the work of Wittgenstein.

AS/PHIL 3270 3.0 Philosophy of Social Science. This course provides an introduction to central ideas in the philosophy of social science. Topics for discussion may include: the debate concerning naturalism in social science, human rationality, scientism and functionalism.
Prerequisites: AS/PHIL 21003.0 or AS/PHIL 21103.0 is recommended.

AS/PHIL 3280 3.0 Mind and Nature: The Philosophy of Biology. This course concerns philosophical issues arising form the life sciences, in particular evolutionary theory and neuroscience. Topics examined may include: What is it that makes something living? What does the Darwinian theory of evolution mean for the understanding of human nature? Are religion and the theory of evolution compatible or irreconcilable?

AS/PHIL 3500 6.0 Philosophy and Feminism. This course studies the history of feminist philosophical thought about the place women are to occupy in a man's world, and examine some contemporary feminist writings on reason, morality, scientific methodology, and/or political theory.

AS/PHIL 3600 3.0 Ancient Philosophy. This course involves a careful reading from selected texts in ancient philosophy. Writings are drawn from the Pre-Socratics, Plato, Aristotle, and others.

AS/PHIL 3620 3.0 Empiricism and Rationalism. The empiricists and Rationalists include such eminent philosophers as Hume, Descartes, Berkely, and Locke, among others. This course examines selected readings from one or more representative of each tradition.

AS/PHIL 3640 3.0 German Philosophy. German philosophy has had a profound impact on Western philosophy. In this course philosophers such as Hegel, and Hursserl. to mention but two, are examined in some detail.

## Cross-listed to: AK/PHIL 3640 3.0.

## AS/PHIL 3990 3.0/3990 6.0 Special Topics.

In any given year an additional number of courses may be offered. Information concerning these are available at the Departmental office.

AS/PHIL 4000 3.0/4000 6.0 Directed Readings. A full-year (or half-year course in either term) course of independent reading under the direction of a member of the faculty. This course is only considered when a student has completed all listed courses in the area of study. Agreement of the supervising faculty member must be obtained prior to registration.
Prerequisite: 84 credits, at least 30 of which are in philosophy.
Degree credit exclusion AS/PHIL 4990 6.0.
Note: Please consult the 'Enrolment and Registration' section, Faculty of Arts, for regulations on independent reading courses.

Note: All fourth year level courses are topics courses. Please consult the departmental annual mini-calendar for specifics.

AS/PHIL 4010 3.0/4010 6.0 Topics in Historical Philosophy. An intensive examination of problems and historical issues in philosophy. Topics vary from year to year.

AS/PHIL 4020 3.0/4020 6.0 Topics in Medieval Philosophy. A seminar course in medieval epistemology and metaphysics. Texts may include selections from St. Augustine, St. Anselm, and St. Thomas.

AS/PHIL 4030 3.0/4030 6.0 Topics in Ancient Philosophy. A seminar course in ancient epistemology and metaphysics. Texts may include Selected Dialogues from Plato, Aristotle's Organon and Metaphysics.
Prerequisite: AS/PHIL 20106.0 or the permission of the instructor.

AS/PHIL 4040 3.0/4040 6.0 Topics in Contemporary Philosophy. An intensive examination of problems and contemporary issues in philosophy. Topics vary from year to year.

AS/PHIL 4050 3.0/4050 6.0 Topics in the Philosophy of History. The course discusses some of the central philosophical problems arising out of historical knowledge Truth, Objectivity, Facts, Explanation. The main emphasis will be on the controversy over "covering laws" and on that between Realists and Idealists.

AS/PHIL 4070 3.0/4070 6.0 Topics in Moral Philosophy. An intensive examination of particular problems in moral philosophy, or intensive studies of the writings of individual moral philosophers. Topics vary from year to year.

AS/PHIL 4080 3.0/4080 6.0 Topics in the Philosophy of Mind. A selection of the following topics are discussed: mind and body, thinking, intention, emotions, desires, motives, reasons, dispositions, memory, the unconscious, and the concept of a person.

AS/PHIL 4090 3.0/4090 6.0 Topics in Metaphysics. An intensive investigation into issues concerning the nature of reality and existence. Focus is on selected issues or the work of particular metaphysicians. Topics vary from year to year.

AS/PHIL 4100 3.0/4100 6.0 Topics in the Philosophy of Language and Logic. An
enquiry into the concepts, categories, and principles of language and logic, comprising a consideration of semantics, the relation between language, conduct, and the world, and the significance of these for philosophy in general.

AS/PHIL 4110 3.0/4110 6.0 Topics in the Philosophy of Science. The course deals with situations in science and in the history of science that give rise to the basic problems of the philosophy of science. The role of observation in science. The criteria of truth in science.

AS/PHIL 4120 3.0/4120 6.0 Topics in Existentialism. An intensive study of selected works of such thinkers as Pascal, Kierkegaard, and Sartre. Topics include idealism and realism, freedom, the self and others.

AS/PHIL 4130 3.0/4130 6.0 Topics in the Philosophy of Nature. Topics in the history of concepts of nature in Western philosophy going back from Kant's Critique of Judgment to aspects of Greek thought, and forward to Hegel's philosophy of nature and to contemporary conceptions, particularly systems theory.

AS/PHIL 4140 3.0/4140 6.0 Topics in Aesthetics: Imitation and Representation in Art. A critical examination of recent problems in aesthetics concerning the representative function of works of art. Specific topics include the semantic theory of representation;
transcription, translation, and the making of equivalent structures in art; picturing, symbolizing, and artistic vision.

AS/PHIL 4150 3.0/4150 6.0 Topics in Practical Philosophy. Considers problems in the philosophy and practice of doing things, ranging from solving problems to resolving conflicts, or designing or changing institutions. The course emphasizes philosophical issues rather than technique.

AS/PHIL 4160 3.0/4160 6.0 Topics in Business Ethics. A study of the moral issues involved in business decisions from both theoretical and practical viewpoints. Topics covered include conflicts between self-interest and public interest, obligations to consumers and employees, fair employment practices, the ethics of advertising, international trade and ethical codes for businesses.

AS/PHIL 4180 3.0/4180 6.0 Topics: Political Philosophy. An intensive study of some selected normative and conceptual problems in contemporary political philosophy.

AS/PHIL 4200 3.0/4200 6.0 Topics in Semantics. The study of semantics is at the root of philosophical logic, as well as the philosophy of language and linguistics. This course studies a topic in this central area of philosophical inquiry.

AS/PHIL 4220 3.0/4220 6.0 Topics: Argumentation Theory. An intensive examination of one or more theories of argument. These may include field theory, critical thinking, and pragma-dialectic approaches.
Recommended: AS/PHIL 32203.0 or permission of course director.

AS/PHIL 4230 3.0/4230 6.0 Topics: Epistemology. Selected topics in the theory of knowledge are explored in depth.

AS/PHIL 4240 3.0/4240 6.0 Topics: Continental Philosophy. An intensive investigation of the work of such writers as Husserl, Heidegger, and Sartre as well as their offshoots and modern formulations.

AS/PHIL 4250 3.0/4250 6.0 Topics in the Philosophy of Film. This course is concerned with the aesthetics and ontology of film as a form of art and human expression. Particular concentration varies from year to year.

AS/PHIL 4500 3.0/4500 6.0 Topics in Feminist Philosophy: Critique and Construct. An intensive study of recent feminist writings in one or more of the following areas: aesthetics, epistemology, ethics, political philosophy, philosophy of science, philosophy of the social sciences, theories of subjectivity, philosophy of language, theories of rationality.

## General Certificate in Practical Ethics

Practical Ethics is an exciting new area of multidisciplinary study and research. The area of practical ethics provides the opportunity to apply ethical concepts and principles to contemporary social issues. The courses listed for the Practical Ethics General Certificate enable students to address questions of applied ethics and public policy in the fields of anthropology, economics, humanities, philosophy, political science, social science, and sociology.
Faculty of Arts students may earn a General Certificate in Practical Ethics in addition to fulfilling the requirements for the Degree of Bachelor of Arts (Ordinary or Honours). To qualify for the General Certificate in Practical Ethics, students must complete AS/PHIL 2070 3.0 and AS/PHIL 20753.0 and 18 additional credits from a list of designated courses (see below), of which at least 6 credits will be at the 3000 or 4000 level. No more than 6 credits will be at the 1000 level. Students must take at least 12 credits outside the Philosophy Department. The cumulative grade point average in all 24 credits taken must be at least 4.0. Students are required to select the 18 additional credits - additional to the required 6 credits (two half courses) specified - so as to ensure a focus to their programmes. Students must register for the Certificate, and the written approval of a member of the Advisory Group for the Certificate must be obtained. Such approval might, at the advisor's discretion, be conditional on the student submitting an acceptable written justification for the intended course selection.

Students must indicate their intention to pursue the Certificate by completing an enrollment form - available from the Philosophy Department. Students must make an appointment for individualized advising with a member of the Advisory Group for the Certificate. The list of Advisory Group members is available from the Philosophy Department. Once students have completed all the Certificate Requirements, they must inform the Philosophy Department of their eligibility for the Certificate. Further information is available from the Philosophy Department.

## Required Courses:

AS/PHIL 2070 3.0 Introductory Ethics. AS/AK/PHIL 2075 3.0 Introduction to Practical Ethics.

## Designated Courses in Practical Ethics:

Note - Check with Departments/Divisions concerning availability.

## Anthropology

AS/ANTH 3020 6.0 Race, "Racism" and Popular Culture.
AS/ANTH 3080 6.0 Modes of Enablement: A Cultural Perspective on Physical Disability.
AS/ANTH 3090 6.0 Gender, Science and Society.
AS/ANTH 3280 6.0 Psychiatric Anthropology and Social Stress.

AS/ANTH 3330 6.0 Health and Illness in Cross-Cultural Perspective.
AS/ANTH 3410 6.0 Ethnicity and Nationalism. AS/ANTH 4020 3.0 Human Rights in Canada: Key Issues.

## Economics

AS/ECON 4259 3.0 Health Economics. AS/ECON 4309 3.0 Law and Economics. AS/ECON 4379 3.0 Regulatory Economics. AS/ECON 4399 3.0 Topics in Law and Economics.

## Humanities

AS/HUMA 1810 6.0 Good and Evil. AS/HUMA 18206.0 Ideology and Morality. AS/HUMA 1950 9.0 Concepts of "Male" and "Female" in the West. (formerly AS/HUMA 1950 6.0)
AS/HUMA 2800 9.0 Introduction to the Study of Religion. (formerly AS/HUMA 2800 6.0) AS/HUMA 2840 6.0 Perspectives on Contemporary Moral Issues.

## Philosophy

AS/PHIL 2050 6.0 Philosophy of Law. AS/AK/PHIL 2060 3.0 Social and Political Philosophy.
AS/PHIL 3020 3.0 Ethics.
AS/PHIL 3025 3.0 Practical Ethics.
AS/AK/PHIL 3110 3.0 Political Philosophy.

## Political Science

AS/POLS 2040 6.0 Introduction to Political Theory.
AS/POLS 3455 3.0/SOSC 3175 3.0 Topics in Women and Politics.
AS/POLS 3600 3.0 Public Law I: The Constitution and the Courts in Canada.
AS/POLS 3605 3.0 Public Law II: The Charter of Rights and Freedoms and the Limits of Public Administration.
AS/POLS 4125 3.0 Women and Current Public Policy Issues.
AS/POLS 4605 3.0 Ethical Politics.
AS/POLS 4620 3.0 Health Policy in Canada.

## Social Science

AS/SOSC 1360 6.0 Social Conflict and Environmental Law.
AS/SOSC 2350 6.0 Law and Society.
AS/SOSC 3050 6.0 Methodological and Ethical Issues.
AS/SOSC 3360 6.0 Canadian Charter of Rights and Freedoms.
AS/SOSC 3370 6.0 Social Justice and Law.
AS/SOSC 4050 6.0 Animals and People.

## Sociology

AS/SOCI 3430 6.0 Race and Ethnic Relations in Western Society.
AS/SOCI 3450 6.0 Sociology of "Race" and Racism.
AS/SOCI 4300 3.0 Sociology of Health Care Delivery.
AS/SOCI 4430 3.0 Canada and Refugees. AS/SOCI 4440 6.0 Race, Minorities and the Legal Order.

## Physics and Astronomy - Pure and Applied Science

Department Office:
128 Petrie, (416) 736-5249
Professor and Chair of the Department:
R.G. Koniuk

Distinguished Research Professor Emeritus: R.W. Nicholls

Professors:
N. Bartel, J.J. Caldwell, W.H. Cannon, J.W. Darewych, M.M. De Robertis, H.S. Freedhoff, M. Horbatsch, K.A. Innanen, J.G. Laframboise, M.L. McCall, J.R. Miller, R.H. Prince, A.D. Stauffer

## Professors Emeriti:

A.I. Carswell, C.H. Dugan, W.R. Frisken, G.R. Hébert, R.P. McEachran

## Associate Professors:

S. Bhadra, J.A. Burt, E.A. Hessels, S. Jeffers, R.A. Koehler, S. Menary, F.J. Morgan, W.A. van Wijngaarden

## Senior Lecturers:

P.A. Delaney, S. Jerzak, S.B. Joshi

## Research Associates:

M.F. Bietenholz, J.M. Mendez Acevedo, W. Schmidke, P. Wiegert

Physics and Astronomy are quantitative sciences which employ the scientific method of observation, experiment and systemization of the results of experiment. Their objectives are to seek to understand the ways in which the most fundamental or elementary systems in nature really operate.
Courses in the Department of Physics and Astronomy cover basic elements of the major topics delineated during the last 200 years in these rapidly developing fields of knowledge. There are certain required courses (see the programme of study requirements in Science section $V$ ) which expose each student to the broad spectrum of physical phenomena and in an elementary way to the techniques of the theoretical physicist or astronomer in numerical analysis and modelling and of the experimental physicist or observational astronomer in measurement, observation and the apparatus of experiment. In developing programmes of 3000and 4000 -level courses, students may concentrate their interests around experimental physics, theoretical physics, or astronomy and astrophysics. There are opportunities to develop Honours Double Major and Honours Major/Minor programmes with other disciplines in the Faculty of Pure and Applied Science or in other Faculties.
The department offers Specialized Honours applied science streams in Applied Physics and in Space and Communication Sciences, developed to meet the needs of rapidly expanding technologies in these fields. The requirements for these streams are found in Science section V.
A brochure giving detailed course descriptions and typical programme prescriptions for all programmes involving Physics and Astronomy is available on request from the department office.

## Courses in Physics and Astronomy

Admission to any course beyond the 1000 level requires consultation with a member of the
departmental admissions committee. Normally, entry to courses at the 3000 and 4000 levels requires successful completion of all lower-level courses that are required for degree programmes in Physics and Astronomy. The prerequisites and corequisites stated for certain courses indicate the standard of background preparation deemed necessary for those not taking Ordinary or Honours Physics and Astronomy programmes. The course director should be consulted by potential entrants who have not completed the normal entry requirements of the department.
Unless otherwise specified, courses whose numbers end in "6.0" (i.e., 6 -credit courses) have three lecture hours per week for two terms when taught in a Fall/Winter Session; those whose numbers end in "3.0" (i.e., 3-credit courses) have three lecture hours per week for one term. Courses offered in the evening and/or in a Summer Session may have different formats and scheduling, though they will be equivalent in credit value.

SC/PHYS 1010 6.0 Physics. Topics include linear, rotational and oscillatory motion; Newtonian mechanics; electrostatics; magnetostatics; electric current and induction; heat; geometrical and physical optics and sound. Differential and integral calculus and vector algebra are used. This course covers fewer topics than SC/PHYS 1410 6.0, but covers them in greater depth. It should be taken by all those likely to enrol in 2000-level PHYS courses. Three lecture hours per week in the first term, two lecture hours per week in the second term; three laboratory hours in alternate weeks in both terms; one tutorial hour each week in both terms.
Prerequisite: OAC Physics or SC/PHYS 1510 4.0.

Corequisite(s): AS/SC/MATH 10133.0 and AS/SC/MATH 10143.0 and AS/SC/MATH 1025 3.0, or AS/SC/MATH 1505 6.0, or equivalents.
Degree credit exclusions: SC/PHYS 1410 6.0, AK/PHSI 2000 6.0.

SC/PHYS 1070 3.0 Astronomy. An
introduction to astronomy for science majors. The course gives an overview of basic astronomical knowledge from the solar system to the edge of the Milky Way, and basic astronomical concepts from white dwarfs to black holes.
Prerequisite: OAC Physics or SC/PHYS 1510 4.0.

Prerequisite or corequisite: AS/SC/MATH 1013 3.0 or AS/SC/MATH 15056.0 or equivalent.

Degree credit exclusions: SC/PHYS 1070 4.0, SC/PHYS 20703.0 (before 1992/93).

SC/PHYS 1410 6.0 Physical Science. Topics include kinematics, dynamics, momentum and energy for linear and rotational motion; elementary kinetic theory and thermodynamics; static and current electricity; waves and physical and geometrical optics, elements of modern physics. Recommended for students unlikely to enrol in 2000-level PHYS courses. Three lecture hours per week in the first term, two lecture hours per week in the second term; three laboratory hours in alternate weeks in both terms; one tutorial hour each week in both terms.

Prerequisite: OAC Physics or SC/PHYS 1510 4.0. This is a calculus-based course making use of elementary differential and integral calculus. While not mandatory, a first-year mathematics course involving calculus, such as AS/SC/MATH $10133.0 / 10143.0$ or AS/SC/ MATH 1505 6.0, is normally taken concurrently. Co-registration in AS/SC/MATH 15153.0 or AS/SC/MATH 15056.0 is strongly recommended for students lacking OAC Calculus.
Degree credit exclusions: SC/PHYS 1010 6.0, AK/PHSI 2000 6.0.

SC/PHYS 1510 4.0 Introduction to Physics. An introductory course for students lacking adequate preparation for SC/PHYS 10106.0 or SC/PHYS 1410 6.0. Topics involve Newton's laws applied to linear and angular motion, force, inertia, torque, impulse, momentum, centre of mass, work, energy, oscillatory motion, geometric optics (including lenses and mirrors). No calculus is used, but vectors are used extensively. Three lecture hours per week, a laboratory session alternating weekly with a tutorial session. One term.
Prerequisite: Ontario Grade 12 Advanced Mathematics. Co-registration in AS/SC/MATH 15253.0 is strongly recommended for students lacking OAC Algebra and Geometry.
Degree credit exclusions: AK/PHSI 1500 3.0. May not be taken by any student who has taken or is currently taking another university course in physics.

SC/PHYS 2010 3.0 Classical Mechanics. Translational motion of point masses and rigid bodies under the influence of both constant and varying forces (e.g., fluid drag, surface gravity on Earth). Rotational motion of point masses and rigid bodies, including cyclical motion and precession.
Prerequisites: SC/PHYS 1010 6.0, or a minimum grade of C in SC/PHYS 1410 6.0; AS/SC/MATH 10143.0 or equivalent; AS/SC/ MATH 10253.0 or equivalent.
Corequisite: AS/SC/MATH 2015 3.0.
SC/PHYS 2020 3.0 Electricity and Magnetism. The elements of electric and magnetic fields are developed together with DC and AC circuit theory and an introduction to electromagnetic waves.
Prerequisites: SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0; AS/SC/MATH 10253.0 or equivalent; AS/SC/ MATH 2015 3.0.

SC/PHYS 2030 3.0 Symbolic Computation in Physics. The Maple symbolic computing environment is used to solve problems from classical mechanics, fluids, heat, and electromagnetics at a level comparable to and above that of SC/PHYS 10106.0 or SC/PHYS 1410 6.0.
Prerequisites: SC/PHYS 10106.0 or SC/ PHYS 1410 6.0; AK/AS/SC/COSC 1540 3.0; AS/SC/MATH 10143.0 or equivalent.
Corequisite: AS/SC/MATH 20153.0 or equivalent.

SC/PHYS 2040 3.0 Special Relativity and Modern Physics. This course introduces the two pillars of modern physics - the special theory of relativity and quantum mechanics. The relativistic concepts of space, time, and energy are derived from first principles. The quantum nature of radiation and matter is introduced. It is strongly recommended that SC/PHYS 20103.0 and SC/PHYS 20203.0 be taken in the same year as this course.
Prerequisites: SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0; AS/SC/MATH 10253.0 or equivalent; AS/SC/ MATH 2015 3.0.

SC/PHYS 2060 3.0 Optics and Spectra. Instrumentation. Wave phenomena. Interference and diffraction. Atomic spectra and lasers. Microwaves, X-rays, and gammarays.
Prerequisites: SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0; AS/SC/MATH 10143.0 or equivalent; AS/SC/ MATH 10253.0 or equivalent.

SC/PHYS 2070 3.0 Galaxies and the Universe. An intermediate survey of the structure, evolution and origin of galaxies, aggregates of galaxies, and the universe as a whole. Frontier topics such as Dark Matter, the Great Attractor, the Great Wall and the Inflationary Universe are included.
Prerequisite: SC/PHYS 1070 3.0, or SC/NATS 17406.0 and permission of the instructor.

SC/PHYS 2211 1.0 Experimental Physics. Second-year laboratory experiments, for students of physical science, in mechanics, electric and magnetic interactions including both AC and DC circuits, geometrical and physical optics. Normally three laboratory hours per week. Offered in both terms. One credit.
Prerequisite: SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0.
Corequisite(s): At least one of SC/PHYS 2010 3.0, SC/PHYS 2020 3.0, SC/PHYS 2060 3.0.

Degree credit exclusions: SC/PHYS 2210 2.0, SC/PHYS 2210 1.0, SC/PHYS 2210A 1.0.

SC/PHYS 2212 1.0 Experimental Physics. A second course in second-year laboratory experiments, for students of physical science, in mechanics, electric and magnetic interactions including both AC and DC circuits, geometrical and physical optics. Includes different experiments than those completed in SC/PHYS 2211 1.0, as determined by the course director. Normally three laboratory hours per week. Offered in both terms. One credit.
Prerequisite: SC/PHYS 2211 1.0.
Corequisite(s): At least one of SC/PHYS 2010 3.0, SC/PHYS 2020 3.0, SC/PHYS 2060 3.0.

Degree credit exclusions: SC/PHYS 2210 2.0, SC/PHYS 2210M 1.0.

SC/PHYS 3001 1.0 Organization and Management Seminar in Space and Communication Sciences. A seminar course taught by guest speakers from industry, government and the University. Content
changes from year to year, but includes such topics as professional ethics, communications regulations, space law, space science policy, project management, privacy and security issues in computing. (Same as SC/COSC 30011.0 and SC/EATS 3001 1.0.) One lecture hour in alternate weeks. Two terms.
Prerequisite: Eligibility to proceed in the Specialized Honours stream in Space and Communication Sciences beyond the 2000level requirements, or permission of the course director.
Degree credit exclusions: SC/COSC 3001 1.0, AS/SC/COSC 3002 1.0, SC/EATS 3001 1.0.

SC/PHYS 3010 3.0 Classical Mechanics. Intermediate classical mechanics, including dynamics of particles and systems of particles. Lagrange's equations and Hamilton's equations.
Prerequisites: SC/PHYS 2010 3.0; AS/SC/ MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.

SC/PHYS 3020 3.0 Electromagnetics I. Vector calculus; electrostatic and magnetostatic fields, derived from charge and current distributions studied in vacuum and in material media.
Prerequisites: SC/PHYS 2020 3.0; AS/SC/ MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.
Prerequisite or corequisite: AS/SC/MATH 3271 3.0.

SC/PHYS 3030 3.0 Statistical and Thermal Physics. Statistical mechanics of systems of large numbers of elements. Probability, ensembles, fluctuations. Applications: spin magnetism, electrons in metals, radiation, specific heats of solids. Transport theory.
Prerequisite: SC/CHEM 20113.0 or SC/CHEM 2050 3.0.

Degree credit exclusions: SC/CHEM 4012 3.0, SC/CHEM 4090 3.0.

SC/PHYS 3040 6.0 Modern Physics. Survey of the basis of contemporary physics: introduction to quantum theory of light, atoms, molecules, solids, nuclei, elementary wave mechanics and elementary particles.
Prerequisites: SC/PHYS 2010 3.0; SC/PHYS 2020 3.0; SC/PHYS 2040 3.0; SC/PHYS 2211 1.0.

SC/PHYS 3050 3.0 Electronics 1. Introduction to physical electronics including DC and AC circuit theory and network analysis; circuit models/analysis for selected transformers; electron and semiconductor devices; introduction to DC power supplies (including CV/CC); analysis/design of basic amplifiers and oscillators; computer simulation/analysis of circuits. Two lecture hours, three laboratory hours form an integral part of this course. One term.
Prerequisites: SC/PHYS 2020 3.0; SC/PHYS 2211 1.0.

SC/PHYS 3070 3.0 Planets and Planetary Systems. Survey of planetary astrophysics. Specific emphases vary, but an overview of planetary observations and current knowledge concerning the atmospheres and interiors of
planets and the formation and evolution of planets and planetary systems is presented. Normally offered in alternate years.
Prerequisite: At least one of SC/PHYS 1070 3.0, SC/EATS 1010 6.0, SC/EATS 2030 3.0; or permission of the instructor.
Prerequisite(s) or corequisite: AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0; or permission of the instructor.

SC/PHYS 3080 3.0 Atmospheric Radiation and Thermodynamics. Applications of basic thermodynamic principles to dry and moist atmospheric situations. Aerological diagrams illustrating vertical structure. Solar (short wave) and terrestrial (long wave) radiation with respect to absorption and scattering processes involving atmospheric atoms, molecules, aerosol particles and clouds. (Same as SC/ EATS 3030 3.0.)
Prerequisites: SC/PHYS 1010 6.0, or a minimum grade of $C$ in SC/PHYS 1410 6.0; AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.
Degree credit exclusion: SC/EATS 3030 3.0.
SC/PHYS 30906.0 (3090 3.0) Special Topics. Supervised study, lectures, seminars and laboratory work on specific topics of contemporary interest.

SC/PHYS 3150 3.0 Electronics II. Advanced circuit theory and analysis/design for semiconductor circuits, operational amplifier circuits, analogue and digital computation circuits, pulse circuits and circuits employing electronic devices of current interest; general feedback and noise theory; electronic circuit analysis/design using computer simulation. Two lecture hours, three laboratory hours form an integral part of this course. One term.
Prerequisite: SC/PHYS 3050 3.0.
SC/PHYS 3210 6.0 Experimental Physics. Experiments are performed in fluid mechanics, electromagnetism, optics, atomic and nuclear physics. Error analysis of the data and detailed write-ups of at least nine experiments are required. Students are required to present a seminar on a research topic to the class. One lecture/seminar hour per week, open laboratory hours. Two terms.
Prerequisites: SC/PHYS 2211 1.0; SC/PHYS 2212 1.0.
Corequisite: SC/PHYS 3040 6.0.
Degree credit exclusions: SC/PHYS 3210 4.0, SC/PHYS 3220 3.0.

SC/PHYS 3220 3.0 Experimental Physics. A three-credit version of SC/PHYS 32106.0 comprising a selection of the experiments in the latter course. These are chosen in consultation with the course director to reflect the student's particular programme and background. One lecture/seminar hour per week, open laboratory hours. One term.
Prerequisite: SC/PHYS 2211 1.0; SC/PHYS 22121.0 is recommended.

Corequisite: SC/PHYS 3040 6.0.
Degree credit exclusions: SC/PHYS 3210 6.0, SC/PHYS 3210 4.0.

SC/PHYS 3250 3.0 Introduction to Space Communications. The course covers all aspects of communications between spacecraft and ground stations. Topics include orbits, perturbations and launching methods, the essential characteristics and components of satellites, interplanetary spacecraft and ground stations, transmission, reception and link equations and access to a satellite. Two lecture hours, one demonstration hour. One term.
Prerequisite: SC/PHYS 2020 3.0.
Prerequisite or corequisite: SC/PHYS 3050 3.0.
SC/PHYS 3280 3.0 Physics of the Space Environment. An introduction to the physical processes of the upper atmosphere, the ionosphere, the magnetosphere and the heliosphere, and the interactions that occur with space vehicles that traverse these regions of space. (Same as SC/EATS 3280 3.0.)
Prerequisites: SC/PHYS 2020 3.0; SC/PHYS 2040 3.0.
Degree credit exclusion: SC/EATS 3280 3.0.
SC/PHYS 4001 6.0 Space and Communication Sciences Workshop. This course is intended to allow the student to carry out the development of a specific space project, under the supervision of a faculty member, a government scientist or an industrial associate. The equivalent of nine laboratory hours per week for two terms. (Same as SC/COSC 40016.0 and SC/EATS 4001 6.0.)
Prerequisite: Satisfactory completion of the 3000level courses in the Space and Communication Sciences core.
Degree credit exclusions: SC/COSC 4001 6.0, SC/EATS 4001 6.0.

SC/PHYS 4010 6.0 Quantum Physics. Physical concepts and applications of nonrelativistic quantum mechanics: Schroedinger, Heisenberg and Dirac formalisms; applications to nuclear, atomic, molecular and solid-state physics, elementary scattering theory and radiation theory.
Prerequisite: SC/PHYS 3040 6.0.
Prerequisite(s) or corequisite(s): SC/PHYS 3020 3.0; AS/SC/MATH 3271 3.0.

SC/PHYS 4020 3.0 Electromagnetics II. Time-dependent electric and magnetic fields, Maxwell's differential equations in linear, isotropic, homogeneous conductors and dielectrics; the radiation and transmission of electromagnetic energy; relativistic transformation; scalar diffraction theory.
Prerequisites: SC/PHYS 3020 3.0; AS/SC/MATH 3271 3.0.

SC/PHYS 4040 3.0 Nuclear and Fundamental Particle Physics. Current knowledge of the properties of atomic nuclei and fundamental particles is examined, beginning with techniques and experiments and proceeding to a survey of theoretical models. Normally offered in alternate years.
Prerequisites: SC/PHYS 3010 3.0; SC/PHYS 3020 3.0; SC/PHYS 3040 6.0.
Corequisite: SC/PHYS 4010 6.0.

SC/PHYS 4050 3.0 Solid State Physics. The structural, mechanical, thermal, electrical and magnetic properties of crystalline solids are studied. Normally offered in alternate years.
Prerequisites: SC/PHYS 3030 3.0; SC/PHYS 3040 6.0.

SC/PHYS 4060 3.0 Time Series and Spectral Analysis. Treatment of discrete sampled data by linear optimum Wiener filtering, minimum error energy deconvolution, auto-correlation and spectral density estimation, discrete Fourier transforms and frequency domain filtering and the Fast Fourier Transform algorithm. (Same as SC/ EATS 40203.0 and AS/SC/MATH 4830 3.0.)
Prerequisites: AK/AS/SC/COSC 15403.0 or equivalent FORTRAN programming experience; AS/SC/MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.

Degree credit exclusions: AK/AS/SC/COSC 4242 3.0, SC/EATS 4020 3.0, AS/SC/MATH 4130B 3.0, AS/SC/MATH 4830 3.0, AS/SC/MATH 4930C 3.0.

SC/PHYS 4070 3.0 Stars and Nebulae. The astrophysics of radiating matter in the universe. The course covers radiation processes, radiative transfer, interstellar matter, stellar atmospheres and stellar interiors.
Prerequisites: SC/PHYS 1070 3.0; SC/PHYS 3030 3.0; SC/PHYS 3040 6.0; AS/SC/MATH 3271 3.0.

SC/PHYS 41006.0 (4100 3.0) Special Topics. Supervised study, lectures, seminars and laboratory work on specific topics of contemporary interest.

SC/PHYS 4110 3.0 Dynamics of Space Vehicles. The dynamics of spacecraft in the near Earth and deep space environments, including the classical theory of orbits, the effects of perturbations on satellite orbits, aerodynamic and electromagnetic drag effects, rocket propulsion, orbital manoeuvres, and methods of satellite stabilization.
Prerequisites: SC/PHYS 20103.0 or SC/EATS 2470 4.0; AS/SC/MATH 2015 3.0; AS/SC/AK/ MATH 2270 3.0; AS/SC/MATH 32713.0 is strongly recommended.

SC/PHYS 4120 3.0 Gas and Fluid Dynamics. Fundamental laws; conservation of mass, momentum and energy; vortex motion; incompressible, compressible and viscous flows; turbulent flow; surface waves. (Same as AS/SC/ MATH 4470 3.0.)
Prerequisites: SC/PHYS 20103.0 or SC/EATS 2470 4.0; AS/SC/MATH 2015 3.0; AS/SC/AK/ MATH 2270 3.0.
Degree credit exclusions: SC/PHYS 3180 3.0, AS/SC/MATH 4470 3.0.

SC/PHYS 4210 3.0 Experimental Physics. Advanced experiments in physics related to topics in solid state physics, optical and microwave spectroscopy, and nuclear physics. Six open laboratory hours. One term.
Prerequisites: SC/PHYS 3210 6.0; registration in an Honours programme in Physics and Astronomy.

Note: Students whose programmes require 6 credits of 4000-level experimental physics take both SC/PHYS 42103.0 and SC/PHYS 4211 3.0, including different experiments as determined by the course coordinator.

## SC/PHYS 4211 3.0 Experimental Physics.

 Advanced experiments in physics related to topics in solid state physics, optical and microwave spectroscopy, and nuclear physics. Six open laboratory hours. One term.Prerequisites: SC/PHYS 3210 6.0; registration in an Honours programme in Physics and Astronomy.
Note: Students whose programmes require 6 credits of 4000-level experimental physics take both SC/PHYS 42103.0 and SC/PHYS 4211 3.0, including different experiments as determined by the course coordinator.

SC/PHYS 4250 3.0 Signal and Communications Theory. Signal representation using orthogonal functions; Fourier series and transforms as applied to signals; ideal and physically realizable filters; the sampling theorem; definitions and characterizations of energy, power and their spectral densities; the modulation theorem; various kinds of modulation and bandwidth requirements
Prerequisites: SC/PHYS 3250 3.0; AS/SC/ MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.
Degree credit exclusion: AS/SC/MATH 4130B 3.0 .

SC/PHYS 4270 4.0 Astronomical Techniques (formerly SC/PHYS 42703.0 before 1999/2000). An introduction to modern astronomical instrumentation, observational methods, data analysis and numerical methods. In addition to weekly lectures, the course provides students with hands-on experience with both observational and theoretical techniques of modern astronomy. Normally offered in alternate years. One and one half lecture hours per week, several laboratory exercises. Two terms.
Prerequisites: SC/PHYS 1070 3.0; AS/SC/ MATH 2015 3.0; AS/SC/AK/MATH 2270 3.0.
Degree credit exclusion: SC/PHYS 4270 3.0.
SC/PHYS 4310 3.0 Physics or Astronomy Project. A supervised research endeavour, either theoretical or experimental, in physics or astronomy. The project follows consultation with a faculty member who agrees to supervise.
Prerequisite: Open to students in the final year of the Physics, Applied Physics, or Astronomy stream of an Honours Physics and Astronomy programme.

SC/PHYS 4410 3.0 Space Geodynamics. The dynamical behaviour of the Earth from space measurements. Included are the external gravity field of the Earth, orbital dynamics of artificial satellites, satellite geoid, internal figure of the Earth, rotation of the Earth and its measurement by space techniques. (Same as SC/EATS 4250 3.0.) Normally offered in alternate years.

Prerequisite(s) or corequisite(s): SC/EATS 3020 3.0; AS/SC/MATH 32413.0 or AK/AS/ SC/COSC 3121 3.0; AS/SC/MATH 3271 3.0. Degree credit exclusion: SC/EATS 4250 3.0.

SC/PHYS 4450 3.0 Spacecraft Systems. The course begins with a presentation of the basic principles underlying the design of spacecraft systems to meet the requirements of an orbital environment. It then develops the concepts and current approaches to spacecraft electrical, mechanical and thermal design.
Prerequisites: SC/PHYS 3050 3.0; SC/PHYS 3250 3.0; SC/PHYS 32803.0 or SC/EATS 3280 3.0.

SC/PHYS 4550 3.0 Introduction to Control Systems. An introduction to the analysis and design of automatic control systems for linear time-invariant systems.
Prerequisites: AS/SC/MATH 2015 3.0; AS/SC/ AK/MATH 2270 3.0; AS/SC/AK/MATH 3410 3.0 strongly recommended.

## Political Science - Arts

Department Office: S672 Ross, (416) 736-5265
Associate Professor and Chair of Department:
S.L. Newman

Professors Emeriti:
N. Black, R. Cornell, R. Cox, M.D. Goldrick, R.W. Grant, G. Szablowski, D. Verney, N. Wood

## Professors:

H.W. Arthurs, A. Bayefsky, D.V.J. Bell, D. Dewitt, E. Dosman, P.M. Evans, F.J. Fletcher, M.B. Frolic, S. Gill, J. Hellman, S. Hellman, H. Kaplan, D. Leyton-Brown, K. McRoberts, L. North, L.V. Panitch,
J. Saul, H. Simmons, H.M. Stevenson, O. Subtelny, R. Whitaker

Associate Professors:
A. Acharya, G. Albo, R. Albritton, I. Bakker, S. Bell, G. Comninel, A. Denholm Crosby, R.J. Drummond, C.I. Greene, A. Horowitz, R. MacDermid, J. Newton, S. Plekhanov, R.A. Rudolph, D. Shugarman, M. Thomas, S.L. Whitworth

Assistant Professors:
A. Dobrowolsky, S. Forsyth, E. Morera, A. Mukherjee-Reed, D. Mutimer, J. Nitzan, G.W. Swanson

Lecturer:
M. Bernard

Contractually-Limited Appointment:
R. Bazowski, D. Marien, L. Sossin

The Political Science Department offers courses in five fields: Canadian Politics, Comparative World Politics, International Relations, Political Theory, and Empirical Theory and Methodology. Students may select from a full range of courses in each field, starting with broad survey courses at the 2000level and advancing to more specialized courses at the 3000-level and Honours seminars at the 4000-level. Typical offerings in Canadian politics deal with federal-provincial relations, public law, municipal government,
and political parties. Comparative world politics courses are of two sorts: some examine the political systems of such countries as the United States, the former Soviet Union, and China, while others explore entire regions like Latin America, Western Europe, and Southern Africa. Offerings in international relations focus particularly upon Canadian foreign and defence policy, strategic studies, international political economy, international organizations, and the foreign policies of the superpowers. In political theory, courses provide a detailed survey of the history of Western political thought and take up the concerns of such modern political philosophers as Hannah Arendt, Albert Camus, C.B. Macpherson, and John Rawls. Finally, courses in empirical theory and methodology introduce students to statistics and computer applications in the social sciences and examine more sophisticated questions of political analysis and the philosophy of inquiry. The department offers a 4000 -level Honours Colloquium open by invitation to advanced students. Students interested in independent study may enrol in individual reading and research courses at the upper level. The department participates, as well, in a substantial number of interdisciplinary programmes within the Faculty of Arts, including, for example, Canadian Studies, Urban Studies, and Law and Society.
Note: The department also offers a Specialized Honours degree programme in Public Policy and Administration. For details, please consult the 'Programmes of Study' section, Faculty of Arts.

## Courses in Political Science

Note: For specific requirements of programmes offered by this department, please consult the Programmes of Study section, Faculty of Arts.
Courses at the 2000 and 3000-level normally have two lecture hours and one tutorial hour a week. Courses at the 4000-level normally have two consecutive seminar hours a week. Majors registered for the Ordinary degree may, with the permission of the department, count toward the major requirement a maximum of 15 credits in Political Science taken outside the department. Honours majors may count toward the major requirement a maximum of 21 such credits taken outside of the department.
Note: A more detailed description of course offerings is contained in the department's supplementary calendar, which is available from the Political Science department, S672 Ross; students should consult the supplementary calendar prior to registration.
Note: Not all courses will necessarily be offered in any given year; consult the department's supplementary calendar for details of courses to be offered.

Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the
departmental/divisional supplemental calendars.

## I. 1000-Level Courses

Note: Open to all students. Should be taken in their first or second years (i.e., before receiving 54 credits in the University).

AS/POLS 1000 6.0 Introduction to Politics: Exploring the Democratic Experience. This course introduces students to the central concepts of political science. The emphasis is on how individuals participate in politics and on how politics may be changed. Among the topics to be considered are the following: nationalism and nation building, liberalism, communism, fascism, power, war, imperialism and dependency, international organization, interdependence, and integration. Material from municipal, provincial, national, and international levels of politics will be included as well as material on current policy issues, such as recent changes in the Ontario Human Rights Code.

## Cross-listed to: AK/POLS 2410 6.0.

AS/POLS 1090 6.0 Introduction to Business Government and Society. This course presents an overview of the Canadian and international business environment with particular emphasis on government regulation of business, and the social pressures governments respond to when regulating business.

## II. 2000-Level Courses

Prerequisites: Open to all students. No prerequisites.

AS/POLS 2040 6.0 Introduction to Political Theory. An introduction to the history of political theory with a focus upon selected theorists in the western tradition.

Note: This course is a prerequisite for most 3000 and 4000-level courses in political theory.

AS/POLS 2100 6.0 Introduction to Canadian Government and Politics. The process of Canadian government is studied through an examination of the institutional framework and socio-economic context of Canadian politics. Topics include federalism, public policy and administration, parties and elections, interest groups, and the structures and operation of parliamentary government.
Note: This course is a prerequisite for most 3000 and 4000-level courses in Canadian politics.

Degree credit exclusion: AS/POLS 2610 6.0. Cross-listed to: AK/POLS 3420 6.0.

AS/POLS 2210 6.0 Introduction to International Relations. A descriptive and analytical examination of international politics from the development of the nation-state system to the present time.
Note: This course is a prerequisite for most 3000 and 4000-level courses in international relations.

AS/POLS 2300 6.0 Introduction to Empirical Theory. Introduction to the issues, procedures, and theories associated with the empirical approach to the study of politics. The course includes an examination of the origins and critical debates of political science and a survey of the major empirical theories of politics.
Note: This course is a prerequisite for most 3000 and 4000-level courses in empirical theory and methodology.

AS/POLS 2510 6.0 Introduction to Comparative Politics. An introduction to the comparative study of political systems, institutions, and processes. The second half of the course examines in detail the government and politics of specific countries and regions.
Note: This course is a prerequisite for most 3000 and 4000-level courses in comparative world politics.

AS/POLS 2610 6.0 Public Policy and Administration. Focusing on Canadian government at the federal, provincial and local levels, this course assesses the relations between administrative structures and public policy development.
Note: This course is a prerequisite for most 3000 and 4000-level courses in Canadian politics.
Degree credit exclusion: AS/POLS 2100 6.0.

## III. 3000-Level Courses

Prerequisites: Most 3000-level courses have a specified 2000-level course as a prerequisite (see the course descriptions for 2000-level courses above, and always consult the departmental supplementary calendar). Third and fourth-year students (i.e., those who have received 54 or more credits in the University) in other departments may, if they are otherwise adequately prepared, take a 3000-level Political Science course without having satisfied the departmental requirements. Written permission of the course director must be obtained and submitted to S672 Ross prior to enrolment.

AS/POLS 3000 3.0/3000 6.0 Special Topics. Various sections of this course focus on specific themes of general interest to undergraduate students. Students should consult the department's supplementary calendar for sections which may be announced at a later date.

AS/POLS 3001 3.0/6.0 Selected Topics in Comparative Politics. Various sections of this course focus on specific themes in Comparative Politics. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 3002 3.0/6.0 Selected Topics in Canadian Politics. Various sections of this course focus on specific themes in Canadian Politics. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 3003 3.0/6.0 Selected Topics in International Relations. Various sections of this course focus on specific themes in International Relations. Students should consult
the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 3004 3.0/6.0 Selected Topics in Political Theory. Various sections of this course focus on specific themes in Political Theory. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 3005 3.0/6.0 Selected Topics in Empirical Theory and Methodology. Various sections of this course focus on specific themes in Empirical Theory and Methodology. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 3010 3.0 Ancient and Medieval Political Thought. An interdisciplinary approach to selected thinkers within their historical context. Readings are drawn from among the works of the Sophists and Epicurians, Plato, Aristotle, Cicero, St. Augustine, and St. Thomas Aquinas.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3010 6.0.
AS/POLS 3020 3.0 Political Thought of the Renaissance and Reformation. An
interdisciplinary approach to selected thinkers of the Renaissance and Reformation within their historical contexts. Primary sources are drawn from the works of Machiavelli, Bodin, Hooker, Luther, and Calvin among others.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3010 6.0.
AS/POLS 3025 3.0 Seventeenth Century Political Thought. An interdisciplinary approach to early modern political thought emphasizing the contributions of selected European theorists. Readings are drawn from the works of the English Levellers, Hobbes, Locke, and Spinoza among others.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3020 6.0.
AS/POLS 3030 3.0 Eighteenth Century Political Thought. An interdisciplinary approach to the political thought of the eighteenth century through a survey of such authors as Vico, Montesquieu, Rousseau, Hume, Smith, Burke, and Kant.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3020 6.0.
AS/POLS 3040 6.0 Currents in Modern Political Theory. This course analyzes the political theories or the political implications of the theories of major philosophers and social theorists from Kant to Foucault. Studies include Kant, Hegel, Marx, Nietzsche, Weber, Freud, and Foucault.
Degree credit exclusions: AS/POLS 3035 3.0,
AS/POLS 3040 3.0, AS/POLS 3045 3.0.

AS/POLS 3060 6.0 Political Thought in Canada. A survey from the eighteenth century to the present. Topics include the colonial mentality; Confederation debates; agrarian populism; liberalism; conservatism; Canadian identity and nationalism.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.

AS/POLS 3065 3.0: Political Culture of Race and Racism. This course analyses the political, economic, and cultural development of "race" and "racism" in political discourse. Attention is given to categories such as "Eurocentric" and "the West". We deal with the historical development of "identity politics" versus "political correctness" debates.

## Prerequisite: None.

Degree credit exclusion: AS/POLS 3000B 3.0.
AS/POLS 3070 3.0 Psychology and Politics. This course involves the use of personality concepts in contemporary political thought. After outlining some psychological theories, starting with Freud, the focus is on selected problems: ideology, freedom and the law, community and utopia, leadership and biography, democratic participation, totalitarianism, and conservatism.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3070 6.0.
AS/POLS 3075 3.0 Law, Justice and Jurisprudence. This course deals with the theories and principles of law and justice which underlie legal systems, with an emphasis on how these theories and principles impact on the political process. Readings draw from a variety of classical and contemporary sources. Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3130 6.0.
AS/POLS 3080 3.0 American Political
Thought. A study of the beliefs, values, and expectations characteristic of American political culture. Readings from the leading political, psychological, and social thinkers in American history.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3080 6.0.
AS/POLS 31003.0 The Politics of Communication and Culture in Canada. This course is organized around the assumption that patterns of communication and culture are central elements in any political system. It examines the principles and theories underlying communications and cultural practices, policy and regulation in Canada, with particular attention to the role of the state and the private sector in shaping the nature of political and cultural discourse in Canada.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or AS/SOSC 23106.0 or permission of the instructor.

AS/POLS 3110 3.0 The Process of Urban Politics I: Institutions and Power. An examination of the political systems of major metropolitan areas in Canada, including the following topics: the structure and operation of municipal government; the role of cities in national and provincial governments; city elections and parties; and political aspects of urban planning.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3110 6.0.
AS/POLS 3115 3.0 The Process of Urban Politics II: Social Justice and Urban Ecology. An examination of the important issues confronting urban governments in Canada and the forces impacting responses to these issues. Issues include redevelopment, social housing and the environment; forces impacting responses include the economy, social culture, ideology and social movements.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3110 6.0.
AS/POLS 3120 3.0 The Politics of French Canada. The purpose of this course is to provide a systematic introduction to the political life of Quebec, as well as relations between Quebec and the rest of Canada. It seeks to apply and evaluate major theoretical propositions about nationalism and independence movements, ethnic and class relations, intergovernmental conflict, economic and social change, and social movements and political parties.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3120 6.0.
AS/POLS 3125 3.0 The Canadian Political Economy. An exploration of the rich tradition of Canadian Political Economy through a survey of the traditional as well as emerging approaches and issues. The classical political economy writers, including the pioneering staples school, are examined, as well as more recent writers. Critiques and explanations of political economists - old and new - highlight the elements of past and current Canadian political and economic development.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3000A 3.0.
AS/POLS 3140 3.0 Political Economy of Labour in Canada. An analysis of the role organized labour has played in the political economy of Canada. The course traces the interaction of labour, business and government and focuses on the contemporary struggle of labour as it confronts the corporate state.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusions: AS/POLS 31406.0 and AS/SOSC 3280 6.0.

AS/POLS 3145 3.0 Government and Business in Canada. This course describes the role of market forces and corporate institutions in shaping Canada's political economy, and the attempt to control or regulate the corporate sector.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3000B 3.0.
Cross-listed to: AK/POLS 3209L 3.0.
AS/POLS 3150 3.0 Political Parties in Canada. An intensive examination of the origins and development of political parties in Canada, including the three major parties and smaller parties which have arisen from time to time at the federal and provincial levels.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3150 6.0.
Cross-listed to: AK/POLS 3209K 3.0.
AS/POLS 3155 3.0 Election Campaigns in Canada. An intensive examination of political science studies of elections, voter decisionmaking, campaigns and campaign strategies in Canada.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3150 6.0.
Cross-listed to: AK/POLS 3209H 3.0.
AS/POLS 3160 6.0 Issues in Canadian Constitutional Law. An introduction to the politics of Canadian constitutional law. The course examines such issues as judicial review, the division of powers, civil liberties, emergency powers, and constitutional reform to demonstrate the link between law and fundamental issues of politics.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 3165 6.0 Problems in Canadian Business Law. This course describes the legal rules that govern the conduct of business in Canada and samples the extensive normative commentary on these issues. Students also develop their capacity to present written arguments reflecting their own views on the law.
Prerequisite: None.
Degree credit exclusions: AS/ECON 45003.0 and AS/ECON 4510 3.0.

Cross-listed to: AS/SOSC 3165 6.0.
AS/POLS 3170 3.0 Provincial Politics in Canada. This course familiarizes students with various issues surrounding the organization of politics in the provinces. The course covers both contemporary and historical political developments in provincial governing structures and processes.

Prerequisite: AS/POLS 21006.0 or AS/POLS 2610 6.0, or permission of the instructor.
Degree credit exclusion: AS/POLS 3170 6.0.

AS/POLS 3175 3.0 Ontario Provincial Politics. An analysis of Ontario provincial politics. The course focuses on substantive problems of Ontario provincial politics and on formal and informal institutions of Ontario's government in the context of the Canadian federal system.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3170 6.0.
AS/POLS 3180 3.0 Interest Groups in Canada. This course deals with the politics of participation and representation. It examines the efforts of citizens and social movements and of corporations and economic interest groups to influence public policy. It deals with theoretical concepts of power, equality, fairness and balance, and with case studies of lobbying, community organization and the politics of dissent.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3180 6.0.
AS/POLS 3190 6.0 Public Administration. This course examines the theory and practice of public administration and the machinery of government, with particular reference to Canada. It discusses who makes policy, how policy is developed and implemented, and how the "system" is controlled and evaluated.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 3200 3.0 Global Conflict and Security I. This course acquaints students with issues surrounding conflict and security in global politics as it has evolved over the past three centuries. It examines the history and development of war from the medieval period to the era of "total war", and the main currents of thought on issues of war and peace.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusions: AS/POLS 32006.0 and AS/POLS 3210 6.0.

AS/POLS 3210 3.0: Global Conflict and Security II. This course explores the issues surrounding different dimensions of conflict and security in the contemporary period. In its broadest sense, security can be understood not only in military, but also in political, economic, cultural and social terms. Several specific themes will be examined in this course, including: national liberation struggles and the rise of protracted social conflicts, the ethics of war, gender and conflict, and the analytic attempts to define alternative conceptions of security.
Prerequisites: AS/POLS 22106.0 and AS/ POLS 32003.0 or permission of the instructor. Degree credit exclusions: AS/POLS 32006.0 and AS/POLS 3210 6.0.

AS/POLS 3220 3.0: Comparative Foreign Policy Analysis. Examination of the value of cross-national comparisons by considering the conduct and sources of the contemporary foreign policies of at least two countries drawn from a list including the United States, China,

Japan, and Russia. Particular attention is devoted to the domestic forces with shape policy formulation and implementation.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3230 6.0.
AS/POLS 3230 3.0 Global Issues in Foreign Policy. Increasingly, problems such as environmental degradation, sustainable development, the uses and effects of technology in financial, production and communication systems, human rights abuses, refugee and population movements, and militarization, require solutions that can only be realized within a system of multilateral cooperation. The purpose of this course is to introduce students to the foreign policy decision-making process in terms of these global issues.
Prerequisites: AS/POLS 22106.0 and AS/POLS 32203.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3230 6.0.
AS/POLS 3235 3.0 Russia and the World: Issues in Contemporary Russian Foreign Policy. This course, taught at the Institute of the USA and Canada, Russian Academy of Sciences, in Moscow, analyses ideas, interests, structures and processes which shape relations between Russia and other countries.
Prerequisites: AS/POLS 22106.0 or AS/POLS 2510 6.0, or permission of the instructor.

AS/POLS 3240 3.0 Multilateralism I: Introduction to International Organization. Multilateralism concerns the management of conflict and the building of cooperation among the variety of political entities and agents that enter the field of world politics and governance. The primary purpose of this course is to provide the student with a better understanding of the evolving role of international organization within the broader context of changing world politics and international law. Emphasis will be placed on the historical development of international organization.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3280 6.0.
AS/POLS 3250 3.0 Multilateralism II: Structures and Processes. Multilateralism concerns the management of conflict and the building of cooperation among the variety of political entities and agents that enter the field of world politics and governance. The primary purpose of this course is to build upon the introduction provided in Political Science 3240 3.0 and examine actual structures, processes, activities and instruments of international organizations within and outside the UN Family.
Prerequisites: AS/POLS 22106.0 and AS/POLS 32403.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3280 6.0.
AS/POLS 3260 6.0 War and Peace in the Middle East. A study of the relations between Israel and its contiguous neighbours, including the historical origins of the current stalemate and an assessment of the various approaches to peace-making in the area.

Prerequisite: AS/POLS 22106.0 or permission of the instructor.

## Cross-listed to: AK/POLS 3209J 6.0.

AS/POLS 3270 3.0 Global Political Economy I: Theory and Approaches. This course introduces the main theoretical perspectives (realism, liberalism, Marxism) and concepts (structure, power, hegemony, state, market, etc.) of GPE and applies them in the identification of the main substructures of the global political economy (e.g. security, money and finance, production and trade) in the context of historical developments, especially since the nineteenth century.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3270 6.0.
AS/POLS 3275 3.0 Global Political Economy II: Issues and Problems Since 1945. This course builds on the theoretical apparatus in AS/POLS 32703.0 to focus on problems and issues relating to the post-1945 GPE, for example, the globalization of production and associated migration of labour; global money and finance, underdevelopment and the debt crisis, the economic crisis of the 1970 s and 1980s, and prospects for the 1990 s and beyond; contemporary transformations such as the changes in Eastern Europe and the implications of the collapse of the USSR; longer-term problems such as ecology and economics, perennial issues such as global conflict and cooperation, e.g. involving the Group of Seven.
Prerequisites: AS/POLS 22106.0 and AS/ POLS 32703.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3270 6.0.
AS/POLS 3280 3.0 Canada and World Affairs. This half course studies the impact of external developments on Canada and Canadians, and the role and behaviour of Canadian traditional state, foreign, and defense policy instruments, other governmental actors, and non-governmental organizations and forces in bilateral and multilateral contexts.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3240 6.0.
AS/POLS 3300 6.0 Statistics for Social Sciences. This course provides a basic understanding of the statistical reasoning and fundamental statistical techniques frequently used to analyse social data. It introduces students to the uses of computers and statistics in the social sciences. It helps develop necessary critical skills to evaluate empirical research.
Prerequisite: AS/POLS 23006.0 or permission of the instructor.
Cross-listed to: AS/SOCI 3030 6.0.
Degree credit exclusions: AS/PSYC 2020 6.0, AS/KINE 2050 3.0, AS/GEOG 24206.0 or equivalent.

AS/POLS 3320 6.0 Ideology and Public Opinion (Same as AS/SOSC 3060 6.0). The course covers theoretical approaches to the study of ideology; twentieth-century ideological developments from Fabianism to NeoConservatism and Leninism to Eurocommunism; and Canadian ideology and public opinion in these contexts.
Prerequisite: AS/POLS 20406.0 or AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 3405 3.0 Comparative Perspectives in Public Policy and Political Economy. An examination of how capitalist states differ in their economic institutions and policy outputs. The economic, political and social factors that explain these differences are analyzed, and the main theoretical paradigms (the liberal-market, neoinstitutional, and Marxist traditions) are explored. Policy areas to be examined include welfare states, labour market policy, the economic role of women, industrial policy, financial institutions, and trade policy.
Prerequisite: AS/POLS 25106.0 or AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 3425 3.0 Comparative Constitutional Law. A comparison of the constitutional systems and jurisprudence of several countries with constitutional problems similar to those of Canada. Particular countries selected for comparison varies from year to year, but are selected from the following: the United States, the United Kingdom, France, Australia, India, Malaysia, Nigeria, South Africa, Germany and Switzerland.
Degree credit exclusions: AS/POLS 3525 3.0, AS/POLS 3130 6.0, AS/POLS 3540 3.0.

AS/POLS 3450 3.0 Women and Politics. This course examines women's political position in advanced capitalist countries. The focus is historical, theoretical and issueoriented. Issues examined include the politics of racism, sexuality, reproduction, pornography within formal political structures and community organizing.
Degree credit exclusions: GL/POLS 4960E 6.0, GL/WMST 4960E 6.0.

Cross-listed to: AS/AK/GL/WMST 3516 3.0, ASISOSC 3170 3.0.

AS/POLS 3455 3.0 Topics in Women and Politics. This course explores in greater depth one or two of the issues examined in AS/ POLS 3450 3.0. Possible issues include women and employment, politics of reproduction, politics of racism, gender and international relations, feminist theory, and so on.
Prerequisite: AS/POLS 34503.0 or AS/SOSC 31703.0 or AS/AK/GL/WMST 35173.0 or permission of the instructor.
Degree credit exclusions: AS/POLS 34506.0 and AS/SOSC 3170 6.0.

Cross-listed to: AS/SOSC 3175 3.0, AS/AK/ GL/WMST 3516 3.0.

AS/POLS 3500 3.0 The State and Politics in 20th Century Russia. The course acquaints students with the development of the Soviet Political System after 1917, and its recent disintegration. Issues to be discussed include: the nature of the Russian Revolution; building socialism; the role of Lenin, Stalin and other leaders; the Communist party; Gorbachev and perestroika; the crises of socialism; and the current post-Soviet successor state.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3500 6.0.
AS/POLS 3502 3.0 Transforming Russia: The Burden of History and the Imperative of Change. This course, taught at the Institute of the USA and Canada, Russian Academy of Sciences, in Moscow, deals with the key issues of Russia's post-communist reforms in a historical context, as the latest in a long series of efforts to modernize Russian society and political system.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3503 3.0 Russia And Canada: Comparing the Two Societies. This course, taught at the Institute of the USA and Canada, Russian Academy of Sciences, in Moscow, reviews issues in contemporary Russia politics through comparisons with Canada.
Prerequisites: AS/POLS 21006.0 or AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3510 3.0 Government and Politics in China. This course examines the origins and development of the modern Chinese political system. Emphasis is on the role of Mao Zedong, the post-1949 period and the reform of Chinese socialism.
Degree credit exclusion: AS/POLS 3510 6.0.
Prerequisite: Any second-year political science course, or permission of the instructor.

AS/POLS 3515 3.0 China and the World. China's relationship with the outside world has been a dominant issue in its political development. This course focuses on this relationship in the post-1949 period, with emphasis on the recent "open door" policy and its impact on the Chinese political system.
Prerequisite: No prerequisites, but students are urged to take AS/POLS 35103.0 prior to taking this course.
Degree credit exclusion: AS/POLS 3510 6.0.
AS/POLS 3520 6.0 The Politics of Socialism. Exploration of the development of socialism as a political movement over the last century. Emphasis is placed on the efforts of socialists to put their ideas into practice, the disputes and splits that have emerged over strategies and tactics, and the importance of these issues today.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3530 3.0 West European Politics. This course begins with an examination of the development of states and political institutions in West European
democracies. It then examines recent trends in politics in Western Europe, including the rise and crisis of the welfare state.
Degree credit exclusions: AS/POLS 34106.0 and AS/POLS 3415 3.0.

AS/POLS 3540 3.0 American Government and Politics. An analysis of the American system via examination of recent political events. Attention is given to the composition of the socio-political elite, the nature of mass influence in public policies and the operation of such major institutions as the congress, courts, presidency and political parties.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusions: AS/POLS 34406.0 and AS/POLS 3440 3.0.

AS/POLS 3545 3.0 Freedom, Wealth and Equality: Society and Political Economy in the United States. The purpose of this course is to provide students with a basic knowledge of U.S. government and politics with the opportunity to apply that knowledge to the analysis of current issues in U.S. politics, and to examine the relation between government and American society.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusions: AS/POLS 34406.0 and AS/POLS 3445 3.0.

AS/POLS 3550 3.0 The Politics of Central America. This course focuses on 20th century Central America to explore the social foundations of political stability and instability. In addition to examining the domestic politics of the region's nations, it looks at the international pressures that impinge on their evolution.

Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3550 6.0.
AS/POLS 3555 3.0 The Politics of South America. This course examines post-World War II experiences of dictatorship and democratization in Mexico and South America, in the light of the region's nineteenth century legacy. It deals with the conflicts that have led to the establishment of repressive regimes and the processes that have paved the way toward political openings.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3550 6.0.
AS/POLS 3560 6.0 Politics of the Third World. An examination of the political issues, institutions and strategies for (and obstacles to) development, in the so-called developing areas. Although the course considers general themes, such as colonialism, social change, economic development, etc., its primary focus is on current politics in independent subSaharan Africa and South Asia.

Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3570 3.0 Africa: The Politics of Continental Crisis. An examination of Africa's present crisis, identifying both the opportunities for, and the severe constraints upon, the political and economic transformation of selected African states, with emphasis varying from year to year, on Ghana, Nigeria, Ivory Coast, Senegal, Tanzania, Kenya and Uganda.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3570 6.0.
AS/POLS 3590 3.0 Japan and World Order. An introduction to the post-war politics of Japan. Topics covered include the traditional origins of the Japanese political system, the influence of the America occupation, political institutions (including the Emperor, elected officials, and the bureaucracy), linkages between state and society, linkages between state and economy, the Japanese production system (including labour relations), and Japan's emerging regional and global role.
Prerequisite: AS/POLS 22106.0 or AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3600 3.0 Public Law I: The Constitution and the Courts in Canada. The objective of this course is to examine constitutional laws and practices, judicial review of the division of powers, and the role of the courts and the legal profession in Canada. A strong emphasis is placed on the relationship between law, politics and public policy.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3600 6.0.
AS/POLS 3605 3.0 Public Law II: The Charter of Rights and Freedoms and the Limits of Public Administration. The
objective of this course is to examine key provisions of the Canadian Charter of Rights and Freedoms as they have been interpreted by the courts. This includes freedoms of expression and association; right to life, liberty and security of the persons; equality rights and non-discrimination; and the rights of aboriginal peoples. In addition, a section of the course will be devoted to judicial review of public administration.
Prerequisites: AS/POLS 21006.0 or AS/POLS 26106.0 and AS/POLS 36003.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3600 6.0.
AS/POLS 3610 6.0 Organization and Administration. An introduction to the way in which large organizations are, and should be, governed. Emphasis is given to public sector organizations.
Prerequisite: AS/POLS 26106.0 or AS/POLS 21006.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3000B 6.0.
AS/POLS 3700 3.0 Political Economy Of Industrial Democracies. This course provides an analysis of the political economy of the advanced capitalist democracies in the
postwar period. The primary area of focus is Western Europe, but the subject matter may also include Japan and the USA.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 3710 3.0 The Political Economy Of The Newly-Industrialized Countries. The course examines theoretical debates concerning the political economy of industrialization in postcolonial countries through examination of specific case studies
Prerequisite: AS/POLS 22106.0 or AS/POLS 2510 6.0.

AS/POLS 3720 3.0 Markets and Democracy after Communism. An examination of key problems of political and economic change in post-communist societies, especially Russia, including economic and political liberalization, the challenge of nationalism, and democratization.
Prerequisite: Any second-year political science course or permission of the instructor.

AS/POLS 3790 6.0 Political Economy of Latin America and The Caribbean. This course critically examines the classical writings on imperialism, underdevelopment, and dependency, as well as new theoretical attempts to conceptualize the new international division of labour and the problems of poverty, environmental degradation, and unequal exchange.
Degree credit exclusion: AS/POLS 3290 6.0.
Prerequisite: AS/POLS 25106.0 or AS/POLS 22106.0 or permission of the instructor.

Cross-listed to: AS/SOSC 3410 6.0.
AS/POLS 3990 3.0/3990 6.0 Supervised Reading and Research. Students in their third year may take independent, individuallysupervised reading/research courses, either on a full-year or half-year basis, when the student and the course meet the requirements set out by the Faculty of Arts and those established by the Department.

## IV. 4000-Level Courses

Prerequisites: 4000-level courses are advanced seminars for students in an Honours Programme (at least a 5.0 cumulative grade point average) who have credit for at least 84 credits in the University. Students who meet these requirements also must have the stated prerequisite, (please check the current supplemental calendar) or written permission of the course director before enrolling.

AS/POLS 4000 3.0/4000 6.0 Special Topics. Various sections of this course will focus on specific themes of general interest to undergraduate students. Students should consult the Department's supplementary calendar for sections which may be announced at a later date.

AS/POLS 4001 3.0/6.0 Selected Topics in Comparative Politics. Various sections of this course focus on specific themes in Comparative Politics. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 4002 3.0/6.0 Selected Topics in Canadian Politics. Various sections of this course focus on specific themes in Canadian Politics. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 4003 3.0/6.0 Selected Topics in International Relations. Various sections of this course focus on specific themes in International Relations. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 4004 3.0/6.0 Selected Topics in Political Theory. Various sections of this course focus on specific themes in Political Theory. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 4005 3.0/6.0 Selected Topics in Empirical Theory and Methodology.
Various sections of this course focus on specific themes in Empirical Theory and Methodology. Students should consult the Department of Political Science supplementary calendar for specific section offerings.

AS/POLS 4010 3.0 Selected Problems in the History of Political Thought. A seminar examining a major theme or problem derived from the writings of one or more central figures in Western political theory.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 4010 6.0.
Integrated with: GS/POLS 5000U 3.0.
AS/POLS 4015 3.0 Theories of Justice. An exploration of theories of justice which are at the heart of contemporary debates in political theory. The course makes the student aware both of the complexity of notions of justice, and of the fundamental conditions for just societies to exist.
Prerequisite: Any second-year political science course or permission of the instructor.

Integrated with: GS/POLS 5000M 3.0.
AS/POLS 4020 3.0 Hegel's Philosophy of Right. An intensive textual study of Hegel's major political work.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Integrated with: GS/POLS 5000U 3.0 and GS/ SPT 6180 3.0.

AS/POLS 4025 3.0 Freedom and Equality. Freedom and equality are two of the fundamental conditions for democracy, and as such they provide the ethical basis for much of contemporary political theory. The course explores conflicting conceptions of freedom and equality, their interrelationship, and the implications of contemporary developments in this important field of political morality.
Prerequisite: Any second-year political science course or permission of the instructor.
Integrated with: GS/POLS 5000X 3.0.

AS/POLS 4030 3.0 Classical Political Theory. An analysis of a number of texts in classical political theory, focusing on primary texts rather than secondary works, relevant to Greek, Hellenistic, and Roman politics.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.

Integrated with: GS/POLS 5010 3.0.
AS/POLS 4035 6.0 The Emergence of Modernity. This course examines the emergence of modernity as a response to Enlightenment crisis. Focusing on conflicting conceptions of reason, values and emotional experience in the modern institutional context, we critically explore the modern bases of contemporary social and political life.
Cross-listed to: AS/SOSC 4500 6.0.
AS/POLS 4040 3.0 Vico to Gramsci: Historicism and Social Science. The primary focus of the course is to enquire into the theory of knowledge underlying the method of historicism and to consider its applicability in contemporary social science. It focuses on the thought of Vico and Gramsci and on other theorists associated with the historicist or hermeneutic tradition.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Integrated with: GS/POLS 50406.0 and GS/ SPT 6390 6.0.

AS/POLS 4045 3.0 Ecology, Politics and Philosophy. This course includes discussion on "deep" ecology, Marxian environmentalism, feminist ecology, social ecology, post-modern approaches, Heideggerian ecology and the approach to the analysis of the domination of nature in the Frankfurt School.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.

AS/POLS 4050 6.0 Contemporary Approaches to the Rational Society. An examination of how contemporary thinkers have sought to grapple with the extent to which people can fashion a rational social system, and what attributes are required by humans and society to bring such a system into being.
Prerequisite: AS/POLS 20406.0 or permission of the course instructor.

AS/POLS 4055 3.0 The Idea of Democracy. This seminar examines texts in contemporary democratic theory, focusing on debates pertaining to (a) capitalism and democracy versus socialism and democracy; (b) modern democratic political representation; (c) new models and strategies for the democratization of state and economy.
Degree credit exclusion: AS/POLS 4000N 3.0. Integrated with: GS/POLS 5000N 3.0.

AS/POLS 4060 3.0 Classical Theories of Imperialism. By analyzing important theoretical works on imperialism which appeared early in this century, this course attempts to arrive at some evaluation of their adequacy in theorizing the main trends of capitalist development between 1870 and 1914.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.

AS/POLS 4061 3.0 Modern Theories of Imperialism. This course focuses on an analysis of a number of important post-World War II theoretical works which attempt to understand the phenomenon associated with capitalist expansion, usually referred to as "imperialism."

Prerequisite: AS/POLS 20406.0 or permission of the instructor.

AS/POLS 4070 6.0 Issues of Contemporary Marxist Theory. The course examines one broad problem in Marxist theory or one outstanding Marxist theorist.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.

AS/POLS 4090 3.0 Classical Marxist Theory. This course focuses primarily on the writings of Marx and Engels with some consideration of Marxism as it first developed as an ideology of mass parties in the context of the Second International.

Prerequisite: AS/POLS 20406.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3090 6.0. Integrated with: GS/POLS 5090 3.0.

AS/POLS 4091 3.0 Contemporary Marxist Theory. This course explores some of the important theories put forward by Marxists in the twentieth century including those of Lukacs, Marcuse, and Althusser. It also examines challenges to Marxist theory posed by feminism and post-structuralism.
Prerequisite: AS/POLS 20406.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 3090 6.0.
Integrated with: GS/POLS 5091 3.0.
AS/POLS 4100 3.0 The Political Development of Canada. A study of Canada in historical perspective employing theoretical perspectives from political development and related fields. Topics include political culture, economy, regionalism, ethnic politics, communications and evolution of political institutions.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 4100 6.0.
Integrated with: GS/POLS 5100 3.0.

## AS/POLS 4110 6.0 Canadian Urban Policy.

 This course examines the influence of government policy on the development of cities and the characteristics of urban life. It provides a historical, institutional and theoretical framework for understanding and analyzing Canadian urban policy-making and policy implementation.Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or AS/SOSC 27006.0 or AS/SOSC 27206.0 or permission of the instructor.

Cross-listed to: AS/SOSC 4720 6.0.

AS/POLS 4114 3.0 Topics in Canadian State Finance. The relative invisibility of decision making around government spending and taxation as well as the general sentiment that "there is no alternative" to current approaches to fiscal crisis given the imperatives of the global political economy, will structure our consideration of Canadian public finance.
Degree credit exclusions: AS/POLS 41156.0 and AS/POLS 4115 3.0.
Prerequisite: AS/POLS 2100 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4115 6.0 The Political Economy of State Finance. The course studies the major fiscal functions of the state, including allocation, distribution and stabilization, accumulation and legitimization. The second semester features a budget simulation where the task is to develop a federal budget from various political party perspectives.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4120 3.0 Ontario and Quebec: The Political Economy of Interregional Conflict. Interdisciplinary course exploring two interrelated themes: Ontario-Quebec economic and political relations, and comparative patterns of internal development. Topics include: sources of Quebec's economic disadvantage; development of provincial states and intergovernmental conflict; implications of Quebec's indépendantisme and Ontario's new economic vulnerability.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 4120 6.0. Integrated with: GS/POLS 5120 3.0.

AS/POLS 4125 3.0 Women and Current Policy Issues. The course begins by evaluating selected feminist theories in the light of their ability to explain policy developments. Policy issues of the past decade are then examined, including prostitution, pornography, homosexual rights, sexual assault, abortion and reproductive technology.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4135 3.0 The Politics of Aging. An examination of the effect of population aging on politics and public policy in Canada.
Degree credit exc/usion: AS/POLS 4000P 3.0 in FW 92.
Prerequisite: AS/POLS 2100 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4145 3.0 Restructuring the Canadian State. The course explores Canada and the shift to a neo-liberal state and citizenship rights, and the current economic and social policy challenges.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4155 3.0 Politics of the Canadian Women's Movement. This course examines the politics of the Canadian women's movement, emphasizing its historical and contemporary development. We examine the suffrage movement, the inter-war years, and the development of second wave feminism in light of Canada's unique political structures and current challenges to feminism.
Cross-listed to: AS/AK/GL/WMST 4503 3.0, GL/POLS 4603 3.0.
Integrated with: GS/POLS 51503.0 and GS/ WMST 6901L 3.0.

AS/POLS 4160 3.0 The Political Economy of Regionalism. This course adopts a political economy perspective to examine the nature and evolution of regionalism in Canada. The core of the course is devoted to the relationship between economic development strategies and regional disparities and political protest.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 4160 6.0.
Integrated with: GS/POLS 5160 3.0.
AS/POLS 4165 3.0 Canadian Social Policy in Comparative Perspective. The course analyzes the design and implementation of social policy in Canada, seen in the context of social policy development in other Western societies, including the United States and Western Europe.
Degree credit exclusion: AS/POLS 4000T 3.0 (FW96 \& FW97).
Integrated with: GS/POLS 5000Y 3.0.
AS/POLS 4170 3.0 The Politics of Security and Intelligence. An examination of the nature of security and intelligence and its effect on policy-making. Among topics studied will be disinformation, counter-intelligence strategies, internal security mechanisms, accountability, and the relation between security and intelligence, democracy and peace.
Prerequisite: AS/POLS 22106.0 or AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

AS/POLS 4175 6.0 Canadian Federalism in Comparative Perspective. An examination of federalism in Canada: historical evolution, impact on public policy; constitutional and political frameworks; future directions. Comparison with other federations, especially those featuring multinational and linguistic divisions. General assessment of federalism as a political regime.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusions: AS/POLS 41303.0 and AS/POLS 4580 3.0.

AS/POLS 4180 6.0 Politics and the Mass Media in Canada. The political functions of the mass media in the Canadian system, and the application of normative and empirical theories about mass media to the Canadian context.

Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or AS/SOSC 23106.0 or permission of the instructor.
Integrated with: GS/POLS 5180 6.0.
AS/POLS 4185 6.0 Culture and Communication. This course explores contemporary issues of cultural theory and their application to cultural and communication policies in Canada.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or AS/SOSC 23106.0 or permission of the instructor.

AS/POLS 4190 6.0 The Politics of Protest in Canada. A study of the principal movements of political protest in twentieth-century Canada. Attention is focused on analyses of right-wing and left-wing responses to developments in Canadian society.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.

Degree credit exclusion: AS/POLS 4350 6.0.
Integrated with: GS/POLS 5170 6.0.
AS/POLS 4200 6.0 International Relations Theory. A survey of recent theories and approaches to international relations. Possible topics include systems analysis, integration, decision-making, communication theory, games theory, social psychological analyses, quantitative methods, strategy and deterrence, and bargaining and negotiation.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Integrated with: GS/POLS 5200 6.0.
AS/POLS 4205 3.0 The New German Politics and European Integration. This course analyses Germany's domestic and foreign politics and the changes within German society after unification and in the context of the end of the cold war. In particular, the course examines the international ramifications of German separation and unification, and the effects of unification on European integration. As well, the impact of unification on Germany's economy and the life of German women is evaluated. Changes in German society and politics, such as the transition of its party system, the rise of right-wing extremism and nationalism, and a new foreign policy are analyzed in comparison to similar trends in the rest of Europe.
Prerequisite: AS/POLS 22106.0 or AS/POLS 25106.0 or permission of the instructor.

Integrated with: GS/POLS 5205 3.0.
AS/POLS 4210 3.0 Peace Research. The purpose of the course is to examine the rationale, assumptions and key issues of peace research, focusing on the possible contributions which peace research can bring to the processes of social change. The course begins with an examination of power, both within the contemporary strategic environment and within the discipline of peace research. A series of issues is then examined, including militarism, feminist perspectives on peace, ecopolitics, and so on.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.

AS/POLS 4215 3.0 Multilateralism. This half course studies the institutions and practices of global and regional cooperation, with a particular emphasis on the forces shaping multilateralism (e.g. states, cultures, social movements) and the way multilateralism can influence global structural change.
Prerequisites: AS/POLS 2210 6.0; and AS/POLS 32403.0 and AS/POLS 3250 3.0, (or AS/POLS 32703.0 and AS/POLS 3275 3.0) or permission of the instructor.

AS/POLS 4220 3.0 Canadian National Security Policy: Issues and Problems. An analysis of contemporary issues and problems in Canadian national security policy.
Prerequisite: AS/POLS 42303.0 or permission of the instructor.
Integrated with: GS/POLS 5220 3.0.
AS/POLS 4225 3.0 Canada and the Americas. The course assesses Latin America prospects in the 1990's and within that context, policy options in Canadian-Latin American relations. The course covers the present Latin American economic environment; the socio-political and "good government" backdrop to economic revival; the process and politics of trade liberalization in Western Hemisphere; and Canada's emergence as a full actor in the Americas. The course introduces students to the principal themes and debates surrounding the apparent revival of several major Latin American countries.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Integrated with: GS/POLS 5000D 3.0.
AS/POLS 4230 3.0 Canadian Defence Policy: Issues, Problems and Future Developments. An analysis of contemporary topics, issues and problems in Canadian defence policy.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Integrated with: GS/POLS 5225 3.0.
AS/POLS 4235 3.0 Latin American Development. An examination of the processes and issues connected with development in Latin America including the impact of political economy, impact on culture, and impact on women.
Prerequisite: Any second-year political science course or permission of the instructor.
Integrated with: GS/POLS 5000T 3.0.
AS/POLS 4240 3.0 Canadian/American Relations. This seminar examines the nature of the various structures, processes and issueareas involved in the political, economic and cultural relationship between Canada and the U.S.

Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Integrated with: GS/POLS 5240 3.0.
AS/POLS 4245 3.0 Gender and International Relations. This course explores theoretical and empirical issues raised by the consideration of gender in international relations (IR). We examine
theoretical concerns raised by feminists and feminist IR scholars, and issues including: gender and the environment, militarism, international political economy and human rights.
Prerequisites: AS/POLS 22106.0 and AS/ POLS 34503.0 or AS/AK/GL/WMST 35163.0 or permission of the instructor.
Cross-listed to: AS/AK/GL/WMST 4802 3.0.
Integrated with: GS/POLS 5245 3.0.
AS/POLS 4250 3.0 Canadian Foreign Policy. A research seminar focusing on such topics as Canada's role in NATO and NORAD, the Law of the Sea Conference, relations with the United States, North-South issues, international economic trends, and domestic sources of foreign policy.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Integrated with: GS/POLS 5050 3.0.
AS/POLS 4255 6.0 Issues in International Human Rights. This seminar examines the operation and efficacy of the United Nations human rights treaty system. It focuses on both the substantive law and the operational strategies associated with their implementation.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 4000X 6.0. Integrated with: GS/POLS 50001 6.0.

AS/POLS 4260 3.0 Contemporary Security
Studies. An examination of current issues and problems in the fields of contemporary strategic studies and international conflict, with a particular emphasis on regional security, conflict management, and conflict resolution.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.

AS/POLS 4270 3.0 United States Foreign Policy. An examination of the historical development of the objectives of U.S. foreign policy and of current policy issues. The course takes different analytic approaches to understanding the formulation and implementation of policy with emphasis on bureaucratic politics.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.
Integrated with: GS/POLS 5270 3.0.
AS/POLS 4280 3.0 Soviet and Post-Soviet Foreign Policies. A study of the formulation and implementation of Soviet foreign policy from an analytic rather than an historicaldescriptive standpoint.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.

Integrated with: GS/POLS 5280 3.0.
AS/POLS 4290 3.0 Topics in International Political Economy. An examination of the actors, processes and issues involved in the politics of international economic relations.
Prerequisite: AS/POLS 22106.0 or permission of the instructor.

Integrated with: GS/POLS 5290 3.0.
AS/POLS 4295 3.0 Political Economy of Global Finance. This course examines the functioning and broader ramifications of international finance. Emphasis is put on how financial markets operate, their historical evolution, and their larger role in the working of the global political economy.
Prerequisite: AS/POLS 32753.0 or permission of the instructor.

AS/POLS 4300 6.0 Public Policy Research. An examination of the theoretical literature in public policy and policy sciences leading toward development of individual policy research for the presentation and critical discussion at the seminar.
Prerequisites: AS/POLS 23006.0 and AS/ POLS 33006.0 or permission of the instructor.

AS/POLS 4330 6.0 Political Linguistics. This course introduces students to the emerging sub-field of political linguistics, i.e., the study of politics as language and communication. Emphasis is placed on such methodological issues as concept formation, theorizing as an intellectual activity, and problems of evidence and inference. Linkages with sociolinguistics, psycholinguistics and philosophy of language are explored.
Prerequisite: AS/POLS 20406.0 or AS/POLS 23006.0 or permission of the instructor.

Integrated with: GS/POLS 5330 6.0.
AS/POLS 4340 6.0 Practicum in Survey Research. This course provides the theoretical background and practical skills needed to conduct surveys. Using computerized telephone survey facilities of the Institute for Social Research, students take part in questionnaire design, interviewing, data processing, statistical analysis and report writing.
Prerequisite: AS/POLS 33006.0 or AS/SOCI 30306.0 or permission of the instructor.

AS/POLS 4435 3.0 The Extreme and NeoFascist Right in Contemporary Europe. An examination of the increasing prominence of extreme right-wing and neo-fascist groups in Western Europe. Particular emphasis is placed on France.
Prerequisite: Any second-year political science course or permission of the instructor.
Integrated with: GS/POLS 5435 3.0.
AS/POLS 4440 3.0 Human Rights in Europe and Canada. The objective of this course is to examine the European Human Rights Convention system in Strasbourg and its political significance in Europe. The focus is on the work of the European Commission and European Courts of Human Rights in the context of national politics and policy priorities of the member-states.
Prerequisite: AS/POLS 25106.0 or AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 4440 6.0. Integrated with: GS/POLS 5440 3.0.

AS/POLS 4445 3.0 European Union. The objective of this course is to examine the key institutions and processes of the EC (Council, COREPER, Commission, Parliament, and European Court) in the context of recent developments. The focus is on the major issues facing the Community: the Maastricht treaty and its implementation; future enlargement by admission of the EFTA and the East-Central European countries; and democratic deficit and future institutional reform.
Prerequisite: AS/POLS 25106.0 or AS/POLS 21006.0 or AS/POLS 26106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 4440 6.0.
Integrated with: GS/POLS 5445 3.0.
AS/POLS 4450 3.0 Madness, Asylums and Politics I. This course looks at the following questions: Is mental illness a myth? What is madness? Has the treatment of the insane really improved since the eighteenth century? What explains the evolution of government policy toward the insane?
Prerequisite: Any second-year political science course or permission of the instructor.

Degree credit exclusion: AS/POLS 4450 6.0.
Integrated with: GS/POLS 5450 3.0.
AS/POLS 4455 3.0 Madness, Asylums and Politics II. After World War II, mental health policy began to change. The day of the large asylum was over and a massive number of people were deinstitutionalized. Many wound up in unsupervised boarding homes or on the streets of major urban centres. This course takes a hard look at the evolution of government policy in an age of deinstitutionalization and cutbacks.
Prerequisites: AS/POLS 44503.0 and any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 4450 6.0.
Integrated with: GS/POLS 5455 3.0.
AS/POLS 4470 3.0 Working Class Politics in Capitalist Democracies. This course seeks to understand the current parameters of working class politics through a theoretical and historical examination of the relationship between parties, trade unions and the democratic capitalist state.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 4710 3.0.
Integrated with: GS/POLS 5460 3.0.
AS/POLS 4505 3.0 Topics in the International Political Economy of Eastern Asia II: Japan, Korea and Taiwan. An analysis of major issues of the political economy of Japan, Korea and Taiwan in relation to the basic theories of international and comparative political economy.
Prerequisite: AS/POLS 22106.0 or AS/POLS 25106.0 or permission of the instructor.

Integrated with: GS/POLS 5505 3.0.

AS/POLS 4510 3.0 The Nationalities of the U.S.S.R. Overview of the key characteristics of the major Soviet nationalities; treatment of the conflict between nationalism and Soviet communism; Soviet nationality policy; assimilatory processes, ethnic assertiveness, the dissident movement, demographic and cultural trends among the nationalities.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 4520 3.0 Nationalism, Communism and Imperialism. The course deals with the relationship between imperial systems and national communities. It includes a comparative analysis of empire-building and nation-building, concentrating on centerperiphery conflicts and imperial disintegration. Case studies are drawn primarily from Russia/ USSR and Eastern Europe, the Balkans and the Middle East. Other regional examples are also considered.
Prerequisite: AS/POLS 22106.0 or AS/POLS 25106.0 or permission of the instructor.

AS/POLS 4530 3.0 Crisis and Collapse of the Soviet Bloc. This course traces the evolution of the socialist idea and its application up to and including the Gorbachev reforms in the 1980s. Emphasis is on the development of the socialist economic system, dissent and human rights, the cold war and the evolution of foreign policy, and the party-state relations.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusion: AS/POLS 4530 6.0. Integrated with: GS/POLS 5530 3.0.

AS/POLS 4540 6.0 Caribbean Politics. A study of selected aspects in Caribbean politics from the protest movements of the 1930s to the present. Special emphasis is paid to attempts at Caribbean regional integration within the context of wider political development.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Integrated with: GS/POLS 5540 6.0.
AS/POLS 4545 3.0 Approaches to American Politics. This seminar introduces participants to overarching interpretations of American politics. We critically examine different theories on the nature and driving forces of politics in the United States since the creation of the republic.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Integrated with: GS/POLS 5545 3.0.
AS/POLS 4550 3.0 Non-Western Politics. An analysis of special political problems in Africa, Latin America, South Asia, South-East Asia or the Arab region. Each year, the focus is on a different region. Issues include military intervention, working-class mobilization, populism, political corruption, and current political crises.
Prerequisite: Any second-year political science course or permission of the instructor.

Degree credit exclusion: AS/POLS 4550 6.0.
Integrated with: GS/POLS 5550 3.0.
AS/POLS 4560 3.0 The Transition to Socialism. This course examines the theoretical and practical problems involved in the attempt to build socialism in a context of economic scarcity in underdeveloped countries. The empirical focus is such attempts in Cuba, Nicaragua, and Grenada.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.

AS/POLS 4575 3.0 The Politics of Southern Africa. This course examines South Africa's racial capitalist system and resistance to it -focussing on the present transition to a more equitable political and economic system; it also explores the current situation in other southern Africa countries (Angola, Mozambique, Namibia, Zimbabwe).
Prerequisites: AS/POLS 25106.0 or permission of the instructor.

Integrated with: GS/POLS 5575 3.0.
AS/POLS 4590 3.0 Political Development in India. A survey of political development in contemporary India, including, for example, the transformation from colony to independence; and the challenge to the liberal-democratic system by caste, communalism, regionalism and communism.

Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Integrated with: GS/POLS 5590 3.0.
AS/POLS 4595 3.0 Southeast Asia in the New Global Order. Using Southeast Asia as its focus, this course addresses questions relating to economic development, political change and regional security in the emerging global order. It stimulates interest in politics and international relations of developing countries in Southeast Asia.
Prerequisite: AS/POLS 25106.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 3595 3.0.
AS/POLS 4600 3.0 Politics and the Judicial Process in Canada. This course analyses the impact of the judicial process on Canadian politics. The course examines the Canadian judiciary and the judicial process, and then proceeds to several case studies such as freedom of expression and Quebec's Bill 101, abortion, pay equity, the Meech Lake Accord, etc.
Prerequisite: AS/POLS 36003.0 and AS/POLS 36053.0 or AS/POLS 31606.0 or permission of the instructor.

Integrated with: GS/POLS 5150 3.0.
AS/POLS 4605 3.0 Ethical Politics. An
analysis of the current systems of ethical rules in Canadian politics concerning conflicts of interest, election financing, lobbying, and truthfulness in the presentation of information. The history and adequacy of these rules are to be considered as well as their philosophical foundations.
Prerequisite: Any second-year political science course or permission of the instructor.
Integrated with: GS/POLS 5605 3.0.

AS/POLS 4620 3.0 Health Policy in Canada. The critical issues in health care delivery are quality, cost, and availability. Interactions between and among health care consumers, providers, payers, and regulators are examined in terms of their impact on those three central issues. The course is interdisciplinary in content, and highly interactive in style, with all members of the seminar being relied on to contribute extensively.
Prerequisite: Any second-year political science course or permission of the instructor.

AS/POLS 4625 3.0 Issues in Canadian Health Policy. This course applies the analytical framework developed in AS/POLS 4620 3.0, Health Policy in Canada, to the study of specific aspects of the Canadian health care system. The specific topics addressed are determined both by their timeliness and by the expressed interests of the students.
Prerequisite: AS/POLS 46203.0 or permission of the instructor.

AS/POLS 4630 3.0 Policy Making and Royal Commissions. As different Royal Commissions are established and conclude their research, their specific findings are discussed with particular reference to the formulation of public policy. Therefore, different Royal Commissions may be discussed in each year.
Prerequisite: Any second-year political science course or permission of the instructor.

AS/POLS 4640 3.0 Politics of Work and Industry. An analysis of the ability of capitalist economic and political institutions to restructure and project themselves anew, including more flexible forms of production and new political alliances. The historical forces which have shaped the politics of work and industry are examined, as well as the contemporary restructuring of work, the new industrial policy debate, and the altering spatial patterns of production and trade.
Prerequisite: AS/POLS 21006.0 or AS/POLS 26106.0 or AS/POLS 25106.0 or permission of the instructor.

AS/POLS 4650 3.0 Provincial and Municipal Government in Ontario. This seminar course examines the theory and practice of the Ontario provincial system of government, including an overview of the federal-provincial and provincialmunicipal arrangements, and an examination of the organization of the executive branch and selected ministries and agencies within the Ontario government. The course includes presentations by various senior provincial and municipal public servants.
Prerequisite: Any second-year political science course or permission of the instructor.
Cross-listed to: AK/POLS 4109D 3.0.
Integrated with: GS/POLS 5650 3.0.
AS/POLS 4660 3.0 Science, Policy and the Legal Process (Same as LW3360 3.0 and GS/ ES6265 3.0). This course explores the relationships between science and law, policy and regulation. Science, in this case, refers mainly to natural science (biology, toxicology,
etc.) and the technical sciences (engineering, risk management). The legal processes refer to courts, tribunals, inquiries, environmental, technical and risk assessment.

AS/POLS 4700 3.0 Topics in International Political Economy of Eastern Asia. This
seminar examines the changing dynamics of political, economic and security relations in and among the countries of Eastern Asia.
Degree credit exclusion: AS/POLS 4500 3.0.
Prerequisite: AS/POLS 22106.0 or AS/POLS 25106.0 or permission of the instructor.

Integrated with: GS/POLS 5500 3.0.
AS/POLS 4735 3.0 After the Fall: International Relations of Collapsed Socialism. An analysis of the Gorbachev reforms and the collapse of the Soviet system in Eastern Europe and the Soviet Union. The analysis will extend to include the Chinese model of socialist reform under Deng Xiaoping, and some examples will be drawn from other communist states.
Prerequisite: Any second-year political science course or permission of the instructor.
Degree credit exclusions: AS/POLS 45353.0 and AS/POLS 4530 6.0.
Integrated with: GS/POLS 5535 3.0.
AS/POLS 4760 3.0 Comparative and International Production Relations. Examines the social and political power implications of the variety of production processes existing throughout the world today in terms both of theoretical concepts and empirical studies. Production relations here covers the technical organization of work, decision-making structures governing work, and attitudes and ideologies of work and authority.
Prerequisite: AS/POLS 20406.0 or AS/POLS 25106.0 or permission of the instructor.

Integrated with: GS/POLS 5860 3.0.
AS/POLS 4770 3.0 Political Economy of Development. This course offers a comparative analysis of patterns of peripheral capitalist development in Latin America and the Caribbean. It explores the formation of social classes, the development of the modern state, and the current economic crises in Mexico and Brazil.
Prerequisite: AS/POLS 2510.06 or permission of the instructor.
Degree credit exclusion: AS/POLS 4570 3.0.
Integrated with: GS/POLS 5870 3.0.
AS/POLS 4980 6.0 Undergraduate Colloquium. The Undergraduate Colloquium offers students with initiative a unique opportunity to pursue research interests in a collegial framework. For further information see the Political Science supplementary calendar.
Prerequisite: By departmental invitation to outstanding Honours Political Science students.

AS/POLS 4990 3.0/4990 6.0 Supervised Reading and Research. During their final academic session in Specialized or Honours programmes in Political Science students may select one supervised reading course. (Students wishing a half course will register for AS/POLS 4990 3.0.) Students in Honours Double Major or Honours Major/Minor programmes have a similar option, provided at least one additional Political Science course is taken at the 4000-level.
Prerequisite: The permission of the Director of Undergraduate Studies.
Note: Please consult the Enrolment and Registration section, Faculty of Arts for regulations on independent reading courses.

AS/POLS 4995 3.0/4995 6.0 Practicum in Public Administration. Public Policy and Administration students in their fourth year may take an independent, individuallysupervised reading and research course which combines volunteer work experience in an agency with an academic analysis of that experience. The course may be taken either on a full-year or half-year basis, when the student and the course meet the requirements set out by the Faculty of Arts and those established by the Department. Students are normally registered in AS/POLS 43006.0 and AS/POLS 4995(3.0 or 6.0) concurrently.
Prerequisite: AS/POLS 36106.0 or AS/POLS 31906.0 or AS/SOCI 36206.0 or AS/POLS 43006.0 or permission of the instructor.

## Psychology - Arts, Pure and Applied Science

## Department Office:

296 Behavioural Sciences Building, (416) 736-5116
General Information:
229 Behavioural Sciences Building, (416) 736-5115
Undergraduate Office:
292 Behavioural Sciences Building, (416) 736-5117
Professor and Chair of the Department: S. Pyke

Distinguished Research Professors: N.S. Endler, D. Regan

## Professors:

E. Bialystok, R.E. Fancher, G. Flett, L. Greenberg, E. Greenglass, L. Harris, P.M. Kohn, H. Ono, J. Pascual-Leone, D. Pepler, D. Rennie, I. Silverman, P. Stager Professors Emeriti:
N. McK. Agnew, D. Bakan, W.H. Coons, K. Danziger, H.I. Day, M. Eagle, H.R. Flock, J. Gaito, I.P. Howard, P.K. Kaiser, B.J. Quarrington, L. Rice, V. Sermat, M.R. Westcott

Associate Professors:
L. Angus, J. Bebko, J. Blake, S. Bryson, J. Check, J. Connolly, H. McK. Doan, M.L. Friendly, K. Grasse, C. Green, W. Heinrichs, P.A. Herzberg, J. Johnson, I. Kusyszyn, R. Lalonde, C.H. Lay, M. Legerstee, H. Mandel, D. McCann, M. Mongrain, D.W. Reid, R. Schuller, R. Sheese, S. Toukmanian, A. Wall,
P. Waxer, F. Weizmann, N.I. Wiener, D. Wiesenthal, M. Wintre

## Associate Professors Emeriti:

L.R. Boulter, K. Koenig, B. Kohn, H.A. Minden, J. Stewart, M. Ziegler

## Assistant Professors:

C. Chataway, J.D. Crawford, J. Elder,
L. Fillion, V. Goel, R. Muller, S. Murtha,
J. Rich, W. Struthers, T. Teo, C. Wekerle,
L. Wilcox

The Department of Psychology offers a curriculum which begins with a broad introductory survey of the various areas of enquiry within the discipline of psychology and the various applications of psychological knowledge.
The intermediate level of the curriculum then provides choice from a wide range of half-year courses which pursue selected areas of psychology in greater depth. Insofar as possible, courses are offered in multiple sections with alternative formats so that students may elect the format which most nearly meets their needs.
At the advanced level, courses are typically offered in relatively small seminars. Students are encouraged to select a wide range of courses and a high degree of flexibility is possible within the programmes offered. It is the intention of the Department of Psychology to serve the needs of students whose interests in the discipline range from curiosity to commitment.
For specific requirements of programmes offered by this department, see the Faculty of Arts "Programmes of Study" section of this Calendar for BA programmes and Science section V for BSc programmes.

## Joint Programmes with Seneca College

The Psychology Department also offers three joint programmes with Seneca College: students may earn a Diploma in Early Childhood Education, a Social ServiceGerontology Diploma, or a Certificate in Rehabilitation Services from Seneca, along with the BA degree in Psychology. For details, see "Psychology" in the Faculty of Arts "Programmes of Study" section of this Calendar. The Certificate in Rehabilitation Services may also be combined with a BSC degree in Psychology - see "Certificate Programmes" in Science section II.

## Courses in Psychology

Admission to all 2000-, 3000-, and 4000-level courses in Psychology (with the exception of AS/SC/PSYC 2020 6.0, AS/SC/PSYC 2021 3.0, and AS/SC/PSYC 2022 3.0) is conditional upon satisfactory completion of Introduction to Psychology, AS/SC/PSYC 1010 6.0.
Note: Students must obtain a minimum grade of C (4.0) in AS/SC/PSYC 10106.0 to be permitted to continue as a Major or Minor in Psychology as well as to take Psychology courses for which AS/SC/PSYC 10106.0 is a prerequisite. Students who receive $D$ or $D+$ in AS/SC/PSYC 10106.0 have a single opportunity to take a requalifying examination
on a specified date in the summer. A student must earn a grade of at least $C$ on this examination to be permitted to proceed in Psychology courses. The examination result does not change the student's grade in AS/SC/ PSYC 1010 6.O. Students receiving E or F in AS/SC/PSYC 10106.0 are not allowed to take the requalifying examination.
Normally, courses in Psychology meet for at least three hours a week, for one term (3 credits - course numbers end in "3.0") or for two terms ( 6 credits - course numbers end in " 6.0 "). Not all courses listed below are offered in any one year or term. Most courses are offered in more than one section. Details of section format and the terms in which half-year courses are offered are announced in the department's supplemental calendar.
Students cannot obtain credit for two sections of the same course, except for Special Topics and independent reading courses.
Some sections of 3000 - and 4000 -level courses may require AS/SC/PSYC 20206.0 or equivalent as a prerequisite. Students should note that the material taught in this course may be important for them in their chosen career or in graduate work. Students might also consider taking AS/SC/PSYC 30103.0 as preparation for work in the final academic session.
Students in all Psychology courses are encouraged to learn about psychological research by participating as subjects in research projects conducted under the supervision of the Department of Psychology.
For a list of Atkinson College courses which are degree credit exclusions for Psychology courses in this Calendar, Arts students should consult the Lecture Schedules. Science students should consult the "Atkinson Equivalence/Exclusion Table for Science Students" available in the Office of Science Academic Services beginning in March each year.

## 1000-Level Course

AS/SC/PSYC 1010 6.0 Introduction to Psychology. A survey of psychology introducing the basic terms, concepts, and methods of psychology. Included are topics such as learning, perception, motivation, cognition, animal behaviour, child development, personality, and abnormal and social psychology.
Note: This course is required for all students who intend to pursue additional courses in Psychology at the 2000, 3000, and 4000 levels. The course must be passed with a minimum grade of $C$ (4.0) in order to pursue further studies in Psychology.

## 2000-Level Courses

## -2000 Series

AS/SC/PSYC 2020 6.0 Analysis of Psychological Data. An introduction to the analysis of data from experiments and naturalistic observation. Fundamental conceptions and techniques of both descriptive and inferential statistics and their application to psychological research.

Prerequisite or corequisite: AS/SC/PSYC 1010 6.0 (with a minimum grade of $C$, when used as a prerequisite).
Degree credit exclusions: AS/SC/PSYC 2021 3.0, AS/SC/PSYC 2022 3.0, SC/BIOL 3080 3.0, SC/ BIOL 3090 3.0, AS/ECON 2500 3.0, AS/ECON 3500 3.0, AS/SC/GEOG 2420 3.0, AS/SC/GEOG 3421 3.0, AS/SC/KINE 2050 3.0, AS/SC/AK/ MATH 1131 3.0, AS/SC/MATH 1132 3.0, AS/SC/ AK/MATH 2500 3.0, AS/SC/AK/MATH 2560 3.0, AS/SC/AK/MATH 2570 3.0, AS/SC/PHED 2050 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.
Notes: 1. Students who discontinue registration in AS/SC/PSYC 20206.0 after the Fall Term may not petition for credit for a half course in statistics.
2. The degree credit exclusions listed above may not be substituted for AS/SC/PSYC 20206.0 to satisfy degree requirements unless approved as acceptable substitutes by the department and Faculty - see the Psychology programme of study requirements in the Faculty of Arts part of this Calendar or in Science section V.

AS/SC/PSYC 2021 3.O Introduction to Descriptive Statistics. Fundamental
conceptions and techniques of descriptive statistics and their application to psychological research.

Prerequisite or corequisite: AS/SC/PSYC 1010 6.0 (with a minimum grade of $C$, when used as a prerequisite).
Degree credit exc/usions: AS/SC/PSYC 2020 6.0, SC/BIOL 3080 3.0, SC/BIOL 3090 3.0, AS/ECON 2500 3.0, AS/SC/GEOG 2420 3.0, AS/SC/KINE 2050 3.0, AS/SC/AK/MATH 1131 3.0, AS/SC/AK/ MATH 2500 3.0, AS/SC/AK/MATH 2560 3.0, AS/ SC/PHED 2050 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/SC/MATH 2030 6.0.

AS/SC/PSYC 2022 3.0 Introduction to Inferential Statistics and the Analysis of Variance. Fundamental conceptions and techniques of inferential statistics and their application to psychological research. Techniques and procedures in analysis of variance and non-parametric statistics are also covered.

Prerequisite: One of AS/SC/PSYC 2021 3.0, AS/ ECON 2500 3.0, AS/SC/KINE 2050 3.0, AS/SC/ AK/MATH 2560 3.0, AK/PSYC 2510 3.0.
Prerequisite or corequisite: AS/SC/PSYC 1010 6.0 (with a minimum grade of $C$, when used as a prerequisite).
Degree credit exclusions: AS/SC/PSYC 2020 6.0, SC/BIOL 3080 3.0, SC/BIOL 3090 3.0, AS/ECON 3500 3.0, AS/SC/GEOG 3421 3.0, AS/SC/MATH 1132 3.0, AS/SC/AK/MATH 2500 3.0, AS/SC/AK/ MATH 2570 3.0, AS/SOCI 3030 6.0. Not open to any student who has successfully completed AS/ SC/MATH 2030 6.0.

AS/SC/PSYC 2030 3.0 Introduction to Research Methods in Psychology. The course introduces the research methods and reasoning processes appearing in the psychological literature. From this literature selected articles are read and analyzed with
respect to research issues such as philosophical orientation, observational method, research design, measurement procedures, and validity.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.
Degree credit exclusion: Not open to students who have passed or are taking AS/SC/PSYC 3010 3.0.

## -2100 Series

AS/SC/PSYC 2110 3.0 Developmental Psychology. An examination of the essential issues in developmental psychology with special emphasis on the nature-nurture issue, cross-culture comparisons, the phylogenetic vs. ontogenetic model, intellectual and social development, and the role of biological factors in development.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 2120 3.0 Social Psychology. An examination of social behaviour; experience and interaction; processes of social influence, attitude formation and change; and persuasive communication.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 2130 3.0 Personality. A
survey of the major theories which attempt to explain the underlying structure and dynamics of variations in individual behaviour in life situations.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

## -2200 Series

AS/SC/PSYC 2210 3.0 Learning. A course in problems, experimental methods, and research findings in basic learning processes.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 2220 3.0 Perception. A course in problems, experimental methods, and research findings in perception.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 2230 3.0 Motivation. A course in problems, experimental methods, and research findings in motivation.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 2240 3.0 Physiological Psychology. A course in problems, experimental methods, and research findings in the biological bases of behaviour.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

## 3000-Level Courses

## -3000 Series

AS/SC/PSYC 3010 3.0 Research in Psychology. An intermediate course to provide further experience with the design, execution, analysis, and communication of psychological
studies. The course builds on the foundation established in AS/SC/PSYC 10106.0 and further prepares students for intermediate and advanced courses oriented toward research. This course is highly useful preparation for many types of Honours Thesis research.
Prerequisites: For 1999/2000: AS/SC/PSYC 10106.0 with a minimum grade of C. For 2000/ 2001: AS/SC/PSYC 10106.0 with a minimum grade of C; AS/SC/PSYC 20303.0 is recommended. For 2001/2002: AS/SC/PSYC 10106.0 with a minimum grade of $C ; A S / S C /$ PSYC 2030 3.0.
Prerequisite or corequisite: AS/SC/PSYC 2020 6.0.

AS/SC/PSYC 3030 6.0 Intermediate Statistics. A course in applied statistics, emphasizing linear models for regression analysis and analysis of variance.
Prerequisites: AS/SC/PSYC 10106.0 with a minimum grade of C; AS/SC/PSYC 20206.0 or equivalent.
Degree credit exclusions: AS/SC/MATH 3033 3.0, AS/SC/AK/MATH 3034 3.0, AS/SC/AK/ MATH 3230 3.0, AS/SC/AK/MATH 3330 3.0.

AS/SC/PSYC 3090 3.0 Principles of Psychological Measurement. An
introduction to measurement theory, including principles of psychological testing with special emphasis on test construction and the evaluation and interpretation of test scores. The course does not address the applied uses of tests.
Prerequisites: AS/SC/PSYC 10106.0 with a minimum grade of $C$; AS/SC/PSYC 20206.0 or equivalent.

## -3100 Series

AS/SC/PSYC $3140 \quad$ 3.0 Abnormal Psychology. A discussion of the nature and causes of behaviour disorders. Consideration is given to the contributions of personality theory to the understanding of disturbed behaviour.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

## -3200 Series

AS/SC/PSYC 3250 3.0 Neural Bases of Behaviour. Experimental and clinical studies illustrating behavioural effects of brain damage are examined in a survey of issues concerning the development and localization of cerebral functions.
Prerequisite: AS/SC/PSYC 2240 3.0.
AS/SC/PSYC 3260 3.0 Cognitive Processes. A course in the experimental psychology of the higher mental processes. Topics to be covered include attention, recognition, remembering, thinking, and language.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3270 3.0 Sensory Processes. A course designed to help develop a better understanding of our senses. Particular attention is paid to experimental methods and research findings as they relate to basic as well as applied problems.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3280 3.0 Animal Behaviour. A course in problems, experimental methods, and research findings in comparative animal behaviour.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3290 3.0 Psycholinguistics. A survey of psycholinguistic research and theory. Topics include language acquisition, psychological correlates of transformational grammars, and information-processing approaches to language. (Same as AS/LING 3220 3.0.)
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$, or AS/LING 1000 6.0.
Degree credit exclusion: AS/LING 3220 3.0.

## -3400/3500 Series

AS/SC/PSYC 3410 3.0 Educational Psychology. An examination of the fundamental psychological issues encountered in education, including the nature and control of human learning, theories of motivation, development of skills, concept formation, creative and critical thinking, and social psychological processes in education.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3420 3.0 Evolutionary Psychology. The evolutionary origins of infra-human and human psychological processes and behaviour are considered from the perspective of the original Darwinian theory through to current sociobiological concepts.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/PSYC 3430 3.0 Behaviour in Groups: Small Group Processes. This course focuses on human behaviour in small group situations, with particular emphasis on sensitivity training, communication, interaction feedback processes, norms, group development, and role theory.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3440 3.0 An Introduction to Health Psychology. This course explores the developing role of psychology in the health field. It provides psychological frameworks that elucidate the (non) practice of health behaviours, the role of stress in illness, adjustment to and coping with illness, and representations of health/illness.
Prerequisite: AS/SC/PSYC 21203.0 or AS/ SC/PSYC 2240 3.0.
Degree credit exclusions: AS/SC/KINE 4050D 3.0, AS/SC/KINE 4710 3.0.

AS/SC/PSYC 3450 3.0 Environmental Psychology. This course acquaints students with issues and research findings in environmental psychology. Topics emphasize the effects of the physical settings created by humans on behaviour and draw material from research in personal space, territoriality, privacy, and small-group ecology.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/PSYC 3460 3.0 Psychology of Religion. The interpretation of religious phenomena in terms of human thought, feeling, and volition.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3470 3.0 Introduction to the History of Psychology. An introduction to the history of psychology in its applications and as an academic discipline. Psychological thought and practice are examined in their social context. The course traces the historical development of different orientations to the study of psychology.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3480 3.0 Psychology of Women: an Overview. This course explores factors associated with the psychology of women, including gender-role stereotypes, socialization practices, male-female differences, and the family. At all times, the interpretation offered is made with reference to the broader social context.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3490 3.0 Psychology of Adult Development and Aging. This course offers a broad survey of the psychology of aging. Major topics include biological and psychological theories of aging; age changes in intelligence, personality and social relations; the pathologies of old age; and methods of intervention.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3500 3.0 Development in Adolescence. This course involves the scientific study of changes in affective, social and cognitive development during the second decade of life. The course focuses on fundamental developmental changes, the contexts in which development occurs, and the central psychosocial issues of adolescence.
Prerequisites: AS/SC/PSYC 10106.0 with a minimum grade of C; AS/SC/PSYC 2110 3.0.

AS/SC/PSYC 35106.0 (3510 3.0) Special Topics in Psychology. As the need arises, the department offers courses or seminars on particular topics not ordinarily available. Details on the topics covered in different sections of the course are given in the department's supplemental calendar. Some Special Topics courses may not be eligible for Science (SC) credit.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 35203.0 Infancy. This course involves the scientific study of changes in motor development, perception, social and physical cognition that occur during the first two years of life. Focus is on the nature and determination of these changes and theoretical and methodological advances.
Prerequisite: AS/SC/PSYC 2110 3.0.
AS/SC/PSYC 3530 3.0 The Psychology of Individual Differences. The scientific study of individual difference variables such as traits, values, interests, motives, skills, abilities, attitudes, styles and roles. Includes the origins and stability of individual differences.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3540 3.0 Introduction to Psychological Testing. This course covers various psychological tests (intelligence, personality, etc.) and their use in applied settings. Special consideration is given to the interpretation and reporting of test scores and profiles. This course is not intended to teach techniques of test administration.
Prerequisite: AS/SC/PSYC 3090 3.0.
AS/SC/PSYC 3550 3.0 Creativity: Pure and Applied. This course offers a systematic study of the persons, processes, and products of creativity, including theories, research, and measurement methods. Creativity is defined as something which is both novel and significant.
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.
Degree credit exclusions: AS/SC/PSYC 3510D 3.0 (taken before 1994/95), AS/SC/ PSYC 3510V 3.0.

AS/SC/PSYC 3560 3.0 Psychology of Death and Dying. This course considers issues and topics in thanatology including sociocultural influences on our understanding of death, care of the dying, and medical ethics. It examines research and theory in aging and illness, adjustment to life-threatening conditions, and grief reactions. (Same as AK/PSYC 3290 3.0.)
Prerequisite: AS/SC/PSYC 10106.0 with a minimum grade of $C$.

AS/SC/PSYC 3570 3.0 Organizational Psychology (formerly AS/SC/PSYC 3510B 3.0 - before 1999/2000). This course involves the study of how individuals think about, and relate to one another in organizations and business. It raises theoretical, scientific, and practical questions about various aspects of psychological life in the workplace.
Prerequisites: AS/SC/PSYC 10106.0 with a minimum grade of C; AS/SC/PSYC 2120 3.0.
Degree credit exclusion: AS/SC/PSYC 3510B 3.0.

## -3800 Series

AS/SC/PSYC 38906.0 (3890 3.0) Independent Reading. Students may arrange to do independent study with members of the Psychology Department. This
allows students and professors to work in areas of psychology which lie outside the usual course offerings. Contact the Undergraduate Office for details.
Note: Students wishing a half course register in AS/SC/PSYC 3890 3.0. Students may take one full course (or two half courses) in independent reading in each academic session. Faculty of Arts students should see the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for regulations on independent reading courses. Some independent reading topics may not be eligible for Science (SC) credit.
Prerequisites: 36 credits completed, inc/uding AS/SC/PSYC 10106.0 with a minimum grade of C.

## 4000-Level Courses

## Prerequisites

Completion of AS/SC/PSYC 10106.0 with a minimum grade of $C$ is a prerequisite for all 4000 level Psychology courses.
Most 4000-level Psychology courses require the following general prerequisites: students must be in an Honours programme in Psychology and have completed 84 university credits. [Note: "An Honours programme" includes any Specialized Honours, Honours (Single Major), Honours Double Major, or Honours Major/Minor (with a major or minor in Psychology) programme in the Faculties of Arts and Pure and Applied Science.]
Students should note the other listed prerequisites for each 4000 -level course. Students may be allowed to register for a course for which they lack the stated prerequisites if they obtain written permission of the instructor. See the department's supplemental calendar for the conditions under which this permission may be given.

AS/SC/PSYC 4000 6.0 Honours Thesis. A thesis involving empirical or bibliographic research. Students arrange for supervision by a member of the Psychology Department. Contact the Undergraduate Office for details. Not open to Special Students. Some Honours Thesis topics may not be eligible for Science (SC) credit.
Prerequisites: General prerequisites, including AS/SC/PSYC 20206.0 or equivalent.
Degree credit exclusion: AS/SC/PSYC 4170 6.0.
AS/SC/PSYC 4010 6.0 Advanced Seminar in Developmental Psychology. Major modern theories of child development are extensively reviewed and their corresponding data and methodologies are analyzed. Learning approaches stressing environmental influences are compared with cognitive and maturational approaches.
Prerequisites: General prerequisites, including AS/SC/PSYC 2110 3.0.

AS/SC/PSYC 4020 6.0 Advanced Seminar in Social Psychology. A critical examination of research on topics such as socialization, processes of social influences, small groups, communication, persuasion, leadership, social perception, interpersonal attraction, and attitudes.

Prerequisites: General prerequisites, including AS/SC/PSYC 2120 3.0.

AS/SC/PSYC 4030 6.0 Behaviour Modification and Behaviour Therapy. An examination of theoretical issues, basic research and practical application in the area of behaviour change.
Prerequisites: AS/SC/PSYC 2130 3.0; AS/SC/
PSYC 3140 3.0; general prerequisites or registration in the Joint York/Seneca Programme in Rehabilitation Services.

AS/SC/PSYC 4040 6.0 Rehabilitation Psychology. A seminar course that introduces students to the field of rehabilitation of persons with disability (physical, emotional, developmental) with special emphasis on the contribution of psychology to theory and practice.
Prerequisites: General prerequisites, including AS/SC/PSYC 21303.0 and AS/SC/PSYC 3140 3.0; or written permission of the instructor.

AS/SC/PSYC 4050 6.0 Personality Theory and Behaviour Disorders. A critical review of current concepts of the nature, causes, and amelioration of disordered behaviour. Concepts are illustrated with selected examples of both normal and abnormal social behaviour.
Prerequisites: General prerequisites, including AS/SC/PSYC 21303.0 and AS/SC/PSYC 3140 3.0.

AS/SC/PSYC 4060 6.0 Psychology of Counselling. An examination of current theory, practice, and research in counselling. Theories of personality change, decision-making, and vocational development are considered in relation to the counselling process in various settings.
Prerequisites: AS/SC/PSYC 2130 3.0; AS/SC/ PSYC 3140 3.0; general prerequisites or registration in the Joint York/Seneca Programme in Rehabilitation Services.

AS/SC/PSYC 4080 6.0 The Neuropsychology of Abnormal Behaviour. An examination of the genetic, physiological and anatomical bases of several types of abnormal behaviour. The social, public policy and ethical implications of a neuropsychological view of abnormal behaviour are discussed.

Prerequisites: General prerequisites, including AS/SC/PSYC 22403.0 and AS/SC/PSYC 3140 3.0; or written permission of the instructor.

AS/SC/PSYC 4090 6.0 Urban Psychology. This research-oriented course provides coverage of topics in environmental psychology as applied to psychological aspects of urban behaviour. Topics include methodology, models of urbanism, stress, noise, crowding, territoriality, litter control, cognitive mapping and transportation management.
Prerequisites: General prerequisites, including AS/SC/PSYC 3450 3.0.

AS/SC/PSYC 41106.0 (4110 3.0) Special Topics in Psychology. As the need arises, the department offers courses or seminars on particular topics not ordinarily available. Details
on the topics covered in different sections of the course are given in the department's supplemental calendar. Some Special Topics courses may not be eligible for Science (SC) credit.

Prerequisites: General prerequisites; any additional prerequisites for specific sections are announced in the department's supplemental calendar.

AS/PSYC 4120 3.0 Psychology and Literature (formerly half of AS/PSYC 4120 6.0 -before 1999/2000). An exploration of issues involved in the interrelationship of psychology and literature in order to enhance the student's understanding and appreciation of human behaviour and experience, and of imaginative literature. (Same as AS/HUMA 4610 3.0.)
Prerequisites: General prerequisites; written permission of the course director.

Degree credit exclusions: AS/PSYC 4120 6.0, AS/HUMA 4610 6.0, AS/HUMA 4610 3.0.

AS/SC/PSYC 4130 6.0 Psychoanalytic Psychology. An advanced seminar dealing with selected aspects of Freudian and/or neo-Freudian theory.

Prerequisites: General prerequisites, including AS/SC/PSYC 2130 3.0.

AS/SC/PSYC 4140 6.0 Current Research and Issues in Personality. A seminar focusing on some of the current and classical issues in personality research and theory, and on some basic personality models. Dissonant research evidence serves as a basis for discussion and debate.

Prerequisites: General prerequisites.
AS/SC/PSYC 4150 6.0 Rigorous Alternatives for Contemporary Psychology. This course examines the wide range of criticism mounted against contemporary mainstream psychology over the past 25 years, and explores in depth several philosophically sophisticated alternative psychological approaches to the study of behaviour and experience.

## Prerequisites: General prerequisites.

AS/SC/PSYC 4170 6.0 Advanced Research in Psychology. As an alternative to independent thesis research (AS/SC/PSYC 40006.0 ), this course offers structure, support, and guidance for student research by means of regular seminar meetings. Different sections of the course (described in the department's supplemental calendar) focus on different types of research. Some research topics may not be eligible for Science (SC) credit.
Prerequisites: General prerequisites, including AS/SC/PSYC 20206.0 or equivalent.
Degree credit exclusion: AS/SC/PSYC 4000 6.0 .

AS/SC/AK/PSYC 4180 3.0 Seminar in Comparative Cognition. This seminar course focuses on the various approaches to the study of cognitive processes in non-human animal species. The course includes the study of memory, problem-solving, concept
formation, the representation of time and number and language acquisition in nonhuman animals.
Prerequisites: 78 credits, including AS/SC/ PSYC 20206.0 or both AS/SC/PSYC 20213.0 and AS/SC/PSYC 2022 3.0; 6 credits chosen from AS/SC/PSYC 2210 3.0, AS/SC/PSYC 3260 3.0, AS/SC/PSYC 3280 3.0.

AS/SC/PSYC 4220 6.0 Theories of Human
Nature. A critical examination of theories of human nature with special emphasis on psychological theories, cultural and social theories, psycho-analysis, philosophical theories, racial theories, and economic theories.
Prerequisites: General prerequisites. Open to students after completion of 48 credits with written permission of the instructor.

AS/SC/PSYC 4230 3.0 Human Performance in Systems. This seminar course examines the application of systems psychology and human factors to the development and evaluation of complex operational systems. Seminar topics include simulation techniques, function allocation, human capabilities, task design, personnel selection, evaluation of individual and system performance. Normally offered in alternate years.
Prerequisites: General prerequisites or written permission of the instructor.

AS/SC/PSYC 4460 6.0 Atypical Development. An examination of problems relating to children with physical, mental, social and emotional problems. An extensive exploration of the nature and causes of the dysfunction, and of experimental methods, research findings and current remedial techniques.
Prerequisites: General prerequisites, including AS/SC/PSYC 2110 3.0.

AS/SC/PSYC $4890 \quad 6.0 \quad(4890 \quad 3.0)$ Independent Reading. Students may arrange to do independent study with members of the Psychology Department. This allows students and professors to work in areas of psychology which lie outside the usual course offerings. Contact the Undergraduate Office for details.

Note: Students wishing a half course register in AS/SC/PSYC 4890 3.0. Students may take one full course (or two half courses) in independent reading in each academic session. Faculty of Arts students should see the "Enrolment and Registration" section of the Faculty of Arts part of this Calendar for regulations on independent reading courses. Some independent reading topics may not be eligible for Science (SC) credit.

Prerequisites: General prerequisites.

## Public Policy and <br> Administration - Arts

Programme Office (Department of Political Science):
S672 Ross, (416) 736-5265, Ext. 88839
Programme Director (1999/00):

## L. Sossin

Associated Faculty:
G. Albo, I. Bakker, R. Bazowski, R. Drummond, C.I. Greene, H. Kaplan, R. MacDermid, J. Newton, L. Sossin, M. Thomas, R. Whitaker

Public Policy and Administration is a limitedenrolment Specialized Honours Programme. It consists of required courses such as quantitative methods in policy analysis (statistics and research design), public law, economics, and public administration.
As the Public Policy and Administration programme has many specific course requirements, students are strongly advised to plan their course load in advance. Interested students should apply for admission to the programme preferably at the end of their first year. Applications are only accepted in March and April of each year. Candidates must have completed at least 24 credits by the end of the Fall/Winter session in April. An Honours Grade Point Average ( $\mathrm{C}+$ or 5.0 ) is necessary to be considered for the programme; however, as enrolment is limited, a slightly higher GPA is generally required. Acceptance letters are mailed out in June, upon review of each applicant's final grades.

## Departmental and Divisional Courses in Public Policy and Administration

Descriptions of the content and format of these courses are contained in the appropriate departmental and divisional listings in this Calendar. Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the director of the programme.
Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.

AS/ECON 1000 3.0 Introduction to Microeconomics.
AS/ECON 1010 3.0 Introduction to Macroeconomics.
AS/POLS 10006.0 Introduction to Politics: Exploring the Democratic Experience.
AS/POLS 2040 6.0 Introduction to Political Theory.
AS/POLS 2300 6.0 Introduction to Empirical Theory.
AS/POLS 2610 6.0 Public Policy and Administration.
AS/POLS 3190 6.0 Public Administration.+
AS/POLS 3300 6.0 Statistics for Social Sciences.
AS/POLS 3600 3.0 Public Law I: The Constitution and the Courts in Canada.
AS/POLS 3605 3.0 Public Law II: The Charter of Rights and Freedoms and the Limits of Public Administration.
AS/POLS 3610 6.0 Organization and Administration.+

AS/POLS 4115 6.0 The Political Economy of State Finance.
AS/POLS 4300 6.0 Public Policy Research. AS/POLS 4995 3.0/4995 6.0 Practicum in Public Administration.
AS/SOCI 3620 6.0 Formal Organizations.+

+ Students must take one of AS/POLS 3190
6.0, or AS/POLS 36106.0 or AS/SOCI 3620 6.0.


## Religious Studies - Arts

## Programme Office:

261 Vanier, (416) 736-5910
Coordinator of the Programme:
TBA
Professors:
D. Bakan, Psychology; M. Bakan, Social Science and Philosophy; M. Brown, Humanities/Languages; K.M.H. Creal, Humanities; D.I. Davies, Sociology; N. DeShane, Fine Arts/Dance; S. Eisen, History; T. Fuse, Social Science; M. Herren, Atkinson/Humanities and Classics; K. Ishwaran, Sociology; M.P. Maidman, History and Languages; S. Mason, Humanities; J. Nagata, Anthropology; B.N. Olshen, Glendon/Multidisciplinary Studies; S. Tweyman, Glendon/Philosophy; P. Van Esterik, Anthropology; B. Wilson, Atkinson/Humanities and Philosophy.

## Associate Professors:

R.E. Chace, History and Humanities; T. Goossen, Humanities; P. Gray, Atkinson/ Humanities; G. Hopton, Atkinson/ Humanities; D.M. Johnson, Philosophy; E. Kallen, Social Science; B. Lightman, Humanities; M. Lockshin, Humanities and Languages J.D. Paper, Humanities; R. Perry, Fine Arts/Visual Arts; L.B. Polka, History and Humanities; R. S. Schneider, History and Humanities; S. Schoenfeld, Glendon/Sociology; J.S. Scott, Humanities; J. Stuckey, Humanities; S. Tanenzapf, Humanities; P. Taylor, Humanities; G.E. Thaiss, Anthropology; M. Webber, Languages/Humanities; W.E. Westfall, Humanities and Atkinson/History; B. Zelechow, Humanities/History.

## Assistant Professors:

A. Buturovic, Humanities; C. Ehrlich, Humanities; J. Gibson, Atkinson/ Humanities; J. Van Esterik, Anthropology.
Religious Studies invites students to join in current scholarly efforts to describe and to understand forms of religious experience. One of the master keys to the understanding of human behaviour and thought, religious experience is open to examination from a variety of disciplinary perspectives.
In the core course, students will be introduced to various disciplinary perspectives. Afterwards they may choose to specialized in one tradition -- e.g. studies of Bible, Judaism, Christianity, or Eastern Religions -- or they may continue to take a comparative approach. Students will, however, be expected to acquire breadth both in disciplinary approach and in subject matter.
Religious Studies has traditionally been a small programme, which emphasizes personal
contact between its majors and the faculty participating in the programme.
Note: For specific requirements of the various degree programmes in Religious Studies, please consult the 'Programmes of Study' section, Faculty of Arts.

## Courses in Religious Studies

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
Descriptions of the content and format of these courses are contained in the appropriate departmental and divisional listings in this Calendar. Not all courses will necessarily be offered in any given year; additional courses in several departments given as special topics are acceptable as programme courses. For details of courses to be offered, consult the coordinator. Complete descriptions and reading lists are given in the Religious Studies supplementary calendar, available each spring.

AS/HUMA 2800 9.0/SOSC 26009.0 Introduction to the Study of Religion. This course places the classic expressions of religion in their social and cultural contexts. It employs different humanistic and social science disciplinary tools and deals with important methodological questions in the study of religion.

AS/ANTH 2140 6.0 Introduction to Archaeology and Paleaoanthropology.
AS/ANTH 2150 6.0 Early Civilizations: Cities, Urbanism and Early States.
AS/ANTH 2180 3.0 Social Anthropology of the Middle East.
AS/ANTH 3000A 3.0 Psychics, Skeptics and Pseudoscience: A Cultural Critique of New Age.
AS/ANTH 3200 3.0 Millenarian and Utopian Religious Movements.
AS/ANTH 3320 6.0 Religious Ritual and Symbolism.
AS/ANTH 3350 6.0 Culture as Performance.
AS/ANTH 4200J 6.0 Selected Topics in Social Anthropology: Religious Movements in Global Perspective.
AS/GEOG 4250 3.0 Geography and Landscape in Secular and Religious Literature.
AS/HEB 3230 3.0 The Literature of Celebration and Commemoration.
AS/HEB 3320 3.0 Exodus: Texts and Classical Interpretation.
AS/HEB 3330 3.0 Deuteronomy: Texts and Classical Interpretation.
AS/HEB 3360 3.0 Prophetic Literature: Texts and Classical Interpretation.
AS/HEB 3370 3.0 Hagiographical Literature: Texts and Classical Interpretation.
AS/HEB 3500 6.0 The Hebrew Revival: Language and Literature.
AS/HEB 3600 6.0 Themes in Modern Israeli Literature and Society.
AS/HEB 3800 6.0 Special Topics in Hebrew. AS/HEB 4300 6.0 Talmudic Literature. AS/HIST 2110 6.0 The Ancient Near East. AS/HIST 3555 6.0 Canadian Jewish History. AS/HIST 3809 6.0 History of the Christian Church: Beginnings to the Reformation.
AS/HIST 3810 6.0 History of the Christian Church: Reformation to the Present.
AS/HIST 3860 6.0 Modern History of the Jews.

AS/HIST 4100 6.0 Selected Problems in Israelite History.
AS/HIST 4220 6.0 Iconological Method in the Study of Medieval Manuscript Illustration. (Crosslisted to: AS/HUMA 4735 6.0, FA/VISA 4930 6.0) AS/HIST 4410 6.0 Religion and Science in Victorian England.
AS/HUMA 1100 9.0 Worlds of Ancient Greece and Rome.
AS/HUMA 1110 9.0 Greek and Biblical Traditions.
AS/HUMA 1300 9.0 Cultures of the Resistance in the Americas.
AK/HUMA 1710 6.0 Roots of Western Culture: The Ancient World.
AS/HUMA 1850 6.0 The Bible and Modern Knowledge. (Equivalent to: AK/HUMA 1850 6.0)
AS/HUMA 2410 6.0 Chinese Art, Poetry and Religion.
AS/HUMA 2000C 6.0 Islamic Traditions.
AS/HUMA 2810 6.0 The Hebrew Bible.
AS/HUMA 2820 6.0 Female Spirituality.
AS/HUMA 2830 9.0 Founders of Christianity.
AS/HUMA 2840 6.0 Perspectives on
Contemporary Moral Issues.
AS/HUMA 2850 9.0 The Jewish Experience: Symbiosis and Rejection.
AS/HUMA 2851 3.0 The Jewish Experience: Symbiosis And Rejection, From Antiquity to the Middle Ages.
AS/HUMA 2852 3.0 The Jewish Experience: Symbiosis And Rejection, From The Middle Ages To The Present.
AS/HUMA 3000D 6.0 Religion, Gender and Korean Culture.
AS/HUMA 3100 6.0 Greek Drama and Culture.
AS/HUMA 3140J 3.0 Holocaust Testimonies and the Canadian Context.
AS/HUMA 3340 6.0 From Alien to Archetype: Jews in North America.
AK/HUMA 3430 6.0 The Making of Christianity and Cristendom. (Degree credit exclusion: AS/ HUMA 3785 6.0)
AK/HUMA 35006.0 Science and Religion.
AK/HUMA 3600 6.0 Myths and Their Meanings.
AK/HUMA 3605J 3.0 Augustine.
GL/HUMA 3660 6.0 Religion and Morality in the Ancient World.
AK/HUMA 3750 6.0 Comparative Study of Religions.
AK/HUMA 3760 6.0 Theology and Culture in the 20th Century.
AS/HUMA 3782 6.0 Christian Thought from 1500 to 1830.
AS/HUMA 3785 6.0 The Making of Christianity and Christendom. (Degree credit exclusion: AK/ HUMA 3430 6.0)
AS/HUMA 37906.0 Jesus and Interpretation.
GL/HUMA 3790 6.0 The Torah: Five Books of Moses.
AS/HUMA 3800 6.0 Contemporary Religious Thought.
AK/HUMA 3800 6.0 Satire, Utopia and Society.
AS/HUMA 3805 6.0 Religious Belief and Philosophical Thought in the Twentieth Century. AS/HUMA 38106.0 Interpretations of Reality. AS/HUMA 38306.0 Israelite Prophecy.
AS/HUMA 3835 6.0 Medieval Jewish Thought. AS/HUMA 3840 6.0 Rabbinic Judaism: Thought and Institutions.
AK/HUMA 3840 6.0 The Early Roman Empire and the Rise of Christianity.

AK/HUMA 38506.0 Issues and Themes in Medieval Culture.
AS/HUMA 3860 6.0 Mysticism: East and West. AS/HUMA 3870 6.0 Religions of Native American Peoples.
AS/HUMA 3880 6.0 On Values.
AS/HUMA 3930 6.0 Woman, Myth and Religion.
AK/HUMA 3950 6.0 Interpreting the Hebrew Bible: Old Testament.
AK/HUMA 3955 6.0 Interpreting the New Testament.
AK/HUMA 3960 6.0 The Development of Jewish Thought and Literature.
AS/HUMA 4310A 6.0 Religion and Politics in the Caribbean.
AK/HUMA 4630 6.0 Studies in Interpretation.
AS/HUMA 4735 6.0 Iconological Method in the
Study of Medieval Manuscript Illustration.
(Cross-listed to: AS/HIST 4220 6.0, FA/VISA 4930 6.0)
AS/HUMA 4740 6.0 The Sacred and the Arts. GL/HUMA 4790 3.0 Studies in the Hebrew Bible: Poetry.
GL/HUMA 4795 3.0 Studies in the Hebrew Bible: Prophetic Books.
AS/HUMA 4800 6.0 Parables of Jesus.
AS/HUMA 4820C 6.0 Problems in the Study of Judaism.
AS/HUMA 4890C 6.0 Women in Islamic Literatures.
AS/IT 4330 6.0 Dante and Medieval Italian Literature.
AS/PHIL 2090 3.0 Philosophy of Religion.
AS/PHIL 2120 3.0 Existentialism.
GL/PHIL 2920 3.0 History of Ethics.
AS/PHIL 3095 3.0 Philosophy of Religion.
AS/PHIL 3125 6.0 Contemporary Existentialism.
AK/PHIL 3440 6.0 Medieval Philosophy.
AK/PHIL 36506.0 Philosophy of Religion.
GL/PHIL 3931 3.0 Philosophy of Religion.
AS/PHIL 4030M 3.0 Topics in Ancient Philosophy.
AS/PHIL 4170M 3.0 Philosophical Theology.
GL/SOCI 3600 3.0 Women and Religion.
GL/SOCI 36406.0 Jewish Identity in the Modern World.
AS/SOCI 36506.0 Sociology of Religion.
AS/SOSC 2430 6.0 Peoples and Cultures of Southeast Asia.
AS/SOSC 2480 9.0 Introduction to African Studies.
AS/SOSC 3120 6.0 Suicide and Culture in Comparative Perspective.
AS/SOSC 39606.0 Interethnic Relations and the Jewish Minorities.
AS/PSYC 3460 3.0 Psychology of Religion.
FA/VISA 1340 6.0 Survey of Art of Asia.
FA/VISA 3341 6.0 The Art of India.
FA/VISA 4340 6.0 Asian Art: Zen Painting and Poetry.
FA/VISA 49306.0 Iconological Method in the Study of Medieval Manuscript Illustration. (Cross-listed to: AS/HIST 4220 6.0, AS/HUMA 4735 6.0)

## Ancillary Courses

The courses listed below do not qualify automatically for programme credit. However, if approved by a Faculty advisor as useful for an individual's programme of study, these courses will count to the major.

AS/GK 1000 6.0 Elementary Classical Greek. AK/GK 14006.0 Introductory Classical Greek. AK/GK 24206.0 Biblical Greek.
AS/HEB 1000 6.0 Elementary Modern Hebrew, Level I.
AS/HEB 1010 6.0 Elementary Modern Hebrew Level II.
AS/HEB 2010 6.0 Intermediate Modern Hebrew.
AS/HEB 3000 6.0 Advanced Modern Hebrew. AS/LA 1000 6.0 Elementary Latin.
AK/LA 14006.0 Introductory Latin.
AK/LA 2430 6.0 Intermediate Latin: Medieval.

## Science, Technology, Culture and Society - Arts

Programme Office (Division of Humanities):
205 Bethune, (416) 736-5164
Professor and Coordinator of the Programme:
M. Fichman, (416) 736-2100 ext. 70475

The Science, Technology, Culture, and Society (STCS) Programme provides students with the opportunity to study the place of modern science and technology in human culture and society from an integrated, critical, and interdisciplinary perspective. The programme includes courses dealing with the history, philosophy, and sociology of the mathematical, physical, biological, and social sciences, as well as the social, cultural, and intellectual contexts which both shaped and were shaped by thinking in those fields. Themes and areas of concentration include: 1) Science, Technology, and Social Change; 2) History and Philosophy of Science, Technology, and the Social Sciences; 3) Science, Technology, and Humanistic Thought; 4) Science, Technology, and the Arts.
The STCS Programme equips students with a broad interdisciplinary education which prepares them for all types of careers. Graduating students will have the same postgraduate opportunities as those possessing an Honours BA in Arts fields - i.e., an opportunity to enter professional schools or graduate programmes. Students who graduate from the STCS Programme would be especially qualified to pursue graduate work in graduate programmes in History and Philosophy of Science, as well as their congruent disciplines. Graduate of this programme are well equipped for further studies in law, medicine, education, journalism, and environmental policy.

## Departmental and Divisional Courses

Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.
Note: Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the mini-calendar of the divisions of Social Science and Humanities or the Science, Technology, Culture and Society supplementary calendar.

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.

## Anthropology

AS/ANTH 3090 6.0 Gender, Science and Society.
AS/ANTH 3150 6.0 Culture, Evolution and Ecology.
AS/ANTH 3280 6.0 Psychiatric Anthropology and Social Stress.
AS/ANTH 4110 6.0 Development of Theory in Social Anthropology.
AS/ANTH 4340 6.0 Advocacy and Social Movements.

## Geography

AS/GEOG 4130 3.0 The History and Theory of Geography.

## History

AS/HIST 3880 6.0 Medicine and North American Society in Historical Perspective. (Cross-listed to: AS/SOSC 3090 6.0)
AS/HIST 3870 6.0 Historical Development of Technology Since 1800 and Its Impact.
AS/HIST 4410 6.0 Science and Religion in Victorian England.
AS/HIST 4680 6.0 History of Communication in the United States.
AS/HIST 4800 6.0 The Science of Society: Social Thought in North America 1890-1940.
(Cross-listed to: AS/HUMA 4220 6.0)

## Humanities

AS/HUMA 1905 9.0 Dangerous Visions, Brave New Worlds: The Science Fiction Culture and Our Scientific Age.
AS/HUMA 1910 9.0 Science and the Humanities.
AS/HUMA 2915 9.0 Darwin, Einstein and the Humanities.
AS/HUMA 2920 9.0 Spreading the Word: Knowledge, Technology and Culture.
AS/HUMA 3000G 6.0 The Cultural Context of the Enlightenment.
AS/HUMA 3210 6.0 The Scene of the Crime. AS/HUMA 3350 6.0 Modernism and AntiModernism in American Culture.
AS/HUMA 3500H 6.0 Science and Religion in Modern Western Culture
AS/HUMA 3920 6.0 Technology and Communication.
AS/HUMA 4220 6.0 The Science of Society: Social Thought in North America 1890-1940. (Cross-listed to: AS/HIST 4800 6.0)
AS/HUMA 4225 6.0 Topics in Science in Cultural Context.
AS/HUMA 4225 6.0B Minds and Matters in Victorian Culture.
AS/HUMA 4810 6.0 The Bible and the Birth of Western Monotheism.

## Mathematics

AS/MATH 3100 3.0 Famous Problems in Mathematics.
AS/MATH 3500 6.0 Mathematics in the History of Culture.
AS/MATH 4400 6.0 The History of Mathematics.

## Philosophy

AS/PHIL 2110 3.0 Truth, Theory and Superstition.
AS/PHIL 3170 3.0 Philosophy of Science.
AS/PHIL 3260 3.0 Philosophical Psychology.
AS/PHIL 3270 6.0 Philosophy of Social Science.
AS/PHIL 3300 3.0 Reader and Author.
AS/PHIL 4110 3.0/06 Topics in the Philosophy of Science.

## Political Science

AS/POLS 4660 3.0 Science, Policy and the Legal Process.

## Psychology

AS/PSYC 3420 3.0 Evolutionary Psychology.
AS/PSYC 3460 3.0 Psychology of Religion.
AS/PSYC 3470 3.0 Introduction to the History of Psychology.
AS/PSYC 4120 6.0 Psychology and Literature. AS/PSYC 4130 6.0 Psychoanalytic Psychology.

## Social Science

AS/SOSC 1020 6.0 Science and Society. AS/SOSC 1030 6.0 Evolution and Society.
AS/SOSC 1080 9.0 Computer Consciousness.
AS/SOSC 1570 6.0 Psychology and Politics.
AS/SOSC 2040 9.0 Nature and Human Nature.
AS/SOSC 2570 6.0 Human Nature in Political and Social Thought.
AS/SOSC 2990C 6.0 Medicine and Society in Historical Perspective.
AS/SOSC 3050 6.0 Controversial Issues in Social Science.
AS/SOSC 3090 6.0 Medicine and North American Society in Historical Perspective. (Cross-listed to: AS/HIST 3880 6.0)
AS/SOSC 3310 6.0 Communications for Tomorrow.
AS/SOSC 3510 6.0 Social Evolution: Problems and Perspectives.
AS/SOSC 3540 6.0 The Political Economy of Food.

## Sociology

AS/SOCI 3020 6.0 Classic Sociological Texts. AS/SOCI 4100 6.0 Brain, Behaviour and Evolution.
AS/SOCI 4910 6.0 The Sociology of Knowledge.

## Faculty of Pure and Applied Science Courses

## Bethune College

SC/BC 3010 6.0 Science an Literature: Concepts of the Body.

## Biology

SC/BIOL 4300 3.0 Origins and Development of Biological Theories.

## Natural Science

SC/NATS 1710 6.0 The Nature and Growth of Scientific Thought.
SC/NATS 1730 6.0 Science as Discovery.
SC/NATS 1760 6.0 Science and Technological Change.

## Atkinson College Courses

## Humanities

AK/HUMA 3350 6.0 Nature in Narrative. AK/HUMA 3500 6.0H Science and Religion.

## Mathematics

AK/MATH 3400 6.0 Topics in the History of Mathematics.

## Natural Science

AK/NATS 1760 6.0 Science, Technology and Society.

## Philosophy

AK/PHIL 2450 6.0 Introduction to the Philosophy of Psychology.
AK/PHIL 3500 6.0 Philosophical Issues in the Natural Sciences.
AK/PHIL 3550 6.0 Philosophy of Social Science.

## Science Studies

AK/STS 1010 6.0 Introduction to Science and Technology Studies.
AK/STS 2010 6.0 History of Modern Science.
AK/STS 3700 3.0/6.0 Selected Topics in Science and Technology Studies.
AK/STS 3730 6.0 Science, Religion and Ethics.
AK/STS 3740 6.0 Controversies in Environmental Science.
AK/STS 3750 6.0 Evolution and Society.
AK/STS 37706.0 Issues in the Modern Physical Sciences.
AK/STS 3780 6.0 Biomedical Science in Social Context.
AK/STS 4700 6.0 Independent Research in Science and Technology Studies.
AS/STS 4710 6.0 Honours Thesis in Science and Technology Studies.
AK/STS 4720 6.0 Seminar in the Social Studies of Science.
AK/STS 4740 6.0 Science, Technology and the Environment in Canada.

## Social Science

AK/SOSC 3300 6.0 New Technology and Social Change.

## Glendon College Courses

## History

GL/HIST 2920B 6.0 Medieval Science: Thought and Practice. (Same as GL/NATS 2920 6.0) GL/ HIST 3630 3.0 Science and Culture: Eighteenth and Nineteenth Centuries. (Same as GL/NATS 3630 3.0)

## Natural Science

GL/NATS 1400 6.0 Science, Faith and Science Fiction.
GL/NATS 1720E 3.0 Scientific Revolutions.
GL/NATS 1890E 6.0 Introduction to Science, Technology, and Society.
GL/NATS 2920 6.0 Medieval Science: Thought and Practice. (Same as GL/HIST 2920 6.0)
GL/NATS 3655 6.0 Social Issues In Reproduction.
GL/NATS 3970 6.0 Socio-politics of Science. (Same as GL/POLS 3970 6.0)
GL/NATS 4600 6.0 Topics in the History of Science.

GL/NATS 4630 3.0 Revolutions in Science and Politics (Same as GL/POLS 4630 3.0)

## Philosophy

GL/PHIL 3620 6.0 Topics in Philosophy of Psychology.
GL/PHIL 4640 3.0 Descartes Metaphysics and Philosophy of Science.

## Political Science

GL/POLS 3970 6.0 Socio-politics of Science. (Same as GL/NATS 3970 6.0)
GL/POLS 4630 3.0 Revolutions in Science and Politics (Same as GL/NATS 4630 3.0)

## Psychology

GL/PSYC 3650E 3.0 History of Experimental Psychology.

## Sociology

GL/SOCI 3320 6.0 The Sociology of Environmental Issues.

## Faculty of Environmental Studies Courses

ES/ENVS 2100 3.0 Foundations of Nature, Technology and Society.
ES/ENVS 3000 3.0 Environmental Ethics.
ES/ENVS 3110 3.0 Science and the Environment
ES/ENVS 3120 3.0 Environmental History.
ES/ENVS 4120 3.0 Natural History.
ES/ENVS 4140 3.0 Environmental Thought.

## Social and Political Thought - Arts

## Programme Office:

S741 Ross, (416) 736-5054
Associate Professor and Coordinator of the Programme:
TBA

## Advisors:

M.A. Gilbert, Philosophy; K. Anderson, Sociology; I. Greene, Political Science; T.V. Cohen, History; G. Thaiss, Anthropology

The Programme in Social and Political Thought is concerned with the interdisciplinary study of human community - its nature, history, and foreseeable futures. It is open to students in the disciplines of anthropology, history, political science, philosophy and sociology. More specifically, it is intended for those students whose breadth of focus is such that they would like to view the social and political situation of contemporary societies, both substantively and theoretically, from a plurality of humanistic and social scientific perspectives.

## Departmental and Divisional Courses in Social and Political Thought

Note: For specific requirements of this programme, please consult the 'Programmes of Study' section, Faculty of Arts.
Note: Not all courses will be necessarily offered in any given year; for details of courses to be offered, consult the Social Science supplemental
calendar, available from the division office, S748 Ross.
Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
AS/ANTH 2100 6.0 One World, Many Peoples. AS/ANTH 21803.0 Social Anthropology of the Middle East.
AS/ANTH 3320 6.0 Religious Ritual and Symbolism.
AS/ANTH 3350 6.0 Culture as Performance.
AS/ANTH 3450 3.0 Negotiations and Bargaining.
AS/ANTH 4110 6.0 Development of Theory in Social Anthropology.
AS/HIST 2100 6.0 Ancient Greece and Rome. AS/HIST 2200 6.0 Medieval Europe.
AS/HIST 2300 6.0 Modern Europe.
AS/HIST 2710 6.0 Traditional Societies of East Asia.
AS/HIST 3000 6.0 Contemporary History: Theory and Practice.
AS/HIST 31206.0 Foundations of Athenian Democracy.
AS/HIST 3233 6.0 Women in Medieval and Early Modern Europe.
AS/HIST 3440 6.0 Victorian Culture and Society.
AS/HIST 3533 6.0 The History of Women in Canada.
AS/HIST 3543 3.0 Quebec: The Pre-Industrial Era.
AS/HIST 3544 3.0 Quebec: The Industrial Era. AS/HIST 37106.0 Ideology, Politics and Revolution in the Caribbean.
AS/HIST 3810 6.0 Reformation to the Present. (Cross-listed to: AS/HUMA 3781 6.0)
AS/HIST 4350 6.0 European Thought in Crisis. AS/HIST 4370 6.0 East European Nationalism and Independence.
AS/HIST 4750 6.0 Backwardness and Revolution in Latin America. (Cross-listed to: AK/HIST 4109A 6.0)
AS/HIST 4800 6.0 The Science of Society: Social Thought in North America, 1890-1940.
AS/HUMA 2100 6.0 The World of Ancient Greeks.
AS/HUMA 21609.0 Romanticism.
AS/HUMA 28009.0 Introduction to the Study of Religion. (Cross-listed to: AS/SOSC 2600 9.0)

AS/HUMA 2915 9.0 Darwin, Einstein and the Humanities.
AS/HUMA 2930 9.0 On Woman: Introduction to Women's Studies. (Cross-listed to: AS/AK/ GL/WMST 2510 9.0, AS/SOSC 2180 9.0) AS/HUMA 3781 6.0 Reformation to the Present. (Cross-listed to: AS/HIST 3810 6.0) AS/HUMA 3805 6.0 Religious Belief and Philosophical Thought in the 20th Century.
AS/HUMA 3920 6.0 Technology, Communication, and Culture.
AS/HUMA 4000H 6.0 Deconstructing Postmodernism.
AS/HUMA 4160 6.0 Madness and Culture.
AS/PHIL 2010 3.0 Origins of Western Philosophy. (Cross-listed to: AK/PHIL 2010 3.0)

AS/PHIL 2015 3.0 Plato and Aristotle.
AS/PHIL 2020 3.0 Descartes, Leibniz and Spinoza.
AS/PHIL 2025 3.0 Locke, Berkeley and Hume. AS/PHIL 2050 6.0 Philosophy of Law.

AS/PHIL 2060 3.0 Social and Political Philosophy. (Cross-listed to: AK/PHIL 2060 3.0)

AS/PHIL 2070 3.0 Introductory Ethics.
AS/PHIL 2075 3.0 Introduction to Practical Ethics. (Cross-listed to: AK/PHIL 2075 3.0)
AS/PHIL 2120 3.0 Existentialism.
AS/PHIL 2250 3.0 Philosophy of Gender and Sexuality. (Cross-listed to: AK/PHIL 2250 3.0) AS/PHIL 31103.0 Political Philosophy. (Crosslisted to: AK/PHIL 3110 3.0)
AS/PHIL 3120 3.0 Early Existentialism.
AS/PHIL 3125 3.0 Contemporary Existentialism.
AS/PHIL 3220 3.0 Argumentation Theory. AS/PHIL 3260 3.0 Philosophical Psychology. AS/PHIL 3270 3.0 Philosophy of Social Science.
AS/PHIL 3640 3.0 German Philosophy. (Cross-listed to: AK/PHIL 3640 3.0)
AS/PHIL 4010C 3.0 Topics in Historical Philosophy: Hegel.
AS/PHIL 4050A 3.0 Philosophy of History.
AS/POLS 2040 6.0 Introduction to Political Theory.
AS/POLS 3020 3.0 Political Thought of the Renaissance and Reformation.
AS/POLS 3025 3.0 Seventeenth Century Political Theory.
AS/POLS 3040 3.0 Early Twentieth Century Political Thought.
AS/POLS 3070 3.0 Psychology and Politics.
AS/POLS 3075 3.0 Law, Justice and Jurisprudence.
AS/POLS 3080 3.0 American Political Thought.
AS/POLS 3270 3.0 Global Political Economy I: Theory and Approaches.
AS/POLS 3275 3.0 Global Political Economy II: Issues and Problems Since 1945.
AS/POLS 3450 3.0 Women and Politics. (Cross-listed to: AS/AK/GL/WMST 35163.0 and AS/SOSC 3170 3.0)
AS/POLS 3455 3.0 Topics in Women and Politics. (Cross-listed to: AS/AK/GL/WMST 35173.0 and AS/SOSC 3175 3.0)

AS/POLS 4015 3.0 Theories of Justice.
AS/POLS 4025 3.0 Freedom and Equality. AS/POLS 4030 3.0 Classical Political Theory. AS/POLS 4035 6.0 The Emergence of Modernity.
AS/POLS 4090 3.0 Classical Marxist Theory. AS/POLS 4200 6.0 International Relations Theory.
AS/POLS 4605 3.0 Ethical Politics.
AS/SOCI 20406.0 Sociological Theory.
AS/SOCI 3020 6.0 Classic Sociological Texts. AS/SOCI 3340 6.0 Social Change.
AS/SOCI 36406.0 Political Sociology.
AS/SOCI 4600 6.0 Feminist Theories and Methodologies.
AS/SOCI 49106.0 Sociology of Knowledge.
AS/SOSC 2112 6.0 The Political Economy of Health.
AS/SOSC 2180 9.0 AS/HUMA 2930 9.0 On
Woman: Introduction to Women's Studies.
(Cross-listed to: AS/AK/GL/WMST 2510 9.0, AS/HUMA 2930 9.0)
AS/SOSC 2520 6.0 Foundations of Political Economy.

Social Science AS/SOSC 25506.0 Contemporary Theories in Social and Political Thought. This is the introductory core course in the Programme in Social and Political Thought and is required of all students in their first year of enrolment in the programme. The course is also open, however, to other interested students. The course aims at an explication of the main historical, philosophic, and social scientific themes relevant to an understanding of the nature of "society," especially modern and contemporary Western society.

AS/SOSC 25606.0 Ideology and the Social Construction of Reality.
AS/SOSC 2570 6.0 Human Nature in Political and Social Thought.
AS/SOSC 2600 9.0 Introduction to the Study of Religion. (Cross-listed to: AS/HUMA 2800 9.0) AS/SOSC 2180A 6.0 Literature, Art and Society: Wells and Shaw.
AS/SOSC 2180B 6.0 Literature, Art and Society: Social Thought in African and Caribbean Literature.
AS/SOSC 2830 9.0 Music and Society.
AS/SOSC 2840 6.0 Film and Society.
AS/SOSC 3050 6.0 Controversial Research in the Social Sciences.
AS/SOSC 3120 6.0 To Be Or Not To Be: Suicide and Culture in Comparative Perspective.
AS/SOSC 3170 3.0 Women and Politics. (Cross-listed to: AS/AK/GL/WMST 35163.0 and AS/POLS 3450 3.0)
AS/SOSC 3175 3.0 Topics in Women and Politics. (Cross-listed to: AS/AK/GL/WMST 35173.0 and AS/POLS 3455 3.0)

AS/SOSC 3280 3.0 The Political Economy of Labour in Canada.
AS/SOSC 3410 6.0 The Political Economy of Latin America and the Caribbean.
AS/SOSC 3480 6.0 Culture, Democracy and Development in Africa.
AS/SOSC 3510 6.0 Social Evolution: Problems and Prospects.
AS/SOSC 3540 6.0 The Political Economy of Food.
AS/SOSC 3542 6.0 Comparative Economic Systems.
AS/SOSC 3550 6.0 Modernity at the Millennium.
AS/SOSC 3590 6.0 The Foundations of Political Economy.
AS/SOSC 3820 6.0 The Social and Political Dimensions of Humour.
AS/SOSC 3930 6.0 University and Society. AS/SOSC 4050 6.0 Animals and People.
AS/SOSC 41606.0 Feminist Theory. (Crosslisted to: AS/AK/GL/WMST 4500 6.0)
AS/SOSC 4500 6.0 The Emergence of Modernity.

Social Science AS/SOSC 45506.0 Problems in Social and Political Thought. This seminar is recommended to, but not required of, students in the Programme in Social and Political Thought. It is also open, however, to interested students outside the programme. The seminar deals each year with a different theme or problem and aims at its elucidation through an interdisciplinary perspective.

AS/SOSC 4570 6.0 Phenomenology, Psychoanalysis and Political Economy.
AS/SOSC 4990K 6.0 Social Theory and the Human Mind.
AS/SOSC 4990S 6.0 The Underside of Progress.

## Social Science - Arts

## Division Office:

S748 Ross, (416) 736-5054
Chair of the Division:
C. Heron

## Professors:

P. Axelrod, D. I. Davies, H. Flakierski, T. Fuse, J. A. Hellman, H. Kaplan, C. LipsigMumme, B.H. Massam, A.L. Murray, D. Noble, P. Roazen, A. Siegel, J. Warwick Professors Emeriti:
W.W. Anderson, T. Fuse, H. Flakierski, E. Kallen, A. Siegel, M. Waters

## Associate Professors:

J. Allett, C.J. Banfield, L. Briskin, J. Caulfield, M.L. Craven, P. Craven, J.T. Durlak, G. Fallis, G. Feldberg, F.J. Frisken, C.P. Furedy, R.W. Grant, C. Heron, J.A. Hutcheson, L. Jacobs, D.A. Kehoe, G. Kellough, L. Lam, S.K. Levine, J. LLambias-Wolff, T. Magder, P. McDermott, C. Nichols, L. Peake, I. Rajagopal, J.B. Ridpath, H. Rosenberg, R. Schlesinger, A. Sekyi-Otu, P. Stamp, R. Weisman, E. Winslow

## Assistant Professors:

V. Agnew, P. Antze, E.S. Baar, B. Beardwood, H. Breslow, S. Chawla, J. Gibbons, J. Gittins, E. Isin, M.J. Keall, S. Mumm, E. Seaton, G. Stubos, W. Swanson, G. Vise

## Courses in Social Science

Note: For specific requirements of programmes offered by this division, please consult the 'Programmes of Study' section, Faculty of Arts.
The Division of Social Science offers a wide range of interdisciplinary general education courses. Many of these courses are offered in conjunction with interdisciplinary honours programmes which are housed in the Division. Some courses have restricted entry but most courses are open to students who are not majors in an honours programme.
Not all courses are necessarily offered in all years. For information about specific offerings students should consult the supplementary calendars available in the spring from the division office, S741 Ross.
Courses are offered within the following list of subject areas:

- General Introduction-methods
- Education, Social Work, Family Studies
- African Studies
- Business and Society
- Canadian Studies
- Health and Society
- Information Technology
- Labour Studies
- Law and Society
- Mass Communications
- Science, Technology, Culture and Society
- Social and Political Thought
- Social and Political Thought-Political Economy
- Social and Political Thought-Arts and Society
- Urban Studies
- Women's Studies

The Division of Social Science also offers a number of courses in connection with Programmes which are housed elsewhere.

- Latin American-Caribbean Studies
- Religious Studies
- Jewish Studies


## I. 1000-Level Courses

Selected 1000- and 2000-level courses offered through the Division of Social Science are a part of the Faculty of Arts Foundation programme. These courses have a 9 credit value and are affiliated with one of the Arts Colleges. As a part of the General Education requirement of the Faculty of Arts, these courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level.

AS/SOSC 1000 9.0 An Introduction to the Social Sciences. The course considers the distinctive characteristics of modern society including the impact of modernization on the family, religion, economic behaviour, politics and belief systems. It introduces many of the major concepts social scientists use in analyzing how society works. (This course is affiliated with Calumet College.)
Degree credit exclusion: AS/SOSC 1000 6.0.
AS/SOSC 1080 9.0 Information and Technology. This course provides students with critical stances with which to view our society's preoccupation with "information" and "technology". We explore how computers can manage information and how this impacts on issues of ethics, control, privacy, censorship, and copyright. (This course is affiliated with Calumet College.)
Degree credit exclusion: AS/SOSC 10806.0 and AS/SOSC 1080 9.0(FW98).

AS/SOSC 1130 9.0 International Migration. The course examines why people leave their native lands and what becomes of them in the countries to which they immigrate, with particular reference to the impact of the immigrant on the host country, using Canadian examples. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 1130 6.0.
AS/SOSC 1140 9.0 Self, Culture, and Society: The Problem of Personal Identity. The course concerns the development of concepts of culture by which individuals seek to understand themselves and the world about them, using materials from anthropology, sociology, and philosophy, and with the aim of developing a critique of our own situation. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 1140 6.0.

AS/SOSC 1185 9.0 Women and Society. This course examines images of women and explores women's experiences in the family, in school, at the workplace, and in relation to the issues of poverty, violence, health and sexuality. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/SOSC 1180 6.0.
AS/SOSC 1188 9.0 Women's Roles. The intersection of gender and culture is considered, with emphasis on women's issues. We explore the role of women in Canada and elsewhere, assessing how nation and culture shape gender discourses, and we examine aboriginal issues at home and abroad. (This course is affiliated with McLaughlin College.)

AS/SOSC 1200 9.0 Canadian Problems. The conceptual framework that has been developed out of this experience is used to examine a number of contemporary problems, selected each year on the basis of their topicality and relevance to a comprehensive understanding of current Canadian public policy. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 1200 6.0.
AS/SOSC 1210 9.0 Minorities in Canadian Society. This interdisciplinary course examines Canadian attitudes, institutional practices, and government policies affecting opportunities for full participation in Canadian society for various Canadian minorities, ethnic and religious groups, homosexuals, women, the aged, disabled, and poor. Strategies for change are critically analyzed. (This course is affiliated with Founders College.)
Degree credit exclusion: AS/SOSC 1210 6.0.
AS/SOSC 1350 9.0 Women and the Law. This course explores the role of gender within the context of the legal system. Current issues that highlight the relationship between gender and law are examined by analyzing both legislation and case law. Topics include: divorce, rape, and equal pay. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 1350 6.0.
AS/SOSC 1430 9.0 Introduction to Development Studies. This course introduces students to the field of Development Studies, which has emerged as a result of efforts to bring about "development" in Third World countries. It uses a critical and historical approach drawing on concrete case studies, to examine the assumptions, practices, and consequences of development. (This course is affiliated with Founders College.)

AS/SOSC 1440 9.0 Introduction to CrossCultural Studies: the Family, Production and Social Groups. The course introduces basic issues in social science. We examine various methods and approaches designed to help understand, analyze, and predict human behaviour. In particular we will focus on families and work in a variety of different cultures. (This course is affiliated with Founders College.)
Degree credit exclusions: AS/SOSC 1000 6.0, AS/SOSC 1000 9.0 Section B.

AS/SOSC 1520 9.0 Markets and Democracy: The Development of Industrial Society. The development of industrial capitalism has entailed profound changes in ways of living. The course considers the spread of the market economy, the industrialization of production and the associated transformation of social and political institutions and ideas. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 15206.0 and AS/SOSC 2510 6.0.

AS/SOSC 1535 9.0 Societies and Economic Systems. This course examines the 20th century's two dominant economic systems: Western capitalism and eastern European socialism. It provides a comprehensive understanding of the theory and practice of both systems, and discusses movement between them. (This course is affiliated with McLaughlin College.)

AS/SOSC 1731 9.0 CyberCities: The Community and Communication in Changing Urban Areas. Technology's impact on cities is examined, with emphasis on institutions and landscapes. Changes of metropolitan form, issues of community formation, and emerging patterns of work, leisure and urban life are explored in the context of shifting modes of electronic communication. (This course is affiliated with Calumet College.)

AS/SOSC 1740 9.0 Development of Urban Economies: Comparing Canada and The Third World. This course compares urban economic development in Canada and the Third World in terms of industrialization, urbanization and economic dependency. Themes are: colonial cities and industrial dependence; the multinational corporation, technological dependence and urban employment; urban problems and alternative solutions. (This course is affiliated with Calumet College.)
Degree credit exclusion: AS/SOSC 1740 6.0.
AS/SOSC 1910 9.0 Education and Social Change. This course examines the development of educational systems against the background of a changing social structure. The question of "education for what" is stressed in understanding historical and contemporary school systems. The course emphasizes the Canadian educational experience. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/SOSC 1910 6.0.
AS/SOSC 1960 9.0 Introduction to Modern Social and Political Thought. This course provides a broad introduction to the interdisciplinary study of modern social and political thought. Through critical reading and analysis of primary texts, students become familiar with the rise of the liberal tradition, focusing on critiques, defenses and developments of its conceptions of the modern world. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/SOSC 1990B 6.0.

AS/SOSC 1990 3.0/6.0 Special Topics in Social Science. Each year, depending on the availability of faculty, full and half courses are offered, with both lectures and tutorial sections, which deal with interdisciplinary topics of a unique character. Consult the supplementary calendars available in the Division Office for full descriptions.

## II. Upper-Level Courses

Courses at the 2000 level include courses of interest to students majoring in other departments, but are frequently designed to introduce students to the Interdisciplinary Programmes (African Studies, Canadian Studies, East Asian Studies, Health and Society, Labour Studies, Latin American and Caribbean Studies, Law and Society, Mass Communications, Religious Studies, Science, Technology, Culture and Society, Social and Political Thought, Urban Studies, and Women's Studies) offered through the Division of Social Science.
Courses at the 3000 level are designed to give students an opportunity for advanced interdisciplinary work in the social sciences. They are either oriented towards theoretical and philosophical problems in the social sciences, or towards specific areas of interdisciplinary research.
Courses at the 4000 level are advanced seminars designed to provide students in the Interdisciplinary General Honours programmes with an opportunity to integrate their studies.
Upper-level courses in the division are open to all students, whether they are or are not registered in an interdisciplinary programme offered by the division. Those restricted to Honours students are few in number and are almost wholly the 4000 level seminars. For the sake of convenient reference, upper-level courses are grouped below under the following themes, which are not exclusive; a number of courses are cross-listed and many could fall under a variety of headings. Courses at the upper-level are also designed as a component of the General Education Programme.

## Multidisciplinary Programme Related:

Business and Society: AS/SOSC 23409.0

## Interdisciplinary Programme Related:

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.
African Studies: AS/SOSC 2480 9.0, 4480 6.0

Canadian Studies: AS/SOSC 2200 9.0, 4200 6.0

East Asian Studies: one from the following AS/HIST 2710 6.0, HUMA 14006.0 or CH 27006.0

Health and Society: AS/SOSC 2110 6.0, 41406.0

Labour Studies: AS/SOSC 2210 9.0, 4210 6.0

Latin American and Caribbean Studies: AS/ SOSC 2460 6.0, 44506.0
Law and Society: AS/SOSC 2350 6.0, 4350 6.0

Mass Communications: AS/SOSC 23109.0

Religious Studies: AS/SOSC 26009.0
Science, Technology, Culture and Society: one from Humanities AS/HUMA 1910 9.0, AS/ HUMA 2910 6.0, AS/HUMA 2500L 6.0; one from Social Science AS/SOSC 1020 6.0, 1030 6.0

Social and Political Thought: AS/SOSC 25506.0

Urban Studies: AS/SOSC 2710 6.0, 3700 6.0, 47006.0 or 47106.0

Women's Studies: AS/SOSC 21809.0
Special Topics: AS/SOSC 2990 6.0/3.0, 3990 6.0/3.0, 4090 6.0/3.0, 4990 6.0/3.0. During spring registration details of upper-level courses are available from the Division Office (S741 Ross). At that time, a listing of new courses under the Special Topics rubric may also be available.

AS/SOSC 2040 9.0 Nature and Human Nature. An enquiry into the biological dimensions of human culture with emphasis on findings of evolutionary theory, zoology, and primate studies in order to understand the evolutionary determinants of "primitive" and "modern" societies. (This course is affiliated with Bethune College.)
Degree credit exclusion: AS/SOSC 1040 6.0.
AS/SOSC 2100 6.0 Social Relations: Ideas and Action. Groups and individuals act on the basis of certain sets of ideas or "ideologies" - convictions as to what is "real" or "good" or "true." This course provides a frame-ofreference for understanding these ideologies as they apply to the interpretation of the self, society, and the natural world.

AS/SOSC 2110 9.0 A Critical Study of Health and Society. This course examines various perspectives towards health, the social construction of illness, and the relationship between disease and social structures. It explores the linkages between the development of the health care system and professions, and the medical-industrial complex.
Degree credit exclusion: AS/SOSC 2110 6.0.
Note: This course is required of students in the Health and Society Honours programme, but also is open to others.

AS/SOSC 2112 6.0 The Political Economy of Health: International Comparative Perspectives. This course analyses (from a comparative political economy perspective) the main determinants of health in developed nations. It considers social, economic and environmental factors, differing health policiesstrategies, comparative health systems, the medical-industrial complex and health care organizations.

AS/SOSC 2113 6.0 Theories and Issues of Health Care Professions. The concept of "profession" in health care is explored through an examination of the development of the hierarchical division of labour and the struggles for autonomy by health occupations. The impact of restructuring on professional boundaries and autonomy is examined.

AS/SOSC 2150 9.0 Families in Crisis: Issues of Health Environments and Poverty. This course examines the crisis of the contemporary family. We use the family therapy literature to examine the crisis within the family system; and we also use the critical perspectives of Marxism, psychoanalysis and feminism to understand the position of the family in the surrounding social world. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/SOSC 2150 6.0, AS/SOCI 3660 6.0, AS/SOSC 3150 6.0.

AS/SOSC 2180 9.0 On Woman. An
introduction to Women's Studies, this course explores the situation of women in various social and cultural contexts. Using the tools and methodologies of the Humanities and the Social Sciences, it approaches the subject in multi- and inter-disciplinary ways. (This course is affiliated with Founders College.)
Degree credit exclusions: AS/SOSC 2180 6.0, AS/HUMA 2930 6.0, AS/AK/GL/WMST 2500 6.0.

Cross-listed to: AS/HUMA 2930 9.0, AS/AK/ GL/WMST 2510 9.0.
Note: This course is required of students in the Women's Studies Honours programme, but also is open to others.

AS/SOSC 2200 9.0 Loyalty, Sovereignty, Democracy: Canadian Identities in the 20th Century. An introduction to the Programme in Canadian Studies. A critical assessment of the body of knowledge on Canada as it has developed in selected disciplines. Works of various scholars are examined to illustrate approaches used. (This course is affiliated with McLaughlin College.)
Degree credit exclusion: AS/HUMA 2200 6.0.
Note: This course is required of students in the Canadian Studies Honours programme, but also is open to others.

AS/SOSC 2210 9.0 Labour Relations in Canada: An Introduction. An introduction to the relations between labour and management in Canada, especially the changing nature of the workplace, the evolution of the Canadian labour movement, the role of the Canadian state, the operation of collective bargaining structures, and a wide range of contemporary issues in labour relations.
Degree credit exclusion: AS/SOSC 2210 6.0.
Note: This course is required of students in the Labour Studies Honours Programme but also is open to others.

AS/SOSC 2310 9.0 Introduction to Communications. This course examines the relationships among the structure of information, the media and technology that convey it, its perception and interpretation by individuals, groups and organizations, and the social, economic and political processes that affect information production and dissemination. (This course is affiliated with Calumet College.)
Degree credit exclusion: AS/SOSC 2310 6.0.
Note: This course is required of students registered in the Mass Communications

Honours programme, but also is open to others.
AS/SOSC 2311 6.0 Communication in Everyday Life. This course examines the processes of interpersonal communication to provide insight into how we create and communicate meaning for each other at all levels of social communication. We analyze everyday communication using a variety of models from the Social Sciences.
Degree credit exclusion: AS/SOSC 1990J 6.0.
AS/SOSC 2330 9.0 The Economics of Law Policy and Organization. This course considers Economics as a form of moral argument. This course considers how economists evaluate existing government policies in a broad variety of areas, including housing policies and rent control, environmental protection, and gender equity in the workplace. (This course is affiliated with Calumet College).
Degree credit exclusion: AS/SOSC 3530 6.0, AS/ POLS 3310 6.0.

AS/SOSC 2340 9.0 Foundations of Business and Society. An introduction to Business and Society studies, emphasizing the interaction of economic and social development globally and in the Canadian context, and introducing the perspectives of Economics, Mathematics and Statistics, Political Science, Psychology, Labour Studies, and Sociology.

AS/SOSC 2350 6.0 Law and Society. This course examines the interrelationship between law and the social sciences with emphasis on types of legal thought, the function of law in society, legal systems, and a variety of specific issues involving Canadian society and law, such as the legal profession, the criminal process, civil and political rights and family law.
Note: This course is required of students registered in the Law and Society Honours programme, but also is open to others.

AS/SOSC 2410 9.0 Developing Countries: Diversities and Contradictions. The course examines the societies of Asia, Africa and Latin America with emphasis on the human dimension of modernizing processes, neo imperialism, political stability and instability, economic development and lack of development, and the solutions adopted in specific countries. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/SOSC 1410 6.0.
AS/SOSC 2430 6.0 Peoples and Cultures of Southeast Asia. This course examines Southeast Asia in historical, ideological, cultural, and ecological contexts. Thematic oppositions, including those between hills and plains, tribes and states, Chinese and Indian civilizations introduce current issues on development, revolution, and migration in Southeast Asia.
Degree credit exclusion: AS/SOSC 1460 6.0.
AS/SOSC 2460 6.0 Contemporary Latin America. This course offers an interdisciplinary examination of the basic features of contemporary Latin America. It provides a historical overview of Latin America, and an understanding of the commonalities and diversities in the region.

AS/SOSC 2470 6.0 Caribbean Society in Transition: Emancipation to Independence. The course explores the sociocultural matrix of Commonwealth Caribbean society, and examines the quest for identity, personal and national, and the pattern of institutional development in promoting or frustrating that quest, including insularity and regionalism; race, colour and class; political leadership.

AS/SOSC 2480 9.0 Introduction to African Studies. The course explores common themes in the social organization, history and cultural heritage of Africa's diverse peoples. It then moves to examine the impact of colonialism, and the struggle to develop politically and economically viable nation-states in the postcolonial era. The work of African writers, artists, and statesmen furnishes an important contribution to the course's understanding of Africa, past and present. This course is affiliated with Founders College.)
Degree credit exclusion: AS/SOSC 2480 6.0.
Note: This course is required of students registered in the African Studies Honours programme, but also is open to others.

AS/SOSC 2550 6.0 Contemporary Theories in Social and Political Thought. This is the introductory core course in the Programme in Social and Political Thought and is required of all students in their first year of enrolment in the programme. The course is also open, however, to other interested students. The course aims at an explication of the main historical, philosophic, and social scientific themes relevant to an understanding of the nature of "society," especially modern and contemporary Western society.

AS/SOSC 2560 6.0 Ideology and the Social Construction of Everyday Life. This course explores the crucial role that ideology plays in patterning and giving purpose to an individual's everyday life experiences. There are two case studies: one focuses on North America, the other examines Weimer Germany and the rise of Nazism.

AS/SOSC 2570 6.0 Human Nature in Political and Social Thought. The course deals with concepts of human nature developed by important theorists over the ages. Particular emphasis is placed on the uses of the psychodynamic conception of personality for political and social thought.

AS/SOSC 2600 9.0 Introduction to the Study of Religion. A comparative examination of the history, literature, practices and social aspects of the religious traditions of South Asia (Buddhism, Hinduism), East Asia (China, Korea, Japan), Europe and West Asia (Judaism, Christianity and Islam), Africa and the Native America. (This course is affiliated with Vanier College.)
Note: not all traditions will be offered in any given year.
Degree credit exclusions: AS/HUMA 2800 6.0, AS/SOSC 2600 6.0.
Cross-listed to: AS/HUMA 2800 9.0.

AS/SOSC 2710 9.0 City Lives and City Forms: An Introduction to Urban Studies. This course introduces students to the tradition and practice of urban studies through an exploration of the social fabrics of cities as historical products that both reflect and influence economic, political and cultural realities in contemporary societies.
Degree credit exclusion: AS/SOSC 2710 6.0.
Note: This course is required of students registered in the Urban Studies Honours Programme, but also is open to others.

AS/SOSC 2730 9.0 The Culture of Cities: Visual Journey Through Space and Time. From the gods of Ur to the colonnades of the Greek agora, from Roman baths to the baroque torture chambers, from the squalid industrial cities to the Disneyland cities, this course is an intellectual and visual journey into the culture of cities.
Degree credit exclusion: AS/SOSC 2730 6.0, AS/SOSC 2990B 6.0.

AS/SOSC 2740 6.0 Jobs in Urban Economies: A Comparative Analysis. This course compares the jobs and workers in advanced and newly developing economies, in the context of the countries' historical and contemporary industrialization processes.

AS/SOSC 2810 6.0 Literature, Art, and Society. An examination of selected works and their relationship to the social, economic, and political conditions within which they were produced.

AS/SOSC 2820 6.0 The Worker through the Social Novel. A study through the medium of the social novel and related readings of work relationships in various forms of employment and under-employment. The novel as an expression of social problems and its roots in factual reporting are a concurrent theme.

AS/SOSC 2830 9.0 Music and Society. This course explores the relationship between the production and performance of music and its economic, social and political milieux. The first part of the course centres on the special theoretical perspective of the social sciences and the understanding it gives of the structure and content of music. The second part focuses on music in the modern world. (This course is affiliated with Vanier College.)
Degree credit exclusion: AS/SOSC 2830 6.0.
AS/SOSC 2840 6.0 Film and Society. Economic and sociological analysis of the cinema in modern Western society, with comparative material from other media and other societies; mass society; communications; studies of the industry, the audience, the content of the experience, and art and values; the medium as the message.

AS/SOSC 2850 6.0 Theatre and Society. This course provides an historical and analytical examination of theatrical plays in terms of their representation of social values and the relationship between the individual
and social life. This focus on the theatre as a cultural institution leads to discussions of gender, race, the family and morality.

AS/SOSC 2860 6.0 Interactive Multimedia. This course examines the social impacts of interactive multimedia, and has an integral "hands on" component that gives students the opportunity to express their ideas through the use of tools that includes text, graphics, sound and animation.

AS/SOSC 2950 3.0 Comparative Education I: Theory and Practice. The theoretical relationships between the education system and society is examined on a comparative basis. The course studies the organization, administration, control and general functioning of education within different economic, social and political systems.
Degree credit exclusion: AS/SOSC 1950 6.0, AS/SOSC 2950 6.0.

AS/SOSC 2951 3.0 Comparative Education II: Politics and Education. Education and politics are said to live in a symbiotic relationship with each influencing the fate of each other in all societies developed and underdeveloped. This course studies that essential connection by examining a number of case-studies on a world wide basis.

Prerequisite: AS/SOSC 2950 3.0.
Degree credit exclusion: AS/SOSC 1950 6.0, AS/SOSC 2950 6.0.

AS/SOSC 2960 9.0 Italian: A Minority Culture and Language in North American Society. This course investigates the effects North American culture and language have on the lives of Italian immigrants and their descendants. (This course is affiliated with Stong College.)
Degree credit exclusion: AS/SOSC 2990C 6.0, AS/IT 27916.0 and AS/IT 2790 6.0.

Cross-listed to: AS/IT 2971 9.0.
AS/SOSC 2990 6.0/3.0 Special Topics. Each year, depending on the availability of faculty, full and half courses are offered, with both lectures and tutorial sections, which deal with interdisciplinary topics of a unique character. Consult supplementary calendars available in the division office for full descriptions.

AS/SOSC 30103.0 Reader and Author. The aims of this course are to become acquainted with hermeneutics as an approach to language and meaning which stresses the intentional relation to both reader and author of the subject matter of an accessible text.

Cross-listed to: AS/PHIL 3300 3.0.
AS/SOSC 3030 6.0 Crime and Punishment in Western Societies. This course focuses on the way different societies over time have endeavoured to deal with perceived criminality. It encompasses a wide range of criminal justice issues, including definitions of crime, criminological theory, the role of the courts, legal codes and policing.

AS/SOSC 3050 6.0 Controversial Research in the Social Sciences: Methodological and Ethical Issues. This course explores in great detail the methodological and ethical controversies which certain kinds of research in the social sciences have provoked.

AS/SOSC 3060 6.0 Ideology and Public Opinion. The course covers theoretical approaches to the study of ideology; twentiethcentury ideological developments from Fabianism to Neo-Conservatism and Leninism to Eurocommunism; and Canadian ideology and public opinion in these contexts.

## Cross-listed to: AS/POLS 3320 6.0.

AS/SOSC 3090 6.0 Medicine and North American Society in Historical Perspective. This course explores North American social and cultural responses to disease. It offers a critical, historical evaluation of the ways in which science accorded medicine a new intellectual and institutional status that transformed explanations for disease and patterns of healing/caregiving.

## Cross-listed to: AS/HIST 3880 6.0.

AS/SOSC 3111 6.0/3111 3.0 Special Topics in Health and Society. From time to time, depending on the availability of faculty, full and half-courses are offered dealing with current topics of special interest to students in Health \& Society and related fields. Please consult the Health and Society Coordinator or the Social Science Division's supplemental calendar for descriptions of current offerings.

AS/SOSC 31136.0 Health and Society in the Third World. This course analyses the morbidity-mortality patterns in the developing countries. It compares the different health care system, discusses the Health-IIIness process and policies in the Third World and examines the international cooperation strategies in the health field.
Degree credit exclusion: AS/SOSC 3990J 6.0.
AS/SOSC 3120 6.0 To Be or Not to BeSuicide and Culture in Comparative Perspective. The course is designed to introduce students to comparative suicidology - an interdisciplinary, transcultural study of suicide behaviour.

AS/SOSC 3125 6.0 Women Organizing. Women have a long tradition of organizing to expand their rights, resist oppression, challenge and defend traditional values, and to change their societies. This course documents and analyses the patterns of women's activism using historical, cross-cultural and contemporary sources.
Degree credit exclusions: AS/SOSC 3990B 3.0.

Cross-listed to: AS/AK/GL/WMST 3509 6.0.
SOSC 3130 6.0 Women and Work: Production and Reproduction. This course explores the conditions of women's work, paid and unpaid. The historical development of a sexual division of labour and the roles played
by the family, employers, trade unions and government policy in the gendering of jobs is examined.
Cross-listed to: AS/AK/GL/WMST 3510 6.0, AK/SOSC 3380 6.0, GL/WKST 3610 6.0.

AS/SOSC 3140 6.0 Psychotherapy and the
Arts. This course investigates the relationship between psychotherapy and the creative arts. The theory and practice of the arts therapies: art, drama, music, movement and poetry therapy - are studied from a depthpsychological and cross-cultural perspective.

AS/SOSC 3160 6.0 Understanding Psychotherapy. This course provides an introduction to the theory and practice of intensive psychotherapy. An overall balance is sought between the classical approach of Freud and his followers, post-Freudian developments in psychoanalytic technique, and the more recent perspective of self psychology.

AS/SOSC 3162 3.0 Drama, Ritual and Healing. This course examines the connections between ritual, theatrical performance and the therapeutic use of theatre, The traditional use of ritual in healing ceremonies are compared to contemporary dramatic and therapeutic practices which seek to revive the ritual dimension.
Degree credit exclusion: AS/SOSC 3162 6.0, AS/SOSC 3990P 6.0.

AS/SOSC 3163 3.0 Drama and Therapy. This course studies the contemporary use of theatre in psychotherapy. It focuses on psychodrama, drama therapy and the Boal method of theatre and therapy.The course combines practical training with theoretical understanding.
Degree credit exclusion: AS/SOSC 3162 6.0, AS/SOSC 3990P 6.0.

AS/SOSC 3164 6.0 Political Economy of Environmental and Occupational Health. Environmental and occupational health problems are examined from a political economy perspective. Using case studies, issues relating to law, media, rights and science are discussed. The role of experts, victims and social movements in affecting change are explored
Degree credit exclusion: AS/SOSC 3111A 6.0.
AS/SOSC $\mathbf{3 1 6 5}$ 6.0 Problems in Canadian Business Law. This course describes the legal rules that govern the conduct of business in Canada and samples the extensive normative commentary on these issues. Students also develop their capacity to present written arguments reflecting their own views on the law.

Degree credit exclusions: AS/ECON 4500 3.0, AS/ECON 4510 3.0.
Cross-listed to: AS/POLS 3165 6.0.
AS/SOSC 3170 3.0 Women and Politics. This course examines women's political position in advanced capitalist countries. The focus is historical, theoretical and issueoriented. Issues examined include the politics
of racism, sexuality, reproduction, pornography within formal political structures and community organizing.
Degree credit exclusions: GL/POLS 4960E 6.0, GL/WMST 4960E 6.0.
Cross-listed Courses: AS/AK/GL/WMST 3516 3.0, AS/POLS 3450 3.0.

AS/SOSC 31753.0 Topics in Women and Politics. This course explores in greater depth one of two of the issues examined in AS/SOSC 3170 3.0. Possible issues include women and employment, politics of reproduction, politics of racism, gender and international relations feminist theory, etc.
Prerequisite: AS/POLS 3450 3.0 OR AS/SOSC 31703.0 or AS/AK/GL/WMST 35163.0 or permission of the instructor.
Degree credit exclusion: AS/POLS 34506.0 and AS/SOSC 3170 6.0.
Cross-listed to: AS/POLS 34553.0 and AS/AK/ GL/WMST 3517 3.0.

AS/SOSC 3190 6.0 Gender, Race, and Class in Canada. This course is designed to explore, through a critical analysis of the relevant literature, both theoretical and empirical, the current status of women in society. Material is derived from the disciplines of anthropology, history, political science, psychology and sociology.

AS/SOSC 3210 6.0 The Working Class in Canadian Society. An exploration of the changing nature of paid and unpaid work in Canada in the nineteenth and twentieth centuries, including discussion of work processes and technology in home and industry, changes in the labour force, evolution of unions and management, the role of the state, ideologies of work, and the impact of changes in the world of work on the larger society. The focus is primarily on Canada, with some international comparisons and consideration of more important theoretical issues.

Cross-listed to: AS/HIST 3531 6.0.
AS/SOSC 3220 6.0 Youth and Society. This course explores the impact of social, economic, political and cultural conditions on the experience of youth. It examines youth in the family, in school, at work, and in politics through the nineteenth century to the present.

AS/SOSC 3230 6.0 Business and Politics in Canada: The Political Economy of Development. This course concerns itself with the relationship between wealth and power in Canada. Patterns of national economic development is examined in the light of political and social factors as well as market forces.

AS/SOSC 3240 3.0 Labour and Globalisation I: North American Perspectives. This course looks at the post-war assumptions governing the limits and possibilities of trade union action in mature welfare states. It moves to looking at labour in English Canada and Quebec, the U.S. and Mexico, pre and during NAFTA.
Degree credit exclusion: AS/SOSC 3240 6.0.

AS/SOSC 3241 3.0 Labour and Globalisation II: Comparative Perspectives. This course focuses on the changed environment for labour action and the search for new sources of trade union authority and power in the European Community, Russia, Australasia, Latin America and Africa.

## Degree credit exclusion: AS/SOSC 3240 6.0.

AS/SOSC 3250 6.0 Canadian Social History. This course is designed to give students an introduction to the major themes of Canadian social development. Demography, geography, economy, social structure, and institutional development are among the major aspects to be examined. The second term is devoted to a study of the industrial society which established its hegemony before 1930. Lectures and readings explore such issues as the changing structure of the labour force; poverty, women, immigration, ethnicity, social change and reform ideologies. Term mini-research projects involve learning to use genealogical and local history sources.
Cross-listed to: AS/HIST 3530 6.0.
AS/SOSC 3270 6.0 The Caribbean Experience in Multi-Cultural Canada. This course explores the underlying assumptions and issues associated with Canadian multiculturalism using the Caribbean as an ethno-cultural reference group. It examines the historical and sociocultural factors which affect the development of multiculturalism as an ideology of Canada.

AS/SOSC 3280 3.0 The Political Economy of Labour in Canada. An analysis of the role organized labour has played in the political economy of Canada. The course traces the interaction of labour, business and government and focuses on the contemporary struggle of labour as it confronts the corporate state.
Prerequisite: Any second year Political Science course or permission of the instructor.
Degree credit exclusion: AS/POLS 3140 6.0.
Cross-listed to: AS/POLS 3140 3.0.
AS/SOSC 3290 6.0 The Regulatory Process in Canada. Drawing on literature from economics, political science, sociology and administrative law this course looks at when and why governments employ social or traditional regulation. When and why is deregulation advocated? Who benefits? Who loses? What controversies surround the design of regulation?

AS/SOSC 3300 6.0 The Mass Media, Culture, and Society: The Canadian Case. An
examination of the flow of ideas and messages through the Canadian mass media communication system. The social and political functions of the media are explored as well as the economic, social, and political environment in which they operate.

AS/SOSC 3310 6.0 Communications for Tomorrow. This course explores the future direction of communications in Canadian society. The technological advances in telecommunications and other information delivery systems (e.g., electronic mail, electronic fund transfer, two-way cable T.V.,
communications satellites) present complex social issues that Canadian communications policy makers must deal with.

AS/SOSC 3311 6.0 Communication in Organizations. This course examines the nature and variety of human organizations and the processes of human communication that create, sustain and change them. Problems in communication in large organizations are studied with a view to understanding the basis for effective communication and approaches to improving organizational functioning.

AS/SOSC 3312 6.0 Mass Media Systems Compared: North America and the Russian Federation. This course provides a comparative analysis of the structure and content of the press, radio, and television in North America and the U.S.S.R. Special attention is given to the question of freedom and responsibility in the treatment of information in the role and functions of the mass media.

AS/SOSC 3313 6.0 Issues in Mass Media, Education and Change. This course examines the impact of mass communication on socialization, learning and change. Canadian and cross-cultural aspects of mass media and education systems are highlighted.

AS/SOSC 3314 6.0 Economic Structure of Mass Communications. An examination of the structure, conduct, and performance of communication industries, including traditional mass media industries and the emerging transnational information industry. The course examines these industries in terms of microeconomic theory and the political economy of communications.

AS/SOSC 3315 6.0 Advertising and Society. This course reviews the historical development of advertising. Careful attention is paid to the economic shift from production to consumption; the culture of consumption; the cultural triumph of the image; the democratization of luxury; and the aesthetics of mass culture.

AS/SOSC 3316 6.0 Television as Culture and Communication. This course examines the interaction between television and culture by exploring the local and global impact of television, its narrative structures, the medium and its effects. The ideological role of television in representing and constructing shared beliefs and audience response.
Degree credit exclusion: AS/SOSC 3990H 6.0.
AS/SOSC 3320 6.0 Communication Theory. This course examines the numerous theories and theoretical approaches being used to study mass communication. Communication theory is studied in the wider context of the social sciences and in light of differences between North American and European perspectives.

AS/SOSC 3350 3.0 Broadcasting Policy: A Comparative Introduction. This course introduces students to the politics of broadcast regulation with an emphasis on the AngloAmerican democracies. It pays particular
attention to the role of regulatory agencies and the struggles that have emerged between the major stakeholders in broadcast regulation.
Degree credit exclusion: AS/SOSC 3350 6.0.
AS/SOSC 3351 3.0 Broadcasting Policy: Current Issues and Case Studies. This course examines current issues in broadcast regulation through the sue of case studies. It examines such issues as: broadcasting and national identity; the regulation of advertising and content; the convergence of broadcasting and telecommunications.
Degree credit exclusion: AS/SOSC 3350 6.0.
Prerequisite: AS/SOSC 3350 3.0.
AS/SOSC 3360 6.0 Canadian Charter of Rights and Freedoms. This research seminar uses historical and contemporary materials to examine the uses and role of law and legal institutions in the production and reproduction of social order. The focus throughout is on the Canadian experience. Various analytic and methodological approaches are discussed, and students are encouraged to pursue original research in relevant substantive areas of their choice.

AS/SOSC 3370 6.0 Social Justice and Law. This course introduces students to different contemporary theories of social justice. The general objective is to bridge the gap between the philosophical literature on social justice and the legal and social science literature on questions of social policy.

AS/SOSC 3380 6.0 Law, Labour and the State. This course examines state regulation of relations between employers and workers by courts, legislatures, and administrative and quasi-judicial tribunals. It compares modern Canada's compulsory collective bargaining regime with the traditional legal view of "master and servant."

AS/SOSC 3381 6.0 Criminal Justice System. This course examines the criminal justice system, exploring issues from a historical, sociological and legal perspective. Various theoretical explanations for discrepancies between legal ideals and social practices are examined. Patterns of decisionmaking are linked to contemporary political debates concerning legal equality in Canada.
Degree credit exclusion: AS/SOSC 3990S 6.0.
AS/SOSC 3390 6.0 Special Topics in Law and Society. From time to time, depending on the availability of faculty, 6 and 3 credit courses are offered dealing with topics of special interest to students in Law and Society. Please consult the Social Science Division's calendar for descriptions of course offerings.

AS/SOSC 3410 6.0 The Political Economy of Latin America and the Caribbean. The course critically examines the classical writings on imperialism, underdevelopment, and dependency, as well as new theoretical attempts to conceptualize the problems of poverty, environmental degradation, unequal exchange, and the new international division of
labour. Case studies of Jamaica, Mexico, Cuba and other countries serve to highlight these issues.
Cross-listed to: AS/POLS 3290 6.0.
AS/SOSC 3480 6.0 Culture, Democracy and Development in Africa. This course explores the complex interplay of political, social and cultural forces at work in Africa's communities, nations and regions. Of particular interest is the often ignored capacity of African culture to generate change and solve the problems of development.

## AS/SOSC 3501 6.0 Feminist Research

 Methods. This course examines methodological and qualitative issues related to doing feminist research in the Social Science disciplines, including: objectivity, standpoint theory, interdisciplinarity, feminist challenges to specific disciplines, inclusivity, methodological tools, and postmodernism. We also explore appropriate research.Degree credit exclusions: AS/SOSC $3990 U$ 6.0, AS/SOCI 4600 6.0, GL/WMST 3900E 6.0, AK/WMST 4300 6.0.
Cross-listed courses: AS/AK/GL/WMST 3501 6.0, GL/SOSC 3604 6.0.

AS/SOSC 3510 6.0 Social Evolution: Problems and Prospects. This course considers an organicist approach to the problems and opportunities created by social, scientific and technological development. Pollution, the arms race, unemployment, and the quality of working life are among the contemporary problems considered.

AS/SOSC 3540 6.0 The Political Economy Of Food. This course examines the production, consumption and social meaning of food, from historical and contemporary perspectives. Following an examination of food in pre-industrial Western and nonWestern societies, it moves to consider the nutritional, social and economic consequences of the industrialization of food production, both in North America and in the Third World. The controversies surrounding both the definition of contemporary problems relating to food, and the solutions proposed for them is addressed.

AS/SOSC 3542 6.0 Comparative Economic Systems. This course explains how different social systems organize their economic institutions and mechanisms to solve the basic economic tasks of society. It considers economic and social consequences of the market and central planning systems, comparing their shortcomings and strengths, their differences and their common features.

Degree credit exclusion: AS/SOSC 1540 6.0.
AS/SOSC 3550 6.0 Modernity at the Millennium: Myths of Transcendence in Modern Western Society. This course critically examines the history of the guiding ideas with which modern western societies define their destiny at the turn of the new millennium: "science," "technology," the "market," "progress," "secularization," "development," and "history" itself.

AS/SOSC 3560 6.0 Wealth and the Community. A study of wealth-producing skills and the accumulation of economic power in various stages of the development of Europe and its branches into the New World. The sources of wealth in communal effort and cross-cultural interaction is stressed. There are some literary readings.

AS/SOSC 3570 6.0 Psychoanalysis and Social Thought. The ideas of Freud and his successors are applied not to personal problems or reforming social policy but to understanding society and the nature of humanity. The course aims neither at teaching established information nor at supplying answers to social problems, but only at raising some basic questions to discuss tentatively in the light of psychoanalysis.

AS/SOSC 3580 6.0 Society and Economy in Transition: The Experience of Post Communist Countries. This course examines the transition of Eastern European communist societies towards new institutional structures encompassing democratic principles and free market operations. Cataclysmic events of the late 80's are placed in historical context in order to determine the prospect and viability of this transition.

AS/SOSC 3590 6.0 Foundations of Political Economy. An introduction to the concepts that have characterized the development of political economy. The course begins with the work of Adam Smith, John Stuart Mill, and Marx and moves to the twentieth-century concerns of Keynes and dependency theory.
Degree credit exclusion: AS/SOSC 2520 6.0.
AS/SOSC 3700 6.0 Urban Analysis. This course examines the different problem-solving and methodological approaches employed by economists, political scientists, historians, geographers, and sociologists to investigate urban topics. Each approach is rigorously dissected to discover underlying assumptions, to articulate ideological positions, to ascertain the types of questions asked and sorts of data utilized, and to demonstrate how all of these lead to particular sets of conclusions.

AS/SOSC 3710 6.0 Theory and Practice of Urban Planning. This course provides a general introduction to planning theory and practice. Specific emphasis is placed on the rationale for planning, the history of planning, theoretical aspects of the planning process, and pragmatic issues of planning practice.

AS/SOSC 3720 6.0 Visual Images in Social Inquiry. We explore social science's two distinct interests in visual materials: their use in the process of doing and reporting social fieldwork; and their status as cultural artifacts that reflect and help shape social contexts in which they are produced.

AS/SOSC 3730 6.0 Comparative Urban Development. Significant dimensions of urbanization and urban-rural relationships are examined comparatively across major world regions, with emphasis upon Africa, Asia, and Latin America. Students may choose a
regional focus for research papers, including North America. Migration patterns, socioeconomic structure of cities, values and images of rural and urban life, employment, and planning to meet the needs of growing cities are the principal topics covered.

AS/SOSC 3740 6.0/3.0 Special Topics in Urban Studies. From year to year, special opportunities arise for unique offerings across disciplinary lines, depending on the availability of faculty. These are courses with both lectures and tutorial sections or seminar courses. In any given year, a full description is be available before registration.

AS/SOSC 3760 6.0 Toronto: Urban Growth and Community. The course is a case-study in Canadian urbanization that examines Toronto's rapid growth in recent decades, forces shaping this growth, and the urban community that has emerged.

AS/SOSC 3770 3.0 Housing Policy. The course studies Canadian housing policy using the approaches of economics, political science and public administration. The course examines models of housing markets; the effects of housing policies; the politics and process of policy formation; and procedures for policy evaluation.
Cross-listed to: AS/GEOG 3770 3.0.
AS/SOSC 3780 3.0 Microcomputers in Urban Analysis. Microcomputers in Urban Analysis has students establish an empirical problem, develop a data set, do preliminary graphing and perform introductory statistical analysis. Analysis is on Apple Ile and Macintosh microcomputers. The course links theory and methodology to contemporary analytic programmes.

AS/SOSC 3785 6.0 Science, Technology and Society in Chinese History. This course examines the development of science and technology in China from the Classical period to the 20th century, in the context of the economic, social, political and intellectual history of China and Eastern Asia.
Cross-listed to: AS/HIST 3785 6.0.
AS/SOSC 3790 3.0 Gender and the City. This course examines the relationship between socially constructed gender relations and the changing nature and form of urban areas. Topics include: the separation of "male" and "female" spheres in cities, and the shifting boundaries of "public" and "private" activities and spheres.

AS/SOSC 3810 6.0 Literature and Canadian Society. An examination of selected Canadian novels and their relationship to the specific social, economic, and political circumstances within which they were written.

AS/SOSC 3820 6.0 The Social and Political Dimensions of Humour. In this course we explore the complex phenomenon of humour from a variety of psychological, social and political perspectives. The writings of such theorists as Henri Bergson, Sigmund Freud, Erving Goffman, and Gregory Bateson are examined in detail. In addition, contemporary
forms of humour are studied, with special emphasis being placed on the various types of humour to be found in the mass media.

AS/SOSC 3920 6.0 Disability and Society: Historical, Sociolocultural and Educational Issues. This course explores the evolution of attitudes and policies towards individuals with special needs. Topics include historical and cross-cultural perceptions of exceptionality, the experience of being labelled mildly to profoundly exceptional, giftedness, the school and exceptional students, major theories.

AS/SOSC 3930 6.0 University and Society. This course explores interrelationships between the Canadian University and society, both historical and contemporary, focusing on the contradictions between ideals and actualities of university's mission, role, and functions. Central are Canadian universities' achievements and shortfalls in serving students and society.

AS/SOSC 3940 6.0 International Conflict: Ends and Means in National Defence. Both achievement of success in international conflict and development of national identity may be imperiled by contemporary weapons systems and alliances. With a Canadian focus, this course considers alternative ways to carry on conflict and to control the arms race.
Cross-listed to: AS/POLS 3800 6.0.
AS/SOSC 3960 6.0 Interethnic Relations and the Jewish Minorities: The Study of the Sephardi, African and Asian Jewish Communities. This course has two parts: the first part examines the sociological theories and concepts pertaining to interethnic relations. The second part analyzes interethnic relations among the minority communities of Spain, Africa and Asia.

AS/SOSC 3970 6.0 India: Politics, Economic Development, and Social Change in the 20th Century. The course analyzes significant political and economic developments in India in the 20th century. It is divided into three sections: (a) the nationalist movement, (b) the political economy of India's development, and (c) social movements -- e.g., women, anti-caste, and the environmental movements.

Degree credit exclusion: AS/SOSC 3990T 6.0.
AS/SOSC 3990 6.0/3.0 Special Topics. Each year, depending on the availability of faculty, full and half courses are offered, with both lectures and tutorial sections, which deal with interdisciplinary topics of a unique character. Consult supplementary calendars available in the Division Office for full descriptions.

AS/SOSC 4000 6.0 Honours Thesis. With faculty permission, students registered in General Honours programmes offered by the Division of Social Science may undertake a major thesis credit.

AS/SOSC 4040 6.0 Issues in Business and Society. An in-depth examination of issues involved in the relationship between business and society in Canada and in the global economy,
including the impact of managerial and technological innovation, investment and marketing decisions, and government policy.

AS/SOSC 4050 6.0 Animals and People. Using psychological, social and historical approaches, we explore animal-human relationships by examining such varied forms as fairytales, works of arts, social attitudes, and economic and political institutions. We also focus on the controversial aspects of these relationships.

AS/SOSC 4051 6.0 Education and Society in Modern China. In 20th-century China, education reform has been an important factor in social, political and ideological upheavals. This course examines education and society in China since the 18th century; other East Asian societies may be brought in for comparison.
Cross-listed to: AS/HIST 4050H 6.0.
AS/SOSC 4090 6.0/3.0 Directed Reading. This course provides supervised study equal in both requirements and credit to regular full and half courses. It is open to students in the Specialized Honours (Individualized Studies) Programme, but other students may also be eligible. In any given year, this course offering is conditioned by availability of faculty members. Enquiries should be directed to the Student Office of the Division of Social Science prior to registration.
Note: Please consult the Enrolment and Registration section, Faculty of Arts, for regulations on independent reading courses.

AS/SOSC 4140 6.0 Health and Society Seminar. This research seminar examines theoretical and applied problems in health and society. It introduces students to a variety of research methods and evaluative skills, which they apply in their own analysis of a particular problem. The subject of the course varies yearly.

AS/SOSC 4150 6.0 Aging and Caregiving. This course introduces students to the interdisciplinary field of gerontology. It deals with issues of aging and caregiving in crosscultural, historical and contemporary Canadian perspectives.

AS/SOSC 4160 6.0 Feminist Theories. This course engages with theoretical debates within feminism. Sections may focus on: jurisprudence, pedagogy, postmodernism, psychoanalysis, praxis/agency, or identity and difference. The course is informed by a range of political positions and addresses the complexity of differences based on race, class, ability and sexual identity.
Degree credit exclusions: AK/WMST 3030 6.0, AS/SOCI 4600 6.0.
Cross-listed to: AS/AK/GL/WMST 4500 6.0, GL/SOSC 4685 6.0.

AS/SOSC 4170 6.0 Gender Relations in the Third World. The course draws from feminist theory, pre- and post-colonial political economy, and theories of discourse and ideology to explore the social relations of gender in the Third World. Africa provides the
focus; other regions form the basis for comparative study. (Same as GS/SPT6750 6.0.)

AS/SOSC 4200 6.0 Canadian Studies Seminar. This course is required for all Canadian Studies programme students in their final year. Seminar discussions and research paper topics normally focus on interdisciplinary approaches to the study of Canada.
Cross-listed to: AS/HUMA 4200 6.0.
AS/SOSC 4210 6.0 Collective Bargaining Simulation. This course provides students who have some academic or experiential background in industrial relations with the opportunity to expand their knowledge of collective bargaining by participating in a yearlong simulation of contract negotiation and administration.
Prerequisite: A university-level course in the labour relations field, or permission of the instructor.

AS/SOSC 4240 6.0 Labour Studies Placement. This course places Labour Studies students in internships with unions and other work-related organizations. Students gain in-depth knowledge of one organization, learn about the nature of industrial relations employment, and share their experiences with other students.

AS/SOSC 4250 6.0/3.0 Special Topics in Labour Studies. From time to time, depending on the availability of faculty, full and half-courses are offered dealing with current topics of special interest to students in Labour Studies and related fields. Please consult the Labour Studies co-ordinator or the Social Science division's supplementary calendar for descriptions of current offerings.

AS/SOSC 4300 6.0 Popular Culture: Explorations in Theory and Practice. This course explores contemporary theories regarding the nature and role of popular culture. It stresses the debate between popular culture as a form of ideological control and popular culture as a source of social resistance and creative expression.

AS/SOSC 4310 3.0 Issues in International Communication: Introduction. This course examines the emergence and consequences of mediated international communication. It focuses on the social and cultural impact of global communication and the ways in which selected countries and international organizations have regulated this process.

AS/SOSC 4311 3.0 Issues in International Communication: Current topics. This course examines current topics in the field of international communication, with particular attention tot he impact of new communication technologies and research in cross-cultural communication.
Prerequisite: AS/SOSC 43103.0 Issues in International Communication: Introduction.

AS/SOSC 4312 6.0 The Politics of Canadian Broadcasting. This course examines the political, economic and cultural considerations that affect the arrangements made by Canadian society to organize broadcasting. The focus is on current issues of public debate which are explored from a historical perspective.

AS/SOSC 4314 6.0 Media Publics and Democracy. The course explores the relationship between contemporary forms of mediated communication and democratic public life. It examines issues such as freedom of expression and the regulation of communication and culture in the context of both dominant and alternative media practices.
Prerequisites: AS/SOSC 23106.0 or AS/ SOSC 2310 9.0.
Degree credit exclusion: AS/SOSC 4990D 6.0.
AS/SOSC 4315 6.0 Communication and The Management of Change in Organizations. This course examines the process of managed change in human organizations and the critical role of communication in the change process. We critically analyze approaches to implementing planned change using a variety of models from the Social Sciences. This seminar is open to fourth year students who have successfully completed SOSC 33116.0 or those who have course director's permission.

AS/SOSC 4320 6.0 Seminar on the Electronic Information Network Marketplace. This course examines the social, economic, political and technological forces in Canada and other nations that are creating an electronic information network marketplace. The main purpose is to identify the opportunities and barriers to a new kind of information-rich civilization, to test its implications, and to suggest strategies for managing it.
Prerequisite: AS/SOSC 33106.0 and major in the Mass Communications programme or permission of instructor.

AS/SOSC 4325 6.0 Mediations of Identity. This course examines processes and practices at work in media representations of race, sexuality, gender, class, ethnicity and nation within Western society. Key theoretical approaches to power, knowledge, ideology, subjectivity, and signification are applied to current and historical representations of social identities.
Degree credit exclusion: AS/SOSC 3330 6.0.
AS/SOSC 4330 6.0 Seminar on MachineMediated Human Communication. Working prototypes of "electronic" newspapers, newsstands and encyclopedias are currently emerging. The course develops student awareness and knowledge of these new media systems through reading, discussions, guest lectures, and "hands on" experience.
Prerequisite: AS/SOSC 33106.0 or permission of instructor.

AS/SOSC 4340 6.0 Communications Field Experience. Students earn course credit by working on a project for an organization involved in communication policy development, information services, or administration. Details of each student's responsibilities are worked out in consultation with the supervisor, the course director and the student.

AS/SOSC 4350 6.0 Law and Society Seminar. This course, required of Law and Society honour students, examines theory and practice relating to the interaction of law and the social sciences depending on student and faculty interest in one or other specific topics.
Prerequisite: This course is required of and limited to, students in the Law and Society Honours Programme during the final 36 credits.

AS/SOSC 4450 6.0 Aspects of Modern Latin American and Caribbean Studies. This seminar is designed to integrate the Honours Programme in Latin American and Caribbean Studies at the upper level.
Cross-listed to: AS/HUMA 4300 6.0.
AS/SOSC 4480 6.0 African Studies Seminar. This course presents a seminar approach to the programme's main themes. Students undertake individual research papers as an integral part of their study. While the overall perspective of the African Studies Programme is that of social science, Faculty offerings in the field of African art, African literature (both francophone and anglophone), law, and music give the programme a breadth and scope that render it truly interdisciplinary.

AS/SOSC 4500 6.0 The Emergence of Modernity. This course examines the emergence of modernity as a response to Enlightenment crisis. Focusing on conflicting conceptions of reason, values and emotional experience in the modern institutional context, we critically explore the modern bases of contemporary social and political life.

AS/SOSC 45106.0 / GS/SPTH 67306.0 Seminal Ideas in Political Economy. This course studies the classics in political economy by concentrating on their predominant themes, such as labour theory of value, utility, economic development, theory of distribution etc. It also considers the implications of Darwinian evolutionary thought and Freudian psychology.

AS/SOSC 45306.0 / GS/SPT 63806.0 Marxism and Political Discourse. An enquiry into problems generated by Marxism's formative metamorphosis from political philosophy into social theory. What place do Marxists accord to questions of power, freedom, justice, in their accounts of social formations and transformations, particularly in the "Third World"?

AS/SOSC 4550 6.0 Problems in Social and Political Thought. This seminar is recommended to but not required of students in the Programme in Social and Political Thought. It is also open, however, to interested
students outside the programme. The seminar deals each year with a different theme or problem and aims at its elucidation through an interdisciplinary perspective.

AS/SOSC 4560 3.0 Regional Planning. An examination of the "regional problem." Alternative interpretations of differential regional growth provide a basis for evaluating various regional planning policies.
Prerequisite: AS/GEOG 21006.0 or an introductory course in Economics, or permission of the instructor.
Cross-listed to: AS/GEOG 4190 3.0.
AS/SOSC 4700 6.0 Urban Studies Seminar.
Students study in depth a selected urban topic leading to a major paper. The format is lectures and seminars for one-half of the year, handled by the faculty member; followed by student presentations of major papers.

## AS/SOSC 4710 6.0 Urban Field Experience.

Students earn course credit by working on a project for an outside organization involved in urban development or administration. Details of each student's responsibilities are worked out in consultations among the student, the project supervisor and the course director.

AS/SOSC 4720 6.0 Canadian Urban Policy. This course examines the influence of government policy on the development of cities and the characteristics of urban life. It provides a historical, institutional and theoretical framework for understanding and analyzing Canadian urban policy-making and policy implementation.
Cross-listed to: AS/POLS 4110 6.0.
AS/SOSC 4730 3.0 Rural Social Geography. The countryside is examined as a social geographic phenomenon with emphasis upon social partitioning by class, ethnicity and territory. Analysis of social relations is related to land-uses and power, linking the countryside to advanced capitalism.
Cross-listed to: AS/GEOG 4300 3.0.
AS/SOSC 4990 6.0/3.0 Special Topics. Each year, depending on the availability of faculty, full and half courses are offered, with both lectures and tutorial sections which deal with interdisciplinary topics of a unique character. Consult supplementary calendars available in the Division Office for full descriptions.

## Sociology - Arts

Department Office:
2060 Vari Hall, (416) 736-5015
Professor and Chair of the Department:
D. Ellis (1998-1999), N. Pupo (1999-2001)

Professor and Associate Chair:
N. Pupo (!998-1999)

Associate Professor and Director of Undergraduate Programme:
A. Turrittin

Distinguished Research Professor:
J. O'Neill

Professors Emeriti:
B. Blishen, J.G. Craig, F. Elkin, K. Ishwaran, E. Lilienstein, T. McCormack, V.V. Murray, J.O'Neill, A.H. Richmond

## Professors:

P. Anisef, P. Armstrong, A. Blum, A.G. Darroch, D.I. Davies, D. Ellis, B.S.R. Green, C.M. Lanphier

Associate Professors:
A.M. Ambert, K. Anderson, H. Bannerji, M. Beare, L. Erwin, C.J. Jansen, L. Lam, P. Landstreet, N. Mandell, J.C. Moore, J. Newson, C. Nichols, M.D. Ornstein, J.G. Paasche, J. Porter, A. Propper, A. Simmons, P. Stewart, L.Weir

## Assistant Professors:

E. Baar, K. Bischoping, S. Chawla, R. Cohen, J. Gibbons, L. Goldring, R. Hadj-Moussa, P. McDonough, P. Vandergeest

As one of the liberal arts and social sciences, the discipline of sociology contributes to selfcomprehension and the understanding of society by developing a body of knowledge concerning its structure, dynamics, and symbolic orders. An undergraduate specialization in sociology provides a basis for graduate study and professional careers in fields such as university research and teaching in sociology, law, secondary school teaching, social research, administration, and various social services. Though the members of the Department of Sociology teach a wide range of materials and perspectives on society in general and on Canadian society in particular, we take social criticism through theory development, research, and teaching to be an essential element of our work.

## Courses in Sociology

For specific requirements of programmes in Sociology, please consult the Programmes of Study section, Faculty of Arts. Normally, courses in Sociology meet for at least three hours a week. A more detailed description of courses and course sections is provided in the Sociology supplementary calendar, available from the Sociology Department, 2060 Vari Hall, in March.

Not all courses listed below will be offered in any one year or term. Consult the Department's supplementary calendar for details of courses to be offered.
Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/ divisional supplemental calendars.

AS/SOCI 1010 6.0 Sociological Perspectives. An introduction to basic sociological concepts and theoretical frameworks used to understand the social structures and cultures that transcend and shape personal experience. Focusing on Canadian society in historical and comparative context, topics include power, differentiation, social control and socialization.

## 2000-Level Fundamental Courses

AS/SOCI 2030 6.0 Sociological Methods. This foundation course, presented in two related parts, deals with questions of how sociological
knowledge is attainable both in principle and in practice, and provides the student with a general introduction to both qualitative and quantitative methods in social research.

## AS/SOCI 2040 6.0 Sociological Theory.

This foundation course deals with the construction, forms and uses of sociological theory, a brief history of theory and the classical texts of some of the great social theorists, and modern developments and current trends in sociological theory.

AS/SOCI 2050 6.0 Social Structure and Social Change. This foundation course deals with comparative and historical aspects of social life, political organization and the state, and modern industrial society. Special attention is given to the analysis of class, inequality, and social change.

AS/SOCI 2060 6.0 Social Interaction and Community. This foundation course deals with processes of social interaction, socialization and self, and the relationship of the individual to society as exemplified in several substantive areas. Emphasis is given to understanding personal action and free will in a social context.

AS/SOCI 2070 6.0 Social Order and Social Organization. This foundation course deals with the problem of social order, how social organization is possible, and its various forms. Special attention is given to formal organizations and institutions, as well as to the role of ideology, media, and education.

## 3000-Level Courses

AS/SOCI 3020 6.0 Classic Sociological Texts. The aim of the course is to acquaint the student with the development of sociological theory from its origins to the present. Selected major theorists are considered, and readings are chosen from original works.

AS/SOCI 3030 6.0 Statistics for Social Sciences. This course provides a basic understanding of the statistical reasoning and fundamental statistical techniques frequently used to analyse social data. It introduces students to the uses of computers and statistics in the social sciences. It helps develop necessary critical skills to evaluate empirical research.

Degree credit exclusions: AS/PSYC 2020 6.0, AS/SC/KINE 2050 3.0, AS/GEOG 24206.0 or equivalent.

Cross-listed to: AS/POLS 3300 6.0.
AS/SOCI 3060 6.0 Classic Issues in Social Psychology. Drawing upon concepts, theoretical formulations and empirical findings of both sociology and psychology, this course constitutes an examination of classic issues in social psychology from a sociological perspective. Topics include views of social interaction, socialization, interpersonal influence, and group dynamics.

AS/SOCI 3090 6.0/3090 3.0 Special Topics. As the need arises, the Department offers courses on particular topics not ordinarily available. Details on the topics covered in different sections of the course are given in the Department's supplementary calendar.

AS/SOCI 3110 3.0 Collective Behaviour. This course analyzes forms of collective behaviour (crowd, mob, panic, fashion, cult) with a view to understanding their function in society. Factors conducive to the formation of such behaviour, characteristics of members, leadership, and processes of social action are considered.

AS/SOCI 3220 6.0 Cultural Sociology. An examination of recent developments in the study of culture as they affect sociological thinking about contemporary society, drawing on sociological as well as other theories and approaches. Includes case studies on gender, popular culture, multiculture, aesthetics, nationalism, political economy of culture, ideology.

AS/SOCI 3310 6.0 Canadian Society: A Sociological Analysis. An examination of the nature of Canadian society from a sociological perspective. Concentrates on the social issues and problems of particular concern to this country. Also discusses the structure and power of Canadian legal, political, economic, religious and educational institutions.

AS/SOCI 3330 6.0 Politics and Society in Latin America. A cross-national analysis of relations between social organization and political systems, movements and ideologies. The evolution of large-scale regional contrasts in societal patterning is stressed. Major topics include class structure, ethnic and race relations, labour and economic organization, rural/urban divisions, demographic patterns, religion, the military, and international influences.

AS/SOCI 3340 6.0 Social Change. Interpretations of large-scale social change are examined. The central theme is the origins and consequences of industrialization. A major concern will be the role of ideas and ideologies, as well as material forces in social change.

AS/SOCI 3350 3.0 Social Movements. Topics studied include the causes, characteristics, processes, and consequences of social movements; the appeal, ideology, organizational structure, strategies, and tactics of social movements; and the process of becoming committed to a social movement.

AS/SOCI 3410 6.0 Social Stratification. Theories about social equality and inequality are analyzed, in industrial and non-industrial, democratic and non-democratic societies. The course considers the influence of differential privilege on social behaviour and institutions, and problems of upward and downward mobility.

AS/SOCI 3420 6.0 Population and Society. Students study Canadian population trends and policy debates in comparison to global population issues. Topics may include Canadian and global patterns of population growth; urbanization and urban reversal; fertility, family planning and abortion; famine, disease and mortality; social security and aging; international migration and ethnic composition.

AS/SOCI 3430 6.0 Race and Ethnic Relations in Western Society. This course presents a systematic study of ethnic group relations in Canada and other Western societies. Such problems as prejudice, discrimination, assimilation, and cultural pluralism are discussed.

AS/SOCI 3450 6.0 The Sociology of "Race" and Racism. This course offers a sociological critique of "race" and racism by examining both the concept and practices in terms of social organization, discourse and history. Biogenetic and cultural racism are investigated in terms of knowledge frameworks involving gender and class.

AS/SOCI 3600 3.0 The Sociology of Work and Industry. In this course, work is viewed as a social problem. Topics include the meaning of work, the theory of alienation, evolving patterns of industrialization and labour relations, occupational cultures, the deskilling of work, and solutions to alienated labour. The theories of post-industrial society are examined.

AS/SOCI 3610 3.0 The Sociology of Occupations and Professions. The focus of this course is on occupational systems, careers, and the professions. The topics of occupational socialization, identity, and subcultures, role relationships in work groups, the process of professionalization, relationships to clients, and the significance of organizational contexts are explored.

AS/SOCI 3620 6.0 Formal Organizations. Among the topics considered are theories of bureaucratic organizations, the relationship between formal and informal structures, official-client relationships, the effects of organizations upon their members and the relationship of organizations to one another and to the community.

AS/SOCI 3630 6.0 Sociology of Education. The relationship of the educational system to the social structure is examined. Among topics to be considered are the role of education in social change, the school as a social system, and the school as an agency of socialization.

AS/SOCI 3640 6.0 Political Sociology. The social bases of political order and conflict in modern societies will be analyzed. Data will be drawn from studies of policy formation, voting behaviour, civic participation, collective protest, and political aspects of social change in old and new nations.

AS/SOCI 3650 6.0 Sociology of Religion Religion in relation to social structure and process. Religious organizations and institutions. Particular attention is given to theorists of the sociology of religion, from Weber and Durkheim to Parsons.

AS/SOCI 3660 6.0 Sociology of the Family. This course focuses on the sociological study of the family as an institution and small group. Attention is given to variations in family life, role relationships, family structure, socialization processes, and problems of family organization and disorganization.
Degree credit exclusion: AS/SOSC 3150 6.0.
AS/SOCI 3670 3.0 Sociology of Sport. Sport is used in this course as a medium for testing sociological theory. Topics are organized around the effects of involvement in sport on those who "play," consume and produce it.
Degree credit exclusion: PHED 3040 3.0.
AS/SOCI 3690 6.0 Sociology of Gender. This course analyzes economic, social, cultural and political aspects of gender formation in a comparative context and in Canada. Emphasis is on the different ways in which femininity and masculinity are constituted in interaction with race, class, and other factors.

AS/SOCI 3710 6.0 Environmental Sociology. This course explores sociological approaches to the interaction between humans and their bio-physical environment; the history of ecology and contemporary social ecologies; contending explanations for environmental problems; and the history of environmental movements and organizations.

AS/SOCI 3810 6.0 Sociology of Crime and Delinquency. Crime and delinquency is examined from the perspectives of deviance theory, social psychology and social organization. The police, the courts and the penal system are examined; research from different countries is discussed.

AS/SOCI 3820 6.0 Sociology of Health and Health Care. Social factors related to health and physical and mental illness are discussed, as well as the social organization of systems of health care.

AS/SOCI 3830 6.0 Sociology of Urban Life. An examination of the process of urbanization and its implications for regional rural-urban systems, the city as an information-processing system, and the experience of living in cities. Sub-groups within the city (e.g., neighbourhoods and social networks) and urban institutions are also be analyzed.

AS/SOCI 3840 6.0 Mass Communications. A sociological analysis of the press, radio, television, and other mass media. Empirical and theoretical studies are discussed to show the growth, structure, content and impact of the media, and their relationship to popular culture.

AS/SOCI 3850 3.0 Social Gerontology. A
course dealing with the social and psychosociological aspects of aging, retirement, and dying. The emphasis is on the social interpretation of aging, and the role/status of the aged in society.

## 4000-Level Courses

Note: For all 4000-level courses (unless otherwise indicated), Student must have successfully completed 84 credits. However, third year Honours students with 78 credits who are also taking summer courses may enrol.

AS/SOCI 4000 6.0 Honours Thesis. The advanced student has an opportunity in this course to prepare a paper on the topic of the student's own choice, and to work independently of direct classroom supervision.

AS/SOCI 4010 6.0 Strategies of Social Research. This course continues the exploration of various modes of empirical research. It studies the relationship between theory and research, and the applicability of the results of empirical research in social and political practice.

AS/SOCI 4014 3.0 Comparative Sociology: Societies Across Time And Space. This course reviews major issues in the comparative analysis of societies. Its focus is macrosociological, and societies themselves are taken as the central unit of analysis. This course covers industrial societies, agrarian states and non-state societies.
Degree credit exclusion: AS/SOCI 4090M 3.0.
AS/SOCI 4030 6.0/4030 3.0 Independent Reading. A full-year reading course (or halfyear course in either term) may be taken by prior arrangement with an instructor.
Note: Please consult the Enrolment and Registration section, Faculty of Arts, for regulations on independent reading courses.

AS/SOCI 4050 3.0 Issues in Qualitative Research. An in-depth examination of selected qualitative methods in social research. Theoretical implications and practical applications of the methods are also considered. The course examines historical methods, field and observational methods, ethnomethodology, focussed interviewing, ethnographic methods, documentary or textual analysis.

AS/SOCI 4055 6.0 Everyday Life in the Metropolis: Fieldwork Studies in Toronto. This is an ethnographic course which seeks to explore various features of urban life which characterize the metropolis as it appears to diverse categories of its users, e.g. multicultural residents, tourists, practitioners of urban occupations, politicians and planners. Students are required to make observations in Metro Toronto.

AS/SOCI 4060 3.0 The Sociology of Parent/ Child Relations. This course examines the parent-child relationship as interactive process within social structure. This relationship is explored in terms of reciprocity, multiple levels, the dynamic lifespan model, and the mediation role of social and cultural factors such as class and ethnicity.

AS/SOCI 4070 6.0 The Semiotics of the Body. The course examines a variety of sign systems which code the body's behaviour (e.g., dressing, eating, dieting, fitness) as the vehicle for larger institutions (political, economic, religious) which require the body's inscription and conscription.

AS/SOCI 4075 3.0 Sexuality, Social Practices and Modernity. This course places sexuality in the context of societal processes and practices, and critically examines a number of major contemporary social theories concerning sexuality.

AS/SOCI 4080 6.0 Practicum in Survey Research Methods. This course provides the theoretical background and practical skills needed to conduct surveys. Using computerized telephone survey facilities of the Institute for Social Research, students take part in questionnaire design, interviewing, data processing, statistical analysis and report writing.
Cross-listed to: AS/POLS 4340 6.0.
AS/SOCI 4090 6.0/4090 3.0 Special Topics. As the need arises, the department offers courses on particular topics not ordinarily available. Details on the topics covered in different sections of the course are given in the Department's supplementary calendar.

AS/SOCI 4100 6.0 Brain and Behaviour. This course examines findings from various disciplines in the brain sciences in relation to the study of culture, society and the individual. Of particular importance is the relation of brain structure to human socialization, and the cultural impact of mental illness and behaviour dysfunctions.

AS/SOCI 4120 6.0 Social Organization and Urban Culture. This course examines how urban residents experience and utilize urban environments so as to generate social choices. The ways in which urban planning, architecture, and ownership status combine to influence the mix of public and private involvements are of special interest.

AS/SOCI 4200 6.0 The Sociology of Conflict and Co-operation. This course analyzes the relationship between conflict and co-operation and explores the causes, characteristics and consequences of both processes in a variety of different social organizational settings.

AS/SOCI 4210 3.0 Economic Sociology. This course examines the impact of market forces on society and the efforts by society to tame the market. Topics include: the origins of capitalism, social resistance to market forces; and changes in social class, gender roles, family organization, and race/ethnic relations which accompany economic transformation.

AS/SOCI 4230 6.0 Sociology of Ethnic Groups. An examination of the process by which immigrant groups become detached from their homelands and integrate into Canadian society. Each year the focus is on different groups such as Italians, Chinese, Polish, and Ukrainian. This course focuses on change in the homeland and adaptation to life in Canada.

AS/SOCI 4300 3.0 Sociology of Health Care Delivery. The course examines the theoretical models sociologists employ in analyzing relationships within the health-care system. It shows how the medical and other health professions have developed in Canada within the context of the growth and change of the medicare system, its organization, and administration.

AS/SOCI 4350 3.0 International Migration. The course examines emerging patterns of international migration and refugee flows. Particular attention is given to the recent rise of emigration from Asia, the Caribbean and Latin America to North America. These flows are studied from the perspective of global trends in political economy, development and underdevelopment, and social-cultural ties and networks.

AS/SOCI 4390 3.0 International Migration: Immigration, the State and Transnationalism. This course introduces theoretical perspectives on transnational migration, focusing on immigrant incorporation, citizenship, the host state, relations with the home state/community, and transnationalism. Comparative material from various regions may be used.
Prerequisite: Students must have successfully completed 84 credits. However, third year Honours students with 78 successfully completed credits who are also enrolled in summer courses may enrol.

## AS/SOCI 4400 3.0 Historical Sociology.

This course examines a variety of recent studies that cross the boundary of history and sociology, including such topics as: historical changes in family, education, women's lives, ethnicity and social class. Both theoretical and empirical materials are considered.

AS/SOCI 4420 6.0 Contemporary Social Issues of North American Native Peoples. This course explores contemporary North American aboriginal issues, organizing them in relation to theoretical and substantive areas in sociology, such as the psychology of the self, social movements, environmental sociology, and the sociologies of religion, the family, and education.

AS/SOCI 4430 3.0 Canada and Refugees. This course offers a comprehensive sociological assessment of some current issues and research in refugee migration. Primary emphasis is on Canada's refugee policy and responses to it. The unique experiences and adaptation problems of refugee resettlement are examined, with particular attention to Third World refugees in Canada.

AS/SOCI 4440 6.0 Race, Minorities and the Legal Order. This course examines critically theories and applications of law in reference to diverse minority groups. Differential rates of participation of minorities as official agents, litiginous actors, offenders, victims, and the "policing" of communities in the Canadian context are studied.

AS/SOCI 4450 6.0 Women In Development. The course explores the theme of women in development in its different meanings. The issue of development is analyzed in terms of global economy, national states, popular movements and discourse with emphasis on women, gender and class analysis and feminist politics.
Degree credit exclusion: AS/SOCI 4090Q 6.0.
AS/SOCI 4460 3.0 Sociological Understandings of Genocide. Using comparative methods, students study the Holocaust, the Armenian genocide, the "ethnic cleansing" in Bosnia-Herzegovina and other genocides from several sociological theoretical perspectives in order to understand the causes, experiences, and consequences of genocide and to investigate solutions.

AS/SOCI 4470 3.0 Sociology of Sex and Gender. This course considers a variety of theories concerning the relation between sex, sexuality and gender identity. Theories to be covered are those of Freud, Michel Foucault on the history of sexuality, and those of a number of psychoanalytic feminist theorists.

AS/SOCI 4500 6.0 Popular Culture and Social Practice in Canada. An examination of attempts by sociologists and critical theorists to come to terms with cultural processes and forms, paying particular attention to contemporary popular culture in Canada.

AS/SOCI 4600 6.0 Feminist Theories and Methodology. This course provides a critical analysis of varieties of feminist theories and methodologies as they have been derived from women's examination of social relations and practices. Theories arise from and organize perspectives of the world that generate and legitimate particular understandings. In questioning the process of theorizing, issues of difference in race, class, able-bodied and sexual orientation are examined.

AS/SOCI 4610 6.0 Women, the Welfare State, and Social Policy. This course uses gender analysis to examine the ideologies and practices underling social-welfare policies. Diverse concepts, theories, and debates that have informed scholarly discourse and research on the relations between women and the state are critically reviewed.

AS/SOCI 4630 6.0 Comparative Education: Focus on Transitions, Schooling to Employment. This course discusses various educational issues including accessibility, social mobility and labour market ties and is organized around Canadian materials with comparisons made to other countries. Students are shown how to effectively analyze issues by comparative methods.

AS/SOCI 4660 3.0 Child Socialization. This course adopts an interdisciplinary approach in which the insights and techniques of sociology, anthropology and psychology are combined to examine childhood socialization. The data are cross-cultural and comparative, with special emphasis on childhood in Canada.

AS/SOCI 4670 3.0 The Social Self. This course examines classical and contemporary sociological theories of self - the development of the self concept, its effects in interaction, and its stability or change over time. Implications of the self in relation to the wider society are explored.

AS/SOCl 4680 3.0 Women and Ageing. This course examines the intersection of ageing and gender. The course emphasizes a social psychological and feminist perspective and thus gives primary attention to the symbolic and social construction of ageing.

AS/SOCI 4685 6.0 Feminist Perspectives on Families, Gender and the State. This course focuses on four major theoretical feminist perspectives on families, gender and the state. Exploring issues such as regulation of sexuality, division of labour and income, violence, childcare, and reproduction of race and class.
Degree credit exclusion: AS/SOCI 4090B 6.0.
AS/SOCI 4700 3.0 Environmental Sociology: Political Ecology. The course introduces a political ecology method which situates environmental problems in ecological and political economic contexts. Students use political ecology to analyze local and third world environmental controversies. The course assumes familiarity with social aspects of environmental studies.
Degree credit exclusion: AS/SOCI 4090S 3.0.
AS/SOCI 4810 6.0 Women and the Criminal Justice System. This course analyzes theory and research on the incidence and treatment of child, adolescent and adult women who are offenders (e.g., theft, homicide), victims (e.g., sexual and physical assault), and professionals (e.g., police, judges) in the criminal justice system.

AS/SOCI 4830 3.0 Childhood and Violence. This course explores violence experienced by children and violence committed by children. The course explores the ways that children and adults learn, use and experience violence (physical and sexual) in societal settings such as schools, churches, television and war.

AS/SOCI 4840 6.0 Sociology of Policing. This course is an introduction to theories of policing applied to the sociology of control. Topics include: ideologies of profit and peace; history and political economy; reproductions of class, race and gender; policing and the state; local/global and private/public controls.

AS/SOCI 4850 3.0 Organized Crime. Course examines national and international organized crime issues and focuses on links between organized crime and the global economy; the relationship between organized crime and social/political environments; theoretical explanations and the evolution of commodities involved in diverse organized crime markets.

AS/SOCI 4910 6.0 The Sociology of Knowledge. An analysis of the role of ideas in the development of social institutions and the impact of society on belief systems. The social organization of knowledge is examined with reference to selected institutional areas such as science, politics, education, religion, the arts, and the professions.

AS/SOCI 4920 6.0 Communication and Community. This course critically analyzes relationships between language use and the structuring of social interaction, and more broadly, between forms of communication and forms of community. Special attention is given to the concept of distorted communication and to socially significant abuses of language.

AS/SOCl 4970 3.0 The Sociology of Adult Development. This course is concerned with the adult life span and its stages, and studies how adults develop, change, adapt, and stabilize their interpersonal and social roles The key stages of the adult life cycle that is emphasized include having children, mid-life, entering a new marital status, facing new work roles, and approaching old age. Coping ability and health consequences are emphasized.

## Statistics - Arts, Pure and Applied Science

See Mathematics and Statistics.

## Stong College - Arts

Academic Programme Office:
314B Stong, (416) 736-5132
College Master:
Eric Willis
Academic Advisor:
Gail Vanstone
Note: Not all courses will necessarily be offered in any given year; for details of courses to be offered consult the Academic Programme Office.
Listed below are the 1000 -level and 2000 -level 9 credit Foundations courses which are part of the Faculty of Arts General Education requirement. These courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.
Students enrolling in Stong College Foundation courses, in either the Division of Humanities or the Division of Social Sciences, will be members of Stong College with access to academic advising, orientation programmes, social and co-curricular events.

## 1000-Level Courses

AS/HUMA 1105 9.0 Myth and Imagination In Greece and Rome. An introduction to ancient and modern myths and theories about myths and mythology in comparative perspectives and their influences on modern literature and art.

## Degree credit exclusion: AS/HUMA 1105 6.0.

AS/HUMA 1200 9.0 The Canadian Experience. Topics illustrating the ways in which culture in Canada resembles and is different from other cultures. The emphasis is on the twentieth century. Materials to be used include fiction, poetry, folklore, the visual arts, and various social and historical studies.
Degree credit exclusion: AS/HUMA 1200 6.0.
AS/HUMA 1220 9.0 Canadian Language and Culture. This course develops the linguistic/ academic skills of students from English as a Second Language background, using themes such as, Language and Communication, Culture and Identity, the Immigrant/Refugee experience, and Multiculturalism. Course activities focus on developing English proficiency while exploring these themes.
Degree credit exclusions: AS/HUMA 1220 6.0, AS/ESL 1000 6.0.

Cross-listed to: AS/ESL 1000 9.0.
AS/HUMA 1620 9.0 Archetypal Themes in Literature. An interdisciplinary examination of those recurring patterns, narrative structures and images in Western culture which have the power to express (symbolize) our quest for meaning and values. Readings are selected from a broad range of cultures and eras in order to focus upon the dynamic persistence of these motifs and the variety of works in which they occur.
Degree credit exclusion: AS/HUMA 1620 6.0.
AS/HUMA 1970 9.0 Worlds of Childhood. An exploration of childhood as an aspect of human experience represented in many forms in various cultures over time.
Degree credit exclusion: AS/HUMA 2215 6.0.
AS/HUMA 2160 9.0 Romanticism. A study of Romanticism with an emphasis on its values as expressed in the arts, chiefly in the Romantic era, through historical, literary, musical, and philosophical texts and works from the visual arts. Degree credit exclusion: AS/HUMA 2160 6.O.

AS/HUMA 2320 9.0 Ideas of America: the Cultures of North America. This course undertakes a study of major artistic, historical, philosophical and/or political texts by and about North Americans.
Degree credit exc/usion: AS/HUMA 2320 6.0.
AS/HUMA 2670 9.0 Film and Literature. The nature of film is explored through detailed comparison with fiction and drama. The different possibilities of drama, narrative, and language in film and in literature are emphasized.

Degree credit exclusions: AS/HUMA 26706.0 and FA/FILM 2711 6.0.

AS/SOSC 1185 9.0 Women and Society. This course examines images of women and explores women's experiences in the family, in school, at the workplace, and in relation to the issues of poverty, violence, health and sexuality.
Degree credit exclusion: AS/SOSC 1180 6.0.

AS/SOSC 1960 9.0 Introduction to Social and Political Thought. This course provides a broad introduction to the interdisciplinary study of modern social and political thought. Through critical reading and analysis of primary texts, students become familiar with the rise of the liberal tradition, focusing on critiques, defenses and developments of its conceptions of the modern world.
Degree credit exclusion: AS/SOSC 1990B 6.0.
AS/SOSC 2410 9.0 Developing Countries: Diversities and Contradictions. The course examines the societies of Asia, Africa and Latin America with emphasis on the human dimension of modernizing processes, neo imperialism, political stability and instability, economic development and lack of development, and the solutions adopted in specific countries.
Degree credit exclusion: AS/SOSC 1410 6.0.
AS/SOSC 2960 9.0 Italian: A Minority Culture and Language in North American Society.
This course investigates the effects North American culture and language have on the lives of Italian immigrants and their descendants.
Degree credit exclusions: AS/SOSC 2990C 6.0, AS/IT 27916.0 and AS/IT 2790 6.0.
Cross-listed to: AS/IT 2971 9.0.

## Theatre - Fine Arts

Department Office:
318 Centre for Film and Theatre, (416) 7365172
Associate Professor and Chair of the Department:
P. McKinnon

Professor:
D. Rubin

## Professors Emeriti:

K. Bradley, D. Buck, J.G. Green, J. Henry, A. Stephenson

Associate Professors:
I. Buchli, J. Courtney, R. Fothergill, D. Pequegnat, D. Rotenberg, J. Rudakoff, A.I. Schlosser, P. Silver, R. Singer, D. Smukler, R. Stuart

## Assistant Professor:

J. Mayberry, D.M. McCaugherty, P. Thomson

## General Information

York's Department of Theatre, with 15 full-time faculty members and more than 60 half or fullyear courses for majors, is the largest theatre department in Eastern Canada. Because of the Department's location in Metropolitan Toronto, students have access to Canada's biggest concentration of English-language professional theatre companies and artists.
The Department of Theatre offers both a BA Honours and a BFA Honours degree, providing students with different approaches to achieving their own theatrical goals. (For information on the MFA in acting, directing and playwriting see the Faculty of Graduate Studies calendar.)
All students must be evaluated by the department before being admitted. Students with credits from other post-secondary institutions may be placed
in first or second year courses, depending on their background and ability. Admission to courses above the first year level is usually by audition, portfolio and/or interview, with the students' work in first year both within the department and the University given particular emphasis. Advancement within the department is based upon demonstrated proficiency in one or more aspects of theatre, and a satisfactory academic standing as defined in this Calendar. It should be noted, however, that a satisfactory academic standing in itself does not guarantee admission to any course. Be aware that the study of theatre requires a special commitment and demands enormous amounts of time and energy.
The first undergraduate year is a common time for Theatre majors to learn about all aspects of theatre, to get involved in both acting and backstage work, and to understand theatre as it existed in other times and places. In this apprentice year, students must also complete several courses in other areas of the University. In their remaining years, students may choose a broad programme of study or follow a more specialized option in acting, directing, production, design, playwriting and dramaturgy, criticism, dramatic literature or theatre history.
Most majors take far more than the minimum number of courses in theatre and, for that reason, the department recommends completing the general education requirements as soon as possible. The BA Honours degree, which is usually chosen by those considering graduate study and careers in teaching or writing, requires at least 51 credits in theatre with a majority of these in theatre studies. The BFA Honours degree for professionally oriented students in acting, directing, playwriting and dramaturgy, production and design allows students to take up to 84 credits (fourteen full course equivalents) in Theatre, the majority in studio. Detailed regulations and programmes of study are available in the Faculty of Fine Arts section of this Calendar and in the Department's handbook.
The following courses are required of all Theatre majors: FA/THEA 10103.0 Introduction to Acting I; FA/THEA 11006.0 Stagecraft I; FA/THEA 1200 6.0 Theatre Survey I; FA/THEA 2200 6.0 Theatre Survey II; FA/THEA 3200 6.0 Theatre Survey III; and either FA/THEA 2150 3.0 Introduction to Theatre Management or FA/THEA 41503.0 Professional Aspects of the Theatre. In addition, courses within each area performance, production, and theatre studies are subject to prerequisites and corequisites. Consult the department handbook for details.
Students pursuing an honours degree in the Faculty of Arts may combine a 42 credit or 48 credit Honours major in an Arts discipline with a second major in Theatre (theatre studies or production streams only.) Honours degree students in the Faculties of Arts, Environmental Studies, or Fine Arts may also qualify for a 30 credit Theatre minor in theatre studies or theatre production. For details contact the Department.

Department classes and productions are only part of the excitement of studying at York University. The Centre for Film and Theatre provides a focus for most departmental activities. Winters College is a designated Fine Arts College and home for many students. Professionals from across Canada, the U.S., England, France, Eastern Europe, China, and other countries have come to York University to share their vision and expertise.

## Courses in Theatre

Three credit courses usually meet three or four hours a week for one term. Six credit nonstudio courses meet either three or four hours a week for the whole academic year. Six credit studio courses meet either six or eight hours a week for the whole year. Additional rehearsal and/or crew hours are often required. Not every course listed here is offered every year.

FA/THEA 1010 3.0 Introduction to Acting I. A studio-oriented survey of the principles and problems of acting stressing the ensemble and including an introduction to theatre movement and voice, improvisational techniques and scene study. Required of all first-year Theatre majors. Open only to Theatre majors.
Corequisites: FA/THEA 12006.0 and FA/ THEA 1100 6.0.
Note: Plus two rehearsal hours per week.
FA/THEA 1011 3.0 Introduction to Acting II. A continuing exploration of the techniques and exercises commenced in FA/THEA 1010 3.0. Open to Theatre majors only, but not required.
Prerequisite: FA/THEA 1010 3.0.
FA/THEA 1100 6.0 Stagecraft I. An
introduction to the fundamentals and vocabulary of design, lighting, and stagecraft (in any given year this could include sound, props, paint, etc.). Required of all first-year Theatre majors. Crew work on departmental productions is required. Open only to Theatre majors. Taught with FA/DANC 1270 3.0.
Corequisites: FA/THEA 10103.0 and FA/ THEA 1200 6.0.
FA/THEA 1200 6.0 Theatre Survey I. The first of a three-year cycle of courses investigating the historical evolution of theatre from its origins to the present time. Theatre Survey I begins with a foundational encounter with diverse forms of theatre from different epochs, integrating analytical reading with studio explorations of performance possibilities, and proceeds to a survey of theatre and drama from classical Athens to Elizabethan London. Required of all first-year Theatre majors. Open to Theatre majors and minors only. Attendance at Prime Time is required.
Corequisites: For Theatre majors, FA/THEA 10103.0 and FA/THEA 1100 6.0.

FA/THEA 1500 6.0 Aspects of the Theatre. Of interest to anyone who wants to understand the complex elements that go to make up theatre. From script selection through directing, design, production, casting, and
promotion, to opening night and the role of the critic. The course is built around many on and off-campus productions, and is aimed primarily at people who are or will become patrons of the arts. The course offers students special rates for required professional productions.
Note: Not open to Theatre majors.
FA/THEA 1510 3.0 Theatre Behind the Scenes. A survey of design and production process for theatre.
Note: Not open to Theatre majors.
Degree credit exclusion: AK/THEA 3131 3.0.
FA/THEA 1520 3.0 Acting for Non-majors. A survey of the principles and problems of acting.
Note: Not open to Theatre majors.
FA/THEA 2000 6.0 Production Practicum (Summer only). An introductory practicum in production technique usually based on training and experience with a professional theatre.
Prerequisite: By special arrangement with the production area.

FA/THEA 2010 3.0 Voice I. An introduction to the rudiments of voice training for the actor with an introduction to the speaking of prose and poetry.
Prerequisites: FA/THEA 1010 3.0, FA/THEA 1100 6.0, FA/THEA 1200 6.0, and/or audition plus permission of the department.
Corequisites: FA/THEA 2020 3.0, FA/THEA 2030 3.0.

FA/THEA 2011 3.0 Voice II. Intensive application and further development of the work begun in FA/THEA 20103.0 with the addition of speech training.
Prerequisites: FA/THEA 20103.0 and permission of the department.
Corequisites: FA/THEA 20213.0 and FA/ THEA 2031 3.0.

FA/THEA 2020 3.0 Acting I. An examination of acting techniques, approaches to character development plus a more intensified approach to dramatic texts, including script analysis.
Prerequisites: FA/THEA 1010 3.0, FA/THEA 1100 6.0, FA/THEA 1200 6.0, and/or audition plus permission of the department.
Corequisites: FA/THEA 20103.0 and FA/ THEA 2030 3.0.

FA/THEA 2021 3.0 Acting II. Intensive application and further development of work begun in FA/THEA 2020 3.0.
Prerequisites: FA/THEA 20203.0 and permission of the department.
Corequisites: FA/THEA 20113.0 and FA/ THEA 2031 3.0.

FA/THEA 2030 3.0 Movement I. An introduction to the rudiments of the physical techniques necessary for the actor. It is the beginning of building a vocabulary of movement, self-discipline and learning how to solve individual problems.

Prerequisites: FA/THEA 1010 3.0, FA/THEA 11006.0 and FA/THEA 12006.0 and/or permission of the department.
Corequisites: FA/THEA 20103.0 and FA/ THEA 2020 3.0.

FA/THEA 2031 3.0 Movement II. Intensive application and further development of the work begun in FA/THEA 2030 3.0.
Prerequisites: FA/THEA 20303.0 and permission of the department.
Corequisites: FA/THEA 2011 3.0, FA/THEA 2021 3.0.

FA/THEA 2040 3.0 Scene Study for Directors I. This survey course is a basic exploration of the acting process. Students face the challenges of translating a scene from script to stage as directors, and discovering the questions that must be answered before the scene can live. Taught with FA/THEA 2050 3.0.

Prerequisites: FA/THEA 1010 3.0, FA/THEA 1100 6.0, FA/THEA 12006.0 and/or interview and permission of the department.
Degree credit exclusion: FA/THEA 2022A 3.0.
FA/THEA 2041 3.0 Scene Study for Directors II. A continuation and development of the scene study work begin in FA/THEA 2040 3.0. Taught with FA/THEA 2051 3.0.

## Prerequisite: FA/THEA 2040 3.0.

FA/THEA 2050 3.0 Scene Study for Actors
I. This course is a basic exploration of the acting process. Students face the challenges of translating a scene from script to stage as actors, and discovering the questions that must be answered before the scene can live. Taught with FA/THEA 2040 3.0.
Prerequisites: FA/THEA 1010 3.0, FA/THEA 1100 6.0, FA/THEA 12006.0 and/or audition/ interview and permission of the department.
Degree credit exclusion: FA/THEA 2022 3.0.
FA/THEA 2051 3.0 Scene Study for Actors II. A continuation and development of the scene study work begin in FA/THEA 2050 3.0. Taught with FA/THEA 2041 3.0.
Prerequisite: FA/THEA 20503.0 and permission of the department.

FA/THEA 2060 3.0 Voice and Speech. A basic course in speech involving exercises in the production of tone, the shaping of sound into words, and the use of the voice as an instrument of interpretation and expression. In addition to basic voice and articulation work, students explore the oral performance of nondramatic literature and the principles of public speaking. (Same as AK/THEA 2060 3.0)

FA/THEA 2090 3.0 Elements of Mime. An introduction to the art of mime. (Same as AK/ THEA 2100 3.0)

FA/THEA 2100 3.0 Production Practicum. Required of all second year students working in production and design, this course gives students the opportunity to learn and practise
the technical and management skills associated with creating a production. Open only to Theatre majors and minors.
Prerequisite: FA/THEA 11006.0 with a minimum grade of C+, and permission of the Production Area.
Corequisite: FA/THEA 2110 6.0.
FA/THEA 2110 6.0 Stagecraft II. An in-depth exploration into the practical elements of production, which will normally include organization, structural theory and advanced scenic construction, drafting, and materials and tools. Required of all second year students working in production and design. Material fee required. Open to Theatre majors and minors only.
Prerequisite: Permission of the Production Area and a minimum grade of C+ in FA/THEA 1100 6.0.

Corequisite: FA/THEA 2100 3.0.
FA/THEA 2120 3.0 An Introduction to Costuming. An introduction to costume drafting, construction and maintenance. Emphasis is placed on the proper use of equipment and employment of techniques of costuming. Materials fee required.
Prerequisite: FA/THEA 11006.0 or FA/DANC 12703.0 or permission of the course director.

FA/THEA 2130 3.0 Techniques of Lighting. Introduction to theatrical lighting. Open to nonmajors with permission of course director.
Note: Students enrolled are expected to serve on one lighting crew for a departmental production.

FA/THEA 2140 3.0 Introduction to Stage Design. An Introduction to the history, theory and practice of stage design, taught in seminar and studio format. Students are expected to have suitable drafting and artists' supplies. Some materials will be provided, for which a material fee is required.
Corequisite: FA/THEA 24106.0 or permission of the course instructor.

FA/THEA 2143 3.0 About Design. A nonspecialist studio course exploring the techniques of theatrical design with particular focus on set design learned from exercises in text analysis, historical research, conceptualization, sketching, model making and drafting.
Degree credit exclusion: AK/THEA 3132 3.0.
FA/THEA 2150 3.0 Introduction to Theatre Management. An introduction to the principles of theatre management and organization including staffing, budgeting, fund raising, box office and production management.
Note: This course or FA/THEA 41503.0 is required of all Theatre majors. Open to nonmajors by permission of the course instructor.

FA/THEA 2200 6.0 Theatre Survey II. Building on the foundations established in Theatre Survey I, this course traces the evolution of theatrical style and dramatic form from a historical and developmental perspective, concentrating on phases of major theatrical innovation from earliest times up into the 20th century, and relating them to their social and cultural contexts.

Required of all second-year Theatre majors. Open to majors and minors only. Note: Attendance at Prime Time is required.
Prerequisite: FA/THEA 1200 6.0.
FA/THEA 2210 3.0 The Idea of Theatre. As a basis for continuing work in Theatre Studies, this course examines questions about the nature of theatre and its role in society. Required of all second year Theatre Studies students.
Prerequisite: FA/THEA 1200 6.0.
Corequisite: FA/THEA 2200 6.0.
FA/THEA 2410 6.0 History of Visual Sources for Theatrical Design. A survey course relating the architecture, art, clothing, interior design, and furnishings of Western civilization to the theatre. The course also touches on the visual aspects of the theatrical styles of various periods. Material fee required. Required of all production and directing students. Others by permission of the course director.

FA/THEA 2500 6.0 Stage and Screen. Drawing on dramatic texts and film and video resources, this interdisciplinary course explores and celebrates the relationship between theatre and film, including the stylistic and structural principles of live theatre and motion pictures as distinctive media, and theatre reconceived and adapted for cinema and television. The course includes outstanding plays, films and attendance at live theatre performance. Note: Not open to Theatre or Film \& Video majors except by special permission. (Same as FA/FILM 2500 6.0)

FA/THEA 3000 6.0 Production Practicum (Summer only). An intermediate practicum in production technique usually based on training and experience with a professional theatre.
Prerequisite: By special arrangement with the production area.

FA/THEA 3010 3.0 Voice III. This intermediate level course is a continuation of techniques, principles and explorations in voice, speech and text for the actor.
Prerequisites: FA/THEA 2011 3.0, and permission of the department.

Corequisites: FA/THEA 30203.0 and FA/THEA 3030 3.0.

FA/THEA 3011 3.0 Voice IV. Intensive application and further development of the work begun in FA/THEA 3010 3.0.
Prerequisites: FA/THEA 30103.0 and permission of the department.
Corequisites: FA/THEA 30213.0 and FA/THEA 3031 3.0.

FA/THEA 3020 3.0 Acting III. An examination of acting techniques, approaches to character development and beginning examination of theatrical styles.
Prerequisites: FA/THEA 20213.0 and permission of the department.
Corequisites: FA/THEA 30103.0 and FA/THEA 3030 3.0.

Note: Plus rehearsal hours.

FA/THEA 3021 3.0 Acting IV. Intensive application and further development of work begun in FA/THEA 3020 3.0.
Prerequisites: FA/THEA 30203.0 and permission of the department.
Corequisites: FA/THEA 30113.0 and FA/ THEA 3031 3.0.

FA/THEA 3030 3.0 Movement III. This
intermediate level course is a continuation of techniques, principles and explorations in movement for the actor.

Prerequisites: FA/THEA 20313.0 and permission of the department.
Corequisites: FA/THEA 30103.0 and FA/ THEA 3020 3.0.

FA/THEA 3031 3.0 Movement IV. Intensive application and further development of the work begun in FA/THEA 3030 3.0.

Prerequisites: FA/THEA 30303.0 and permission of the department.
Corequisites: FA/THEA 30113.0 and FA/ THEA 3021 3.0.

FA/THEA 3050 3.0 Scene Study for Actors III. An opportunity to pursue advanced scene study work, in conjunction with the third year directing students. Taught with FA/THEA 3480 3.0.

Prerequisites: FA/THEA 20503.0 and FA/ THEA 20513.0 and/or audition/interview.

FA/THEA 3051 3.0 Scene Study for Actors IV. A continuation and development of work undertaken in FA/THEA 3050 3.0. Taught with FA/THEA 3481 3.0.
Prerequisites: FA/THEA 30503.0 and permission of the department.

FA/THEA 3070 3.0 Performance Practicum
I. Intended for third-year students working in acting, the course will give an intensive opportunity to develop and improve skills in the creation of workshop productions.
Prerequisites: FA/THEA 20213.0 and permission of the department.

FA/THEA 3071 3.0 Performance Practicum II. Intended for third-year students working in acting, the course will give an intensive opportunity to develop and improve skills in the creation of workshop productions.
Prerequisite: FA/THEA 30703.0 or permission of the department.

FA/THEA 3080 3.0 Physical Stage Techniques I. Introductory training in special physical techniques for the actor, including tumbling and unarmed combat.
Prerequisites: FA/THEA 20313.0 and/or permission of the department.

FA/THEA 3081 3.0 Physical Stage Techniques II. Intensive application and further development of work begun in FA/ THEA 3080 3.0.
Prerequisites: FA/THEA 30803.0 and permission of the department.

FA/THEA 3100 3.0 Production Practicum. Required of all third-year students working in production and design, the course gives students an opportunity to experience all aspects of creating a show (including stage management) from a production standpoint.
Prerequisite: FA/THEA 21003.0 or permission of the production area.
Corequisite: At least one other studio course in theatre production.
Note: Students may take FA/THEA 31003.0 or FA/THEA 3101 6.0, but not both concurrently.

FA/THEA 3101 6.0 Production Practicum. Required of all third-year students working in production and design, the course gives students an opportunity to experience all aspects of creating a show (including stage management) from a production standpoint.
Prerequisite: FA/THEA 21003.0 or permission of the production area.
Corequisite: At least one other studio course in theatre production.
Note: Students may take FA/THEA 31003.0 or FA/THEA 3101 6.0, but not both concurrently.

FA/THEA 3120 3.0 Basic Costuming I. Intensive application and further development of work begun in FA/THEA 2120 3.0. The course focuses on costume drafting and construction, and proper use of equipment and materials. Materials fee required.
Prerequisite: FA/THEA 21203.0 or permission of the course director.
Corequisite: FA/THEA 3142 3.0.
FA/THEA 3121 3.0 Costume Design I. Exploration of costume design theory and technique. Script analysis, character and historical research, and costume sketch development and presentation.
Prerequisite: FA/THEA 31203.0 and permission of the course director.
Corequisite: FA/THEA 3142 3.0.
FA/THEA 3130 3.0 Lighting Design I. An introduction to the theory and practical application of theatrical lighting design. Students are expected to serve on lighting crews for departmental productions.
Prerequisite: FA/THEA 21303.0 or permission of the course director.
Degree credit exclusion: FA/THEA 3130 6.0.
FA/THEA 3130 6.0 Lighting Design I. An introduction to the theory and practical application of theatrical lighting design. Students are expected to serve on lighting crews for departmental productions.
Prerequisite: FA/THEA 21303.0 or permission of the course director.

Degree credit exclusion: FA/THEA 3130 3.0.
FA/THEA 3140 3.0 Stage Design I. Theoretical and practical studies in the art and techniques of stage design. Material fee required.
Prerequisites: FA/THEA 2140 3.0, FA/THEA 24106.0 and permission of the course director. Corequisite: FA/THEA 3142 3.0.

FA/THEA 3141 3.0 Stage Design II. Intensive application and further development of work begun in FA/THEA 3140 3.0. Material fee required.
Prerequisites: FA/THEA 31403.0 and permission of the course director.
Corequisite: FA/THEA 3142 3.0.
FA/THEA 3142 3.0 Drawing for the Theatre I. This studio course aims at giving the student the basic skills of drawing, and the particular requirements of visual expression for theatre set and costume design.
Corequisites: FA/THEA 3120 3.0, FA/THEA 3121 3.0, and/or FA/THEA 3140 3.0, FA/THEA 3141 3.0.

FA/THEA 3170 3.0 Make-up. The
fundamentals of stage make-up.
Prerequisite: Permission of the department.
FA/THEA 3171 3.0 Materials of Production. Principles and practice of producing stage properties and artifacts. Material fee required.
Prerequisite: FA/THEA 21003.0 or permission of the instructor.

FA/THEA 3180 3.0 Stage Management. A practicum in the art of stage management, consisting of lectures and seminars on theory, methodology and organization, focused through practical application of developed skills.
Prerequisites: FA/THEA 21003.0 and permission of the course director.

FA/THEA 3200 6.0 Theatre Survey III. This course examines developments in dramatic literature and theatre from World War II to the present. The course covers contemporary world and Canadian theatre in its varied forms. Required of all third-year Theatre majors. Open to majors and minors only.
Prerequisite: FA/THEA 2200 6.0.
Note: Plus Prime Time sessions as assigned.
FA/THEA 3210 6.0 Seminar in Theatre Aesthetics and Criticism I. From Aristotle to Jerzy Grotowski, this course offers a study of theatrical theory and practice, with special attention to applied theatrical criticism, both scholarly and journalistic. The course will include attendance at theatre events on- and off-campus.
Note: Open to third and fourth-year Theatre students.
Prerequisite: FA/THEA 22103.0 or permission of the instructor.

FA/THEA 3260 1.5/3.0/6.0 Special Topics. Seminar in dramatic literature or theatre history. Topics change yearly.
Prerequisite: Permission of the course director.

FA/THEA 3290 6.0 Playwriting and New Play Dramaturgy I. Through reading of student-written material, in-class discussion, and dramaturgical input from students and the instructor, students work towards creation and development of theatrical work. Throughout
the course, the instructor works with the playwrights and dramaturgs to forge individual methodologies of, respectively, play creation and play development specific to the needs of each student. The playwrights and dramaturgs work together on identifying and examining methodology, as well as on the development of new work.
Prerequisites: Playwriting: submission of a portfolio and permission of the course director. Interview may be required. New Play Dramaturgy: submission of a portfolio and the permission of the course director. Interview is required.

FA/THEA 3450 6.0 Theatre for Young Audiences. An introductory studio course in the theory and technique of theatre for young audiences. (Same as AK/THEA 3200 6.0.)
Prerequisites: FA/THEA 10103.0 and FA/ THEA 12006.0 , or for students with experience in working with children and young people, permission of the course director.

FA/THEA 3480 3.0 Directing, Dramaturgy and the Creative Process I. The process of directing is akin to the creative process, which is fluid and can follow ny number of channels. This course is for artists who want to work in an intense collaborative environment, since it will address the personal as well as the collaborative process of creating in theatre. Students must possess a keen interest in either directing, writing, creative research and/ or acting. Taught with FA/THEA 3050 3.0.
Prerequisites: FA/THEA 20403.0 (formerly FA/THEA 2022A 3.0), FA/THEA 24106.0 and permission of the department.
Corequisites: FA/THEA 20603.0 and FA/ THEA 3100 3.0.

FA/THEA 3481 3.0 Directing, Dramaturgy and the Creative Process II. A continuation and deepening of the work undertaken in FA/ THEA 3480 3.0. Taught with FA/THEA 3051 3.0.

Prerequisites: FA/THEA 3480 3.0.
FA/THEA 4000 6.0 Production Practicum (Summer only). An advanced practicum in production technique usually based on training and experience with a professional theatre.
Prerequisite: By special arrangement with the production area. Open to Theatre majors only.

FA/THEA 4010 3.0 Voice V. This senior level course in voice incorporates, focuses and adds to the skills developed in prior years training to shaping the character within the context of the play and the performance.
Prerequisites: FA/THEA 30113.0 and permission of the department.
Corequisites: FA/THEA 40203.0 and FA/ THEA 4030 3.0.

FA/THEA 4011 3.0 Voice VI. Intensive application and further development of the work begun in FA/THEA 4010 3.0.
Prerequisites: FA/THEA 40103.0 and permission of the department.

Corequisites: FA/THEA 40213.0 and FA/THEA 4031 3.0.

FA/THEA 4020 3.0 Acting V. Advanced examination of acting techniques, approaches to scene study, characterization and style.
Prerequisites: FA/THEA 30213.0 and permission of the department.
Corequisites: FA/THEA 40103.0 and FA/THEA 4030 3.0.

FA/THEA 4021 3.0 Acting VI. Intensive application and further development of work begun in FA/THEA 4020 3.0.
Prerequisites: FA/THEA 40203.0 and permission of the department.
Corequisites: FA/THEA 40113.0 and FA/THEA 4031 3.0.

FA/THEA 4030 3.0 Movement V. This senior level movement course incorporates, focuses and adds to the skills developed in prior years training to shaping the character within the context of the play and the performance.
Prerequisites: FA/THEA 30313.0 and permission of the department.
Corequisites: FA/THEA 40103.0 and FA/THEA 4020 3.0.

FA/THEA 4031 3.0 Movement VI. Intensive application and further development of the work begun in FA/THEA 4030 3.0.
Prerequisites: FA/THEA 40303.0 and permission of the department.
Corequisites: FA/THEA 40113.0 and FA/THEA 4021 3.0.

FA/THEA 4070 3.0 Performance Practicum III. Intended for final-year students working in acting, the course gives students an intensive opportunity to develop and perfect advanced skills in the creation of a fully mounted show.
Prerequisites: FA/THEA 30213.0 and permission of the department.

FA/THEA 4071 3.0 Performance Practicum IV. Intended for final-year students working in acting, the course gives students an intensive opportunity to develop and perfect advanced skills in the creation of at least one fully mounted show.
Prerequisite: FA/THEA 40703.0 or permission of the department.

FA/THEA 4100 3.0 Production Practicum. Required of all fourth-year students working in production and design, the course gives advanced students an opportunity to further develop and perfect skills in the creation of a show. Labs include work on departmental productions.
Prerequisite: FA/THEA 31003.0 or FA/THEA 3101 6.0.
Corequisite: At least one other fourth-year course in theatre production.
Note: Students may take FA/THEA 41003.0 or FA/THEA 41016.0 but not both concurrently.

FA/THEA 4101 6.0 Production Practicum. Required of all fourth-year students working in production and design, the course gives advanced students an opportunity to further develop and perfect skills in the creation of a show. Labs include work on departmental productions.
Prerequisite: FA/THEA 31016.0 or FA/THEA 3100 3.0.
Corequisite: At least one other fourth-year course in theatre production.
Note: Students may take FA/THEA 41003.0 or FA/THEA 41016.0 but not both concurrently.

FA/THEA 4120 3.0 Costume Design II. Intensive application and further development of costume design technique.
Prerequisite: FA/THEA 31213.0 or permission of the course director.
Corequisite: FA/THEA 4142 3.0.
FA/THEA 4121 3.0 Advanced Costuming. Intensive application and further development of work begun in FA/THEA 4120 3.0. Material fee required.
Prerequisites: FA/THEA 41203.0 and permission of the course director.
Corequisite: FA/THEA 4142 3.0.
FA/THEA 4130 3.0 Lighting Design II. Intensive application and further development of work begun in Lighting Design I.
Prerequisite: FA/THEA 31303.0 or FA/THEA 31306.0 and permission of the course director.

FA/THEA 4140 3.0 Stage Design III. Advanced work in applied stage design. Material fee required.
Prerequisites: FA/THEA 31413.0 and permission of the course director.
Corequisite: FA/THEA 4142 3.0.
FA/THEA 4141 3.0 Stage Design IV. Intensive application and further development of work begun in FA/THEA 4140 3.0. Material fee required.
Prerequisites: FA/THEA 41403.0 and permission of the course director.
Corequisite: FA/THEA 4142 3.0.
FA/THEA 4142 3.0 Drawing for the Theatre II. This studio course aims at giving the student skills of graphic expression for theatre set and costume design including colour media. Some concentration on design presentation approaches.
Corequisites: FA/THEA 4120 3.0, FA/THEA 4121 3.0, and/or FA/THEA 4140 3.0, FA/THEA 4141 3.0.

FA/THEA 4150 3.0 Professional Aspects of the
Theatre. A grounding in a variety of financial, legal and contractual aspects of professional theatre in Canada, as well as the current structure and practice of theatre management.
Note: Required of all graduating Theatre majors who have not completed FA/THEA 21503.0 Introduction to Theatre Management.

FA/THEA 4160 3.0 Theatre Technology. An examination of the use of audio and other technologies.
Prerequisites: Permission of the course director.

FA/THEA 4210 6.0 Seminar in Theatre Aesthetics and Criticism II. A follow-up to FA/THEA 3210 6.0, the course focuses on major issues in theory and criticism and culminates in the publication of an issue of the York Theatre Journal.
Prerequisite: FA/THEA 32106.0 and/or permission of the course director.

FA/THEA 4220 3.0/FA/THEA 4220 6.0 NonEuropean Theatre. A study of ritual and theatre, including Indian, Chinese, South-east Asian and Japanese theatres. Students may pursue interests in other non-European areas. (Same as AK/THEA 3209B 3.0/6.0.)

FA/THEA 4270 1.5/3.0/6.0 Special Topics. An advanced seminar in dramatic literature.
Prerequisite: Permission of the course director.

FA/THEA 4290 6.0 Advanced Playwriting and New Play Dramaturgy II. Emphasizing skills development, this process-oriented course builds on the discoveries achieved in Playwriting and New Play Dramaturgy I, and continues to explore the special requirements of new play dramaturgy and play development.
Prerequisites: For playwriting: FA/THEA 3290 6.0, submission of a portfolio, and permission of the course director; interview may be required. For dramaturgy: submission of a portfolio, permission of the course director, and interview.

FA/THEA 4300 3.0/6.0 Independent Study. Open to highly motivated third and fourth year Theatre students who wish to pursue specific and intensive personal study in the Theatre Studies area under the supervision of a Theatre Studies area instructor.
Note: Open by petition to the department.
FA/THEA 4301 3.0/6.0 Independent Study. Open to highly motivated third and fourth year Theatre students who wish to pursue specific and intensive personal study in the Acting or Production area under the supervision of the appropriate area instructor.
Note: Open by petition to the department.
FA/THEA 4330 3.0/6.0 Canadian Theatre. An in-depth investigation of contemporary Canadian theatre, including a look at its historical roots.
Prerequisite: Third- or fourth-year standing. Others by permission of the course director.

FA/THEA 4331 3.0/6.0 Theatre for Social Change. An exploration of the roles that theatre can play in bringing about social change.
Prerequisite: Third- or fourth-year standing. Others by permission of the course director.

FA/THEA 4340 3.0/6.0 Comedy. An
exploration of the comic spirit in the theatre, including not only a survey of comic drama from Aristophanes to Joe Orton, but also other theatrical expressions of the comic, such as stand-up comedy, mime, the art of the revue sketch, and much more.
Prerequisite: Third- or fourth-year standing. Others by permission of the course director.

FA/THEA 4350 3.0/6.0 Tragedy. An
examination of tragedy as a dramatic form, including theories of tragedy, and its changing manifestations from Aeschylus to the twentieth century.
Prerequisite: Third- or fourth-year standing. Others by permission of the course director.

FA/THEA 4360 3.0/6.0 The Musical Theatre. An exploration of the fusion of music and drama, focussing particularly on the popular musical theatre from its beginnings to the present.
Prerequisite: Third- or fourth-year standing. Others by permission of the course director.
Degree credit exclusion: AK/THEA 4450 3.0/ 6.0.

FA/THEA 4420 3.0 Creating a Solo Show. This course is designed to present a method for discovering source material and bringing it to a theatrical form. The content discovered from the source work explorations will be brought to form based on the compositional principles traditionally used by dance choreographers and the self-scripting methods drawn from the work of Jerry Growtoski and LInda Putnam.
Prerequisite: 3rd or 4th year standing. Others by permission of the department.

FA/THEA 4440 6.0 Drama and Education. This course explores drama/theatre in an educational context. In addition to examining the major literature in drama in education over the past four decades, the class provides hands-on work in exploring the practical uses of drama in the classroom or in other educational environments e.g., community based. (Same as AK/THEA 4500A 6.0.)

FA/THEA 4450 3.0/6.0 Plays in Performance. This course draws upon students' academic and practical theatre skills in concentrated production experiences with plays of different genres, styles or periods. Students can explore further their own special interests in acting, directing, design or technical work as part of an informal production company. (Same as AK/THEA 41503.0 and AK/THEA 4150 6.0)

Prerequisite: 3rd or 4th year standing. Others by permission of the department.

FA/THEA 4460 3.0/6.0 Improvisation and Playmaking. The principles and techniques of making your own play through improvisation and group work (collective creation), including the adaption of non-dramatic material for the stage. (Same as AK/THEA 40603.0 and AK/ THEA 4060 6.0)

Prerequisite: 3rd or 4th year standing. Others by permission of the department.

FA/THEA 4480 6.0 Advanced Directing. A continuation of the development of the director's craft with particular emphasis on dramatic form and style. The focus of the course is on individual work.

Prerequisites: FA/THEA 2410 6.0, FA/THEA 34813.0 (or FA/THEA 3480 6.0), and permission of the department.
Corequisite: FA/THEA 4100 3.0.
FA/THEA 4800 6.0 Special Topics in Theatre Production. This course is available to students who collectively wish to pursue a topic, production, or area of interest, which either integrates various aspects of production/ technical theatre or which may be more appropriately studied under the umbrella of a professional producing organization. Available to fourth-year production students only, by application.
Corequisites: FA/THEA 41016.0 and at least 6 further credits in production at the senior level.

## Urban Studies - Arts

## Programme Office:

301 Calumet College, (416) 736-5057
Associate Professor and Coordinator of the Programme:
J. Caulfield, Social Science

Professors:
J.U. Marshall, Geography; B.H. Massam, Social Science/Geography; A.L. Murray, Social Science/Environmental Studies

## Associate Professors:

J. Caulfield, Social Science; G. Fallis, Economics/Social Science; E. Isin, Social Science; R.A. Murdie, Geography; L. Peake, Social Science/Environmental Studies; V. Preston, Geography

## Assistant Professors:

E. Isin, Social Science; M.J. Keall, Social Science

The Urban Studies Programme is a four-year Honours (Linked Double Major) Programme that enables students to combine concentration in a single discipline with an interdisciplinary perspective on the city and the urban region. Students who enrol in the Programme also co-register in one of the following approved disciplines: Anthropology, Economics, Geography, History, Humanities, Political Science, Psychology, Sociology. Students may also combine Urban Studies with the undergraduate programme in the Faculty of Environmental Studies [FES] or The School of Women Studies or with one of the following free standing interdisciplinary programmes: Classical Studies, Creative Writing, East Asian Studies, Religious Studies. The Urban Studies Programme is designed to provide a liberal undergraduate education about the nature and functioning of urban society. While it is comprehensive in its approach and range, it also aims to achieve depth in the examination of fundamental urban issues. It serves the needs of students who:
i) want to gain a critical understanding of the city, out of intellectual interest alone or plan to pursue an advanced degree in a related discipline;
ii) want to acquire a knowledge of the city, its problems and how it functions as a background for professional studies in law, business or public administration;
iii) desire to build a sound urban-oriented geographical and socio-economic foundation for professional studies in urban planning or urban administration;
iv) want a four-year honours degree that exposes them to a broad range of disciplines and ideas focused on topics involving the urban region.
In keeping with the Programme's extensive scope and diverse aims, the curriculum is designed to encourage students to think broadly about people, processes and change while developing analytical and synthesizing skills. Courses blend in-class instruction with fieldwork and research practice. In-class sessions focus on bringing together the theoretical insights of several disciplines. Field work and research practice are carried out in one of the world's most complex and best equipped urban laboratories the Metropolitan Toronto region.

## Required Core Courses:

AS/SOSC 2710 9.0 City Lives and City Forms: An Introduction to Urban Studies.
AS/SOSC 3700 6.0 Urban Analysis.
AS/SOSC 4700 6.0 Urban Studies Seminar.

## Departmental and Divisional Courses in Urban Studies

Note: For specific requirements of this programme, please consult the Programmes of Study section, Faculty of Arts. For purposes of meeting programme requirements all 9 credit Foundations courses will count as 6 credits towards the major.

Note: Students should consult appropriate Departmental calendars for up-to-date course descriptions, prerequisites and degree credit exclusions.
AS/ANTH 3020 6.0 Race, Racism \& Popular Culture.
AS/ECON 3230 3.0 Urban Economics
AS/ECON 4070 3.0 Public Finance I.
AS/ECON 4080 3.0 Public Finance II. AS/ECON 4110 3.0 Regional Economics. AS/ECON 4279 3.0 Housing Economics. AS/GEOG 2300 6.0 Social Geography. AS/GEOG 3080 6.0 Reading Landscapes Through Time.
AS/GEOG 3120 6.0 Urban Geography. AS/GEOG 3150 6.0 The Rural-Urban Fringe. AS/GEOG 4040 6.0 Urban Historical Geography.
AS/GEOG 4090 3.0 Urban Identities.
AS/GEOG 4110 3.0 Regional Urban Systems. AS/GEOG 4170 3.0 Geographic Perspectives on Immigration, Ethnicity and Race in Modern Cities.
AS/GEOG 4220 3.0 Industrial Geography. AS/GEOG 4240 3.0 The Planning of Urban Public Facilities.

AS/GEOG 4260 3.0 Applied Transportation Geography.
AS/GEOG 4380 3.0 Urban Social Policy.
AS/HIST 3530 6.0/AS/SOSC 3250 6.0. Canadian Social History.
AS/HIST 4530 6.0 The Development of Toronto.
AS/HIST 4550 6.0 Ontario in the Twentieth Century.
AS/POLS 3110 3.0 Process of Urban Politics I: Institutions and Power.
AS/POLS 3115 3.0 Process of Urban Politics II: Social Justice and Urban Ecology.
AS/POLS 4110 6.0/AS/SOSC 4720 6.0 Canadian Urban Policy.
AS/POLS 4650 3.0/GS/POLS5650 3.0 Provincial and Municipal Governments in Ontario.
AS/PSYC 3450 3.0 Environmental Psychology.
AS/PSYC 4090 6.0 Urban Psychology. (formerly AS/PSYC 4110E 6.0)
AS/SOSC 1730 6.0 Urbanization: A World Perspective.
AS/SOSC 1731 9.0 Cybercities: Community and Communication in Changing Urban Areas.
AS/SOSC 1740 9.0 Development of Urban Economies: Comparing Canada and the Third World.
AS/SOSC 27109.0 (Core Course) City Lives and City Forms: An Introduction to Urban Studies.
AS/SOSC 2730 6.0 The Culture of Cities: Visual Journey Through Time and Space.
AS/SOSC 3250 6.0 Canadian Social History. (Same as AS/HIST 3530 6.0)
AS/SOSC 3290 6.0 The Regulatory Process in Canada.
AS/SOSC 3540 6.0 The Political Economy of Food.
AS/SOSC 37006.0 (Core Course) Urban Analysis.
AS/SOSC 3710 6.0 Theory and Practice of Urban Planning
AS/SOSC 3720 6.0 Visual Images in Social Inquiry.
AS/SOSC 3740 3.0 Special Topics in Urban Studies.
AS/SOSC 3760 6.0 Toronto: Urban Growth and Community.
AS/SOSC 3770 3.0 Housing Policy. (formerly AS/ SOSC 3740B 3.0)
AS/SOSC 3790 3.0 Gender and the City
AS/SOSC 47006.0 (Core Course) Urban Studies Seminar.
AS/SOSC 4710 6.0 Urban Field Experience.
AS/SOSC 4720 6.0 Canadian Urban Policy.
AS/SOCI 3420 6.0 Population and Society. AS/SOCI 3430 6.0 Race and Ethnic Relations. AS/SOCI 3620 6.0 Formal Organizations. AS/SOCI 3830 6.0 Sociology of Urban Life. AS/SOCI 4120 6.0 Social Organization and Urban Culture.
AS/SOCI 4430 3.0 Canada and Refugees.

## Optional Atkinson College Courses in Urban Studies:

Note: For a list of Atkinson courses which are degree credit exclusions, students should consult the degree credit exclusion/equivalent tables in the Lecture Schedule or the departmental/ divisional supplemental calendars.
Note: Faculty of Arts Urban Studies majors may not take AK/URST 24106.0 for degree credit (Degree credit exclusions: AS/SOSC 2700 6.0, AS/SOSC 2710 6.0, AS/SOSC 2720 6.0)

AK/ECON 3640 6.0 Urban Economics.
AK/GEOG 3400 6.0 Geographical Study of Populations.
AK/GEOG 3430 6.0 Urban Geography.
AK/GEOG 3510 6.0 Conservation and Urbanization.
AK/GEOG 4130 6.0/AK/URST 41306.0 Planned Communities.
AK/GEOG 4180 6.0/AK/URST 41806.0 Advanced Urban Geography.
AK/HIST 3100M 6.0/AK/URST 3490 6.0 The History of Toronto.
AK/URST 2420 6.0 Introduction to Planning Concepts and Methods.
AK/URST 3420 6.0 Recent Urban Development In Ontario.
AK/URST 3430 6.0 The Nature of Urban Population.
AK/URST 3440 6.0 Evolution of Urban Places.
AK/URST 3480 6.0 Urban Planning and Practice.
AK/URST 3490 6.0/AK/HIST 3100M 6.0 The History of Toronto.
AK/URST 3500 3.0 Urban Residential Design.
AK/URST 3510 3.0 Canadian Housing Policy.
AK/URST 4180 6.0/AK/GEOG 41806.0
Advanced Urban Geography.

## Optional Faculty of Environmental

Studies Courses in Urban Studies:
EN/ENVS 2200 3.0 Foundations of Human Settlements and Population.
EN/ENVS 3220 3.0 Urban Sustainability.
EN/ENVS 4161 3.0 New Social Movements.
EN/ENVS 4210 3.0 World Population Issues and Problems.
EN/ENVS 4220 3.0 Urbanization in Developing Countries.

## General Certificate in Urban Studies:

All Faculty of Arts students in an Honours programme have the opportunity to earn a certificate in Urban Studies if they complete 24 approved Urban Studies credits (4 full course equivalents) with a cumulative GPA of 5.0 (C+). Course requirements for the certificate are:
a) AS/SOSC 2710 9.0 City Lives and City Forms: An Introduction to Urban Studies.
b) 18 additional credits (3 full course equivalents) from among the courses recognized as satisfying the degree requirements in Urban Studies. At least 6 credits must be at the $4000-$ level. A course completed for major 1 (other discipline) and which is also an Urban Studies option cannot be counted for both requirements, i.e. students may choose to use this course toward any one discipline only.
c) An advising appointment with an Urban Studies faculty member teaching in one of the core courses.

## Vanier College - Arts

Academic Programme Office:
238 Vanier, (416) 736-5191
College Master:
Helen Doan
Academic Advisor:
Paul Swarney

Note: Not all courses will necessarily be offered in any given year; for details of courses to be offered, consult the supplementary calendar, available in the Academic Programme Office.

## 1000-Level Courses

Listed below are the 1000 -level and 2000 -level 9 credit Foundations courses which are part of the Faculty of Arts General Education requirement. These courses introduce students to interdisciplinary study and emphasize critical thinking, reading, and writing skills at the university level, and reflect the academic mandate of the College.
Students enrolling in Vanier College Foundations courses, in either the Division of Humanities or the Division of Social Sciences, will be members of Vanier College with access to academic advising, orientation programmes, social and co-curricular events.

AS/HUMA 1100 9.0 Worlds of Greece and Rome. A study of the classical world with a view to understanding the origin and evolution of some of the literary, philosophical, and political ideals of ancient Greece and Rome. Materials for this study will be drawn from Greek and Roman literature in translation, with illustration from the plastic arts.
Degree credit exc/usion: AS/HUMA 1100 6.0.
AS/HUMA 1110 9.0 Greek and Biblical Tradition. The stories, symbols, and myths of Greek and Biblical literature have provided the basic images for Western society's interpretation of itself and its experience. An examination of Greek and Biblical traditions which inform personal and community life today.
Degree credit exclusion: AS/SOSC 1110 6.0.
AS/HUMA 1120 9.0 Medieval Civilization. An investigation of the culture of medieval western Europe, tracing its values, aesthetics, and habits of perception. Plastic arts and architecture, epic, romantic and lyric prose and poetry, theology, and historical documents illustrate forms of thought and expression.
Degree credit exc/usion: AS/HUMA 1120 6.0.
AS/HUMA 1130 9.0 The Renaissance. This course explores the European Renaissance as a form of civilization. It treats literature, music, philosophy, religion, political theory, and the plastic arts, and seeks to make clear the ideas, values, and habits of mind which gave unity to an epoch in Western history.
Degree credit exclusion: AS/HUMA 1130 6.0.
AS/HUMA 1610 9.0 The Art of Writing. A course on the nature and evolution of European, British and American writing through the modern period.
Degree credit exclusion: AS/HUMA 1610 6.0.
AS/HUMA 1840 9.0 Truth, Order and Meaning. Major works of literature, philosophy, religion, and science since the Renaissance are read and discussed in a search for the distinctively human.
Degree credit exclusion: AS/HUMA 1840 6.0.

AS/HUMA 1915 9.0 Animals and the Imagination. From antiquity to the present, the animal world has been strongly reflected in Western literature. The course presents a cross-cultural examination of the depiction of animals in Western literature and culture (especially the English, North American, German, and Russian traditions).
Degree credit exclusion: AS/HUMA 1500C 6.0.
AS/HUMA 2110 9.0 Egypt in the Greek and Roman Mediterranean. An examination of Egypt and Egyptians in the imagination and History of the cultures of the Greek and Roman Mediterranean.

AS/HUMA 2800 9.0 Introduction to the Study of Religion. This course places the classic expressions of religion in their social and cultural contexts. It employs different humanistic and social science disciplinary tools and deals with important methodological questions in the study of religion.
Degree credit exclusions: AS/HUMA 28006.0 and AS/SOSC 2600 6.0.
Cross-listed to: AS/SOSC 2600 9.0.
AS/HUMA 2830 9.0 The Founders of Christianity. This course raises questions such as: what was it like to be a Christian living in the first century? Was "Christianity" a single movement or many? How did the new faith relate to the Jewish communities of the Roman world? Who became Christians and why? How were particular expressions of Christianity conditioned by local factors? We shall consider in turn the first three generations (roughly AD 30 to 125).
Degree credit exclusion: AS/HUMA 2830 6.0.
AS/HUMA 2850 9.0 The Jewish Experience: Symbiosis and Rejection. Jewish-Gentile relationships through the ages as an exercise in acculturation. The course will consider Hellenistic, medieval, and modern periods, with special emphasis on modern Europe and Israel.
Degree credit exc/usion: AS/HUMA 2850 6.0.
AS/HUMA 2830 9.0 The Founders of Christianity. An introduction to the literature and history of the early Christian communities in Palestine, Syria, Asia Minor, Greece, and Rome. The varieties of early Christian thought and practice are examined in terms of their religious, cultural, and political contexts.
Degree credit exclusion: AS/HUMA 2830 6.0.
AS/HUMA 2900 9.0 Introduction to Creative Writing. This course is an introduction to the writing of poetry and prose fiction. The main focus of the course will be the student's own writing. Students will be expected to satisfy a number of assignments relating to both fiction and poetry.
Degree credit exclusion: AS/EN 2900 6.0.
AS/SOSC 1910 9.0 Education and Social Change. This course examines the development of educational systems against the background of a changing social structure. The question of "education for what" is stressed in understanding historical and
contemporary school systems. The course emphasizes the Canadian educational experience.
Degree credit exclusion: AS/SOSC 1910 6.0.
AS/SOSC 2600 9.0 Introduction to the Study
of Religion. Please see AS/HUMA 26006.0 for course description.
Degree credit exclusions: AS/HUMA 2800 6.0, AS/SOSC 2600 6.0.

Cross-listed to: AS/HUMA 2800 9.0.
AS/SOSC 2830 9.0 Music and Society. This course explores the relationship between the production and performance of music and its economic, social and political milieux. The first part of the course centres on the special theoretical perspective of the social sciences and the understanding it gives of the structure and content of music. The second part focuses on music in the modern world.

Degree credit exclusion: AS/SOSC 2830 6.0.

## Visual Arts - Fine Arts

Department Office: 232 Centre for Fine Arts, (416) 736-5187
Associate Professor and Chair of the Department:
K. Carpenter

University Professor:
J. Zemans

Professors:
T. Bieler, G.P.R. Métraux, M. Thurlby, A. Tomcik, T. Whiten

## Professor Emeritus:

V. Frenkel

Associate Professors:
C. Breeze, S.A. Brown, M. Davey, B. Dodge, J. Jones, H. LeRoy, D. Newgren, B. Parsons, R. Perry, D. Scadding, J. Schwarz

## Associate Professors Emeriti:

J. Dale, K. Hayano, G. Needham

## Assistant Professors:

J. Baturin, B. Grosskurth, N. Nicol, J. Peng,
K. Stanworth, P. Tenhaaf

## Programmes of Study

The programmes of study in the Department of Visual Arts are based on a creative interaction among the historical, practical and critical/ theoretical approaches to the visual arts that is possible only within a modern university. The department educates students within a humanistic context and provides a strong foundation for those who wish to pursue further study and professional involvement in the visual arts. It offers programmes leading to a BA Honours or BFA Honours degree. All Visual Arts majors must complete a minimum of 24 credits in the department at the 3000 or 4000 level. In addition to courses in Visual Arts, students are also required to take courses within the humanities, social sciences and natural sciences to complement and reinforce their studies. As a result, the Department of Visual Arts reserves the right to restrict students to 18 credits in Visual Arts in any given year. Of these 18 credits, only 12 credits
will be allowed in the studio area of the department in any given year.
Honours Minors in Visual Arts (Art History) and Visual Arts (Studio) are also available.

## Studio Art

Practicum courses have been designed to develop creative thinking and also to accommodate diverse backgrounds, abilities, and interests. Students concentrating in studio may work in drawing, painting, sculpture, printmaking, photography, or new media.
Studio students are recommended to:
a) take FA/VISA 2620 6.0 Modern Art: 1750 to the Present during the course of their studies;
b) successfully complete no fewer than 12 credits in two-dimensional and 6 credits in three-dimensional studio art.
Note: Course numbers whose second digit is 0 normally represent studio work.

## Art History

Courses in art history are designed primarily for students whose major interest is the history of art or whose Honours programme includes the history of art as one of its elements, and for other students majoring in the fine arts. Enrolment for students in other disciplines who wish to take any of these courses as electives may be accepted either with the stated prerequisites or with the approval of the instructor.
Students intending to continue their studies beyond the undergraduate level in art history are advised that most graduate schools require reading facility in modern languages. Students concentrating in this area are urged to include in their course of study at least one foreign language at the earliest possible time.
Some courses may use a title variance to indicate different course content within the same area of study. Courses may be organized in a geographical, chronological or thematic basis. Students should check with the department for more detailed course descriptions in any given year.

## Visual Arts Practicum Courses

Note: Not all courses listed are necessarily offered every year.

FA/VISA 1060 6.0 Introductory Photography. The use of photographic equipment is introduced in conjunction with historic and contemporary technique in shooting and processing. Emphasis begins with the camera and the process of fine art printing and then moves on to the craft of shooting, processing and printing as well as matting and mounting. Discussions inform student production, while individual and group critiques develop alternative approaches to the media. Compulsory supplementary fees apply. A 35 mm or twin-lens reflex camera with a light meter and safety equipment are required.
Degree credit exclusions: FA/VISA 2061 3.0, FA/VISA 2062 3.0, AK/VISA 2360 6.0.

FA/VISA 2000 3.0 Special Options: Practicum. In any given year one or more courses involving non-traditional or traditional approaches or techniques in the making of art may be offered. A materials fee may be required.

FA/VISA 2021 3.0 Painting. Aesthetics and techniques are examined through the study of various traditions and approaches in painting. Visual vocabulary and formal composition are developed through practical application and critical appraisal. Contemporary art concerns are discussed in slide presentations.
Note: Also available to non-majors.
FA/VISA 2022 3.0 Painting. Subject matter and its attendant meaning are addressed through the application of direct and indirect methods of painting. This is achieved through diverse sources of imagery, including photography. The development of twentieth-century painting is examined in slide presentations.
Note: Also available to non-majors.
FA/VISA 2031 3.0 Sculpture. Formal principles are developed in conjunction with personal concepts employing both additive and subtractive processes to make the finished sculpture. Techniques include modelling in clay and plaster and carving in wood and stone. The history of sculpture is examined in slide talks. Compulsory and optional materials fee and damage deposit apply. Mandatory safety equipment required.
Note: Also available to non-majors.
FA/VISA 2032 3.0 3-Dimensional Construction. Projects focus on the threedimensional construction process using materials such as plaster/clay, wood, steel and found objects. The theory and practice of twentiethcentury constructed sculpture is also examined through discussions and slide presentations. Compulsory and optional materials fees and damage deposit apply. Mandatory safety equipment required.
Note: Materials may vary depending on the instructor.

FA/VISA 2033 3.0 Clay Modelling and Plaster Casting. Through a combination of slide lectures and studio practice, students are introduced to the historical tradition and the contemporary theory and practice of clay modelling over an armature and the transformation of the modelled object into a plaster casting through the waste mould process. Compulsory and optional materials fees and damage deposit apply. Mandatory safety equipment required.
Note: Also available to non-majors.
FA/VISA 2041 3.0 Visual Language. The elements and principles comprising a visual language are examined and explored on the twodimensional level through various projects. The visual language developed is equally applicable to design and studio oriented projects and investigations. For students not majoring in Design, compulsory and voluntary supplementary fees apply. Required course for foundation studies in Design. Note: Available to non-majors by permission of the course director. Students
should have basic computer literacy skills as defined by the Faculty of Fine Arts. (Same as FA/ YSDN 1001 3.0.)

FA/VISA 2044 3.0 Design and Image. The process of creating representational, graphic and abstract images in the context of visual communication design is examined. Different methods of generating and manipulating images are investigated. Consideration is given to form and content of images as well as to their potential for the communication of ideas. The skills developed are equally applicable to design and studio oriented projects. For students not majoring in Design, compulsory and voluntary supplementary fees apply. Required course for foundation studies in Design. Note: Available to non-majors by permission of the course director. Students should have basic computer literacy skills as defined by the Faculty of Fine Arts.(Same as FA/YSDN 1002 3.0.)
Prerequisite: FA/VISA 20413.0 or FA/YSDN 10013.0 with a grade of $C+$ or better, or permission of the course director.

FA/VISA 2051 3.0 Film/Performance/ Installation. New media are introduced alone or in combination and may include film, video, audio, computer-generated imagery, performance and installation. Emphasis is placed on film, performance and installation works through a combination of hands-on technical workshops, individual and group projects, theoretical and technical readings. Optional materials fees and damage deposit apply.

FA/VISA 2053 3.0 Crossing Boundaries. An introduction to interdisciplinary studio practice. Performance art, image and text and video art are examined in relation to mass media, ideology, identity and social concerns. Studio projects encourage individual creative exploration while emphasizing a grounding in visual language, narrative structures and semiotics. Technical workshops include an introduction to Adobe Photoshop. Compulsory materials fee applies.

FA/VISA 2054 3.0 Introduction to Electronic Media. Video, audio and the computer are introduced as media for artmaking. Conceptual approaches to working with electronic media are explored by students through hands-on technical workshops, individual and group projects, and theoretical and technical readings.
Degree credit exclusion: FA/VISA 2052 3.0.
FA/VISA 2055 3.0 Time-based Art. Basic concepts about the relation between image, sound and time are explored through individual and group projects and readings. These explorations focus on time-based media, either used directly in students' work or as an influence on work.
Degree credit exclusion: FA/VISA 2051 3.0.
FA/VISA 2061 3.0 Photography. The use of photographic equipment is introduced in conjunction with historic and contemporary techniques in shooting and processing. Emphasis is on the functions of the camera and the process of fine art printing. Critiques and discussions inform student production. Compulsory materials fee applies. 35 mm camera and mandatory safety equipment required.

Corequisite: FA/VISA 2062 3.0.
Degree credit exclusions: FA/VISA 1060 6.0, AK/VISA 2360 6.0.

FA/VISA 2062 3.0 Photography. The use of photographic equipment is introduced in conjunction with historic and contemporary techniques in shooting and processing. Emphasis is on the craft of shooting, processing and printing and includes matting and mounting, toning and handcolouring. Individual and group critiques develop alternative approaches to the media. Compulsory materials fee applies. 35 mm camera and mandatory safety equipment required.
Prerequisite: FA/VISA 20613.0 or permission of the instructor.
Degree credit exclusions: FA/VISA 1060 6.0, AK/VISA 2360 6.0.

FA/VISA 2071 3.0 Introduction to Printmaking. Participants will receive a grounding in the ideas and aesthetics which inform contemporary print media in addition to an understanding of a range of print methodologies. These may include monoprint techniques, relief processes, and basic etching or screen printing. The purpose is to expand creative potentials by overcoming aesthetic, technological, and conceptual hurdles. Compulsory materials fees apply. Mandatory safety equipment required.

FA/VISA 2072 3.0 Printmaking: Screen Printing \& Relief. Participants develop print capabilities by working with processes and methodologies which are pertinent for both contemporary print making and for mixedmethod practices, with the intention of exploring beyond their own developing aesthetic vocabulary. Projects are adapted to a combination of either screen printing and etching or screen printing and relief. Compulsory materials fee. Mandatory safety equipment is required.

FA/VISA 2081 3.0 Drawing. Formal drawing concerns, emphasizing perception, proportion and structure, are examined in relation to a variety of subject matter, including the figure. Various techniques and materials are used. Creative processes are developed through historical, aesthetic and psychological issues.
Note: Also available to non-majors.
FA/VISA 2082 3.0 Drawing. An emphasis is placed on the development of imagery from a number of sources. Various materials and techniques are used. Critiques and discussions inform personal growth.
Note: Also available to non-majors.
FA/VISA 3000 3.0/6.0 Special Options: Practicum. In any given year, one or more courses involving non-traditional or traditional approaches or techniques in the making of art may be offered by the studio area of the department. Materials fee may be required.
Prerequisite: Third- or fourth-year standing and permission of the course director.

FA/VISA 3010 6.0 Feminisms: Women, Art and Culture. Studio practice combined with lectures and seminars to address the relationship of women to art specifically and to culture and society generally. Contemporary debate on issues such as race, class and gender is examined in relation to artistic theory and practice. Students are encouraged to develop individual and collaborative works in a variety of media, including photography, text, painting, performance, video and film. Technical workshops and guidance are incorporated into the course as required. Optional materials fees apply.
Prerequisite: Successful completion of foundation studies or permission of the instructor.

FA/VISA 3020 6.0 Painting. A studio course emphasizing various modern concepts in painting. Problems presented are designed to be as flexible as possible, challenging the student's creative expression. Individual work space is assigned to each student; therefore enrolment is limited. Note: Students are expected to work on their own outside scheduled class time.
Prerequisite: Successful completion of foundation studies including 6 credits in painting at the 2000-level with an average grade of $B$ or better, or permission of the instructor.

FA/VISA 3023 6.0 Computer Imaging for Artists. Conceptualization, planning and manipulation of images on the computer as they pertain to contemporary art practices including drawing, painting and printmaking. Investigation of the creative advantages and disadvantages inherent in the operation language of the computer. Explorations are intended for application to traditional and nontraditional surfaces.
Prerequisite: Successful completion of foundation studies with an average grade of $C+$ or better or permission of the course director.

FA/VISA 3030 6.0 Sculpture. This course permits the student to progress from a general understanding of sculptural concepts and media to more complex sculptural problems. Compulsory materials fees apply. Mandatory safety equipment required.
Prerequisite: Successful completion of foundation studies including 6 credits in sculpture at the 2000-level with a grade of C+ or better in each course, or permission of the instructor.

FA/VISA 3050 6.0 Interdisciplinary Studio. The emphasis in the course is on the shaping of concepts and how to manifest them through art. Students are asked to become aware of cultural assumptions and preconceived ideas and to develop beyond their present preconceptions. New ends may also be sought through known processes - film, video, performance, creative writing, etc. - as well as through unfamiliar processes of the students' own devising, presented seminar-fashion. Optional damage deposit applies.

Prerequisite: Successful completion of foundation studies, including 6 credits in new media with an average grade of $C+$ or better, or permission of the instructor.

FA/VISA 3051 6.0 Electronic Time and Space. Advanced electronic media techniques are introduced, including analog and digital video, multi-media formats, and use of the Internet. Concepts related to the impact of new technologies on the cultural environment are addressed, in individual and group projects as well as in readings.
Prerequisite: Successful completion of foundation studies, 6 credits in new media including FA/VISA 20523.0 or FA/VISA 2054 3.0 with an average grade of $C+$ or better, or permission of the instructor.

FA/VISA 3052 6.0 Video Art. A range of video art practices including video installation, media performance art, narrative structures and new challenges in documentary are examined. Technical workshops are given in combination with seminars and discussion exploring the history of video art, creative concepts and theory. Practical experience is gained in production planning and techniques, editing in digital or tape formats. Students are introduced to a range of themes explored by contemporary video artists which critique cultural assumptions including race, racism and representation; gender and the body; queer identity; ideology and popular culture. A $\$ 30$ materials fee is required.
Prerequisite: Successful completion of foundation studies, including 6 credits in new media with an average grade of $C+$ or better, or permission of the instructor.

FA/VISA 3060 6.0 Photography (Silver). Advanced photography dealing with the fine print. Compulsory materials fees and damage deposit apply. Mandatory safety equipment required.
Prerequisite: Successful completion of foundation studies, including FA/VISA 1060 6.0, or FA/VISA 20613.0 and FA/VISA 2062 3.0, with an average grade of C+ or better, or permission of the instructor.

FA/VISA 3061 6.0 Historical Processes of Photography. A course employing historical processes to make photographic images. Compulsory materials fees and damage deposit apply. Mandatory safety equipment required.
Prerequisite: Successful completion of foundation studies, including FA/VISA 1060 6.0, or FA/VISA 20613.0 and FA/VISA 2062 3.0, with an average grade of C+ or better, or permission of the instructor.

FA/VISA 3063 6.0 Photographic Explorations. This course will investigate mixed method photo-based practices. It addresses the necessary interplay of creative problem solving, conceptual thought, social and political theory, and the evolution of electronic and digital technologies in contemporary art practice.

Prerequisite: FA/VISA 10606.0 with a grade of C+ or better, or FA/VISA 20613.0 and FA/ VISA 20623.0 with an average of C+ or better, or permission of the course director.

FA/VISA 3070 6.0 Printmaking. This course hones emerging printmaking skills and develops a greater understanding of the options available in contemporary practice. The intention is to provide a better understanding of the range of traditional print practices including advanced screenprinting, relief processes and etching. Lithography and mixed-method practices are also covered in detail. Compulsory materials fees. Mandatory safety equipment required.
Prerequisites: FA/VISA 20713.0 and FA/VISA 20723.0 with a grade of $C+$ or better in each, or permission of the instructor.

FA/VISA 3073 6.0 Print Explorations. Print explorations works with a cross section of print and mixed-method practices that recognize the necessary interplay of conceptual thought, creative problem solving, contemporary art and social theory, and the evolving technologies involved in contemporary art practice. Continuing to expand on the notion of the print as the most likely outcome, participants have significant opportunities to investigate computer resources for image creation/modification/generation. Research, demonstrations and lectures are provided in print and other facilities. Creative problem solving and alternative forms of production in addition to competence in ideas and technologies are our primary concerns.
Prerequisites: FA/VISA 20713.0 and FA/VISA 20723.0 with a grade of C+ or better in each, or permission of the course director.

FA/VISA 3080 6.0 Drawing. The object of this course is to give order to the acts of seeing and thinking. The student is required to select information from the phenomenal world so as to become capable of differentiating between the perceived and the known.
Prerequisite: Successful completion of foundation studies, including FA/VISA 2081 3.0 and FA/VISA 20823.0 with an average grade of C+ or better, or permission of the instructor.

FA/VISA 3081 6.0 Investigative Methods, Resource Development and Notation. An examination and elucidation of the concerns of form as they relate to studio practice in drawing so as to provide a grounding in the understanding, use and exercise of basic systems of visual research and concept development.
Prerequisite: Successful completion of foundation studies, including FA/VISA 2081 3.0 and FA/VISA 20823.0 with an average grade of C+ or higher, or permission of the course director. Degree credit exclusion: FA/ VISA 3000C 6.0.

FA/VISA 3110 6.0 Historical Techniques and Materials of the Artists. An intensive study of the media and the methods employed by artists throughout history. There are four units of study in the course: drawing,
printmaking, painting, and sculpture, which are examined in a series of lectures, studio, experimentation, demonstrations, and gallery visits. Compulsory materials fee applies.
Note: It is strongly recommended that students have taken at least 6 credits in studio and 12 credits in art history before enrolling in this course

FA/VISA 4000 3.0/6.0 Special Options: Practicum. In any given year, one or more courses involving non-traditional or traditional approaches or techniques in the making of art may be offered by the studio area of the department. Information on specific offerings will be available from the department each year.
Note: A materials fee may be required.
Prerequisite: Third or fourth-year standing and permission of the course director.

FA/VISA 4020 6.0 Painting. An advanced studio seminar, with emphasis on a self-directed programme in which students begin to formulate their own objectives. Individual work space is assigned to each student; therefore enrolment is limited. Six hours.

Note: Students are expected to work on their own outside scheduled class time.
Prerequisite: FA/VISA 30206.0 with a grade of $B$ or better, or permission of the instructor.

FA/VISA 4030 6.0 Sculpture. Advanced personal year-long projects in sculptural media. Compulsory and optional materials fees apply.
Prerequisite: FA/VISA 30306.0 with a grade of $C+$ or better, or permission of the instructor.

FA/VISA 4050 6.0 Interdisciplinary Studio. An advanced studio seminar involved with the shaping of individual concepts through experimental work in film, video, performance, and publications. Through independent work, students develop a heightened consciousness of their work and its implications. The evolution and final form of the work depends on the bringing into form of the individual's idea. Optional materials fees apply.
Prerequisite: FA/VISA 30506.0 with a grade of $C+$ or better, or permission of the instructor.

FA/VISA 4060 6.0 Photography. Further development of advanced photography, dealing with the fine print, or historical processes. Compulsory materials fees apply. Mandatory safety equipment required.
Prerequisite: FA/VISA 30606.0 or FA/VISA 3061 6.0 with a grade of $C+$ or better, or permission of the instructor.

FA/VISA 4070 6.0 Printmaking. This course allows students to further refine skills and develop a greater understanding of the options available in contemporary practices including cross-over methodologies and areas such as digital technologies. It is a course about ideas as much as it is a course about methods or practices. Progression through the course is on a contract basis. Contracts are points of departure to be expanded upon. They are not limitations to creative potentials or to aesthetic and philosophic evolutions. Compulsory materials fees apply. Mandatory safety equipment required.

Prerequisite: FA/VISA 30706.0 with a grade of C+ or better, or permission of the instructor.

FA/VISA 4080 6.0 Drawing. The focus of this course is intention. Emphasis is given to notation and its subsequent understanding. The aesthetic experience is examined as it relates to the creative process. The bias of the course is the intelligent development of intention as it imparts information and provides the transcendental experience.
Prerequisite: FA/VISA 30806.0 with a grade of $C+$ or better, or permission of the instructor.

FA/VISA 4090 6.0 Advanced Studio Practice. A study programme for highly motivated students in a studio discipline. Individualized studio research is conducted within a context of selected seminars, guest speakers, gallery tours, peer exchange and regular individual meetings with a faculty member. In any given year, one or more themes provide a focus for intensive study. Selected topics may vary from year to year. Note: Supplemental fees are charged in studio areas where such fees are normally applied.
Prerequisite: Third or fourth year standing and completion of at least 6 credits in studio at the 3000-level with a grade of B or better.

FA/VISA 4091 3.0/6.0 Independent Studies: Studio Art. An individualized study programme for highly motivated students in their final year of study who wish to pursue specific and intensive independent projects under the supervision of a faculty member on topics not available in other courses in the department. No more than one independent study course may be taken in any given year. Supplementary fees are charged in studio areas where such fees are applicable.

Prerequisite: A 4000-level studio practicum in the media area being proposed, an overall major average of $B_{+}$, and permission of the department. Note: Applications are available in the spring for the following academic session. Applications must include written support of faculty supervisor prior to submission to the department for approval.

## Visual Arts Studies Courses

FA/VISA 1000 3.0 Critical Issues in the Studio. This course introduces students to visual, conceptual and theoretical language as it relates to studio practice. Ideas are examined through various disciplines from different points of view. Core course for first-year foundation studies in Visual Arts. Note: FA/VISA 10403.0 may be taken as an alternative to this core course requirement. Also available to non-majors.
Degree credit exclusion: FA/VISA 1040 3.0.
FA/VISA 1040 3.0 Critical Issues in Design. An introduction to the cultural, practical, technological and contextual issues facing designers today by examining works and readings from our day in the various fields of Design. Required course for foundation studies in Design. Also available to non-majors. Note: FA/ VISA 10003.0 may be taken as an alternative to this core course requirement. Students should have basic computer literacy skills as defined by the Faculty of Fine Arts. (Same as FA/YSDN 1101 3.0)

Degree credit exclusions: FA/YSDN 1101 3.0, FA/VISA 10003.0 and the former FA/VISA 2047 3.0.

FA/VISA 1110 6.0 Introduction to Western Art. Fundamentals of western art history, visual analysis and selected cultural and philosophical themes in the development of human expression in the arts. The emphasis is on the chronological and thematic development of western European and some North American art with a view to assessing and understanding the history of artistic creativity and its many manifestations.

## Prerequisite: None.

FA/VISA 1340 6.0 The Art of Asia. A survey of the art of India, China and Japan, with special emphasis on the informing religious traditions.
Prerequisite: None.
FA/VISA 2110 6.0 Introduction to the History of Western Architecture. A
chronological study of the theory, practice and development of architecture from ancient Greece to the twentieth century, based on the detailed examination of individual buildings.

Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 2520 3.0 Greek Art and Architecture. A study of the art of Greece in all media (vase painting, sculpture, architecture) from its origins in Aegean times through the Hellenistic period. Works of art are set in their philosophic, literary and dramatic context, and their social and economic background are considered. Extensive use of Toronto-area museum collections is included.
Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 2530 3.0 Roman Art and Architecture. A survey of the art of the Roman Republic and Empire from its origins in Etruscan times through Constantine. Works of art are set in their context of Latin literature, both poetry and rhetoric; and the social and economic development of the Republic and Empire are studied as a parallel manifestation. Extensive use of Toronto-area museum collections is included.
Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 2540 6.0 Medieval Art. A survey of the arts of architecture, sculpture, painting and the so-called minor arts from early Christian times to ca. A.D. 1400.
Prerequisite: FA/VISA 1110 6.0, any course in the history, philosophy or literature of the Middle Ages, or permission of the course director.

FA/VISA 2550 6.0 Introduction to Medieval Architecture. A selective study of major medieval churches, circa 313-1500, in a cultural and technological context. Each building is examined in light of the demands of the patrons, and the practical design and technological skills of the master masons and artists. The aims are to understand why and
how each edifice was created and what it meant to society, and to equip students with the archaeological skills necessary to read medieval buildings.
Prerequisite: None.
FA/VISA 2560 6.0 Renaissance and Baroque Art. An examination of the art of Northern and Southern Europe from the early fifteenth century to the mid-eighteenth century. (Same as AS/HUMA 2140 6.0.)
Prerequisite: FA/VISA 1110 6.0, any first-year Humanities course, or permission of the course director.

FA/VISA 2620 6.0 Modern Art: 1750 to the Present. A survey of modern art and western visual culture from the mid-eighteenth century to the present, with emphasis on European and North American developments in art and architecture. (Same as AS/HUMA 2170 6.0.) Prerequisite: None.

FA/VISA 2680 3.0 Contemporary Art. An introduction to art in North America and Europe since World War II, which includes film, video and performance art as well as the more traditional media. Examination of the theoretical issues involved in contemporary art as well as study of the achievements of individual artists and groups. Visits to galleries in Toronto and Buffalo are an essential part of the course.

Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 2910 6.0 History of Design. Functional objects, past and present, and their relationship to the process of design, conditions of the time, the problems met, important influences and the importance to our time are examined. The primary focus is from the industrial revolution to today with required reading and much critical looking at our own environment. Required course for Design Major. (Same as FA/YSDN 2102 6.0.)
Prerequisite: FA/VISA 10403.0 (FA/YSDN 1101 3.0) or FA/VISA 10003.0 or permission of the Course Director.

Degree credit exclusion: the former FA/VISA 3910 6.0.

FA/VISA 3001 3.0 Critical Issues in the Studio II. This course further expands students' awareness of critical debates in contemporary art practice. It focuses on how artists contextualize their own work in relation to key areas of contemporary thought.

Prerequisite: Successful completion of 1000and 2000-level studies and practicum requirements for the BFA stream, or permission of the course director for nonmajors.

FA/VISA 3110 6.0 Historical Techniques and Materials of the Artists. An intensive study of the media and the methods employed by artists throughout history. There are four units of study in the course: drawing, printmaking, painting, and sculpture, which are
examined in a series of lectures, studio, experimentation, demonstrations, and gallery visits. Compulsory materials fee applies.
Note: It is strongly recommended that students have taken at least 6 credits in studio and 12 credits in art history before enrolling in this course.

FA/VISA 3341 6.0 The Art of India. A survey of the painting, sculpture and architecture of India, from the Indus Valley Civilization to modern times; the informing religions of Buddhism and Hinduism are also examined in some detail. Special emphasis is placed on Buddhist and Hindu iconography. (Same as AS/HUMA 3410 6.0.)

## Prerequisite: None.

FA/VISA 3343 3.0 The Art of China. A chronological survey of the visual arts of China with an emphasis on painting and sculpture. Oriental art, as it relates to religion and philosophy, is also discussed, as well as occasional forays into Chinese poetry.

## Prerequisite: None.

FA/VISA 3344 3.0 The Art of Japan. A
thematic survey of the visual arts of Japan with an emphasis on painting and sculpture. Oriental art, as it relates to religion and philosophy, is also discussed, as well as occasional forays into Japanese poetry.

## Prerequisite: None.

FA/VISA 3350 3.0 Native Art of the Americas: North America. An introduction to the native art and architecture of North America. Lectures concentrate upon a descriptive survey of the major culture areas and seminars are devoted to an in-depth exploration of special topics.
Prerequisite: Second-year art history survey course or permission of the course director.

FA/VISA 3540 3.0 Studies in Medieval Art and Architecture. A study of one period or subject in the art of the medieval era. Selected topics vary from year to year.
Prerequisite: FA/VISA 25406.0 or permission of the course director.

FA/VISA 3560 3.0 Studies in Renaissance and Baroque Art. Selected problems in painting, sculpture and/or architecture from the Renaissance and Baroque periods. Selected topics vary from year to year.
Prerequisite: FA/VISA 25606.0 or permission of the course director.

FA/VISA 3580 3.0 Studies in the Art and Architecture of Italy. Considerations of selected topics in the painting, sculpture, and/ or architecture of Italy. Selected topics vary from year to year.
Prerequisite: FA/VISA 25606.0 or permission of the course director.

FA/VISA 3620 3.0 Studies in Nineteenth Century Art. Selected topics in the painting, sculpture and architecture of the nineteenth century with emphasis on European developments. Selected topics vary from year to year and have included:
A. Realism and Impressionism
B. Romantic Art

Prerequisite: FA/VISA 26206.0 or permission of the course director.

FA/VISA 3680 3.0 Studies in Modern Art. Selected aspects of modern painting, sculpture, and architecture concentrates on problems of the late nineteenth and twentieth centuries. Topics dealing with European, Canadian and/or American art are studied. Selected topics vary from year to year and have included:
B. Representation, Modernity and Identity
C. Abstract Expressionism and Contemporary European Movements
D. Canadian Art Outside Quebec: 19401980
K. Expressionism and NeoExpressionism
M. Representations of the Gendered Self

Prerequisite: FA/VISA 26206.0 or permission of the course director.

FA/VISA 3720 6.0 Canadian and American Art. A survey of North American art. Architecture, painting and sculpture are considered although special emphasis may be placed at the discretion of the course director.
Prerequisite: FA/VISA 26206.0 or permission of the course director.

FA/VISA 38003.0 or FA/VISA 38206.0 Special Options: Studies. In any given year, one or more courses directly related to the study of art history or theory may be offered. Selected topics vary from year to year.
Prerequisite: Permission of the course director.

FA/VISA 3830 3.0 Aspects of Portraiture. The artistic theory, psychology, and development of portraiture in the West from Roman times to the portrait photograph, with emphasis on portraits after 1400. Lectures, discussions, and student presentations.
Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 3840 3.0 Aspects of Modern Portraiture. A lecture survey course with frequent periodic discussions on the topic of portraiture, group-portraiture, and selfportraiture from the beginning of the 18th century to the present in Western art (Europe and North America). Emphasis is on individual artists as well as the formulae and contexts of portrait-representation with a view to outlining how modern and contemporary portraiture draws on the traditions.
Prerequisite: FA/VISA 1110 6.0, FA/VISA 2560 6.0, FA/VISA 2620 6.0, or permission of the course director.

FA/VISA 3930 6.0 History of Photography. A survey of the history of photography as an art form in relation to the other arts from early experiments in the medium to contemporary work.
Prerequisite: FA/VISA 11106.0 or permission of the course director.

FA/VISA 3950 3.0 Aspects of Architecture in the West. The three components of architecture - structure, form and function - are studied both chronologically and thematically with emphasis on the role of the architect. Extensive use of modern and contemporary structures and building sites is included.
Prerequisite: An introductory art history course or permission of the course director.

FA/VISA 4100 6.0 Independent Studies: Art History. A study programme for highly motivated students in an art history discipline. This course gives an individual the opportunity to pursue a specific and intensive personal study which must be arranged in consultation with the instructor.
Prerequisite: Limited to students who have completed a fourth-year course in art history; must have permission of the directing faculty member. Applications may be obtained from, and must be submitted to, the Department of Visual Arts in the spring for the following academic session.

FA/VISA 4310 6.0 Art Criticism: History, Theory, Practice. The historical development of art criticism with an emphasis upon the practice of art criticism and critical writing on art today.
Prerequisite: Fourth-year standing or equivalent, or permission of the course director.
Note: FA/VISA 26206.0 provides useful background material.

FA/VISA 4340 6.0 Asian Art. An in-depth seminar dealing with special areas in Indian, Chinese, or Japanese art. (Same as AS/HUMA 4400 6.0).
Prerequisite: 6 credits in Asian art at the 3000level.

FA/VISA 4370 6.0 Signs and Symbols in Western Art. An introduction to the pictorial language of attributes, emblems and other identifiers, as developed in classical, Christian and secular art and architecture. Lectures, discussions and student presentation.
Prerequisite: Permission of the course director.
FA/VISA 4540 6.0 Problems in Ancient or Medieval Art and Architecture. A seminar concentrating on areas and problems of ancient or medieval art and architecture. In any given year, the course focuses upon a particular problem, theme, or specified chronological period for intensive study.
Prerequisite: FA/VISA 25406.0 or FA/VISA 3540 3.0 or permission of the course director.

FA/VISA 4580 3.0 Problems in the Art and Architecture of Italy. Seminar concentrating on areas and problems in the history and theory of Italian painting, sculpture, or architecture of the fourteenth, fifteenth, and sixteenth centuries. In
any given year, the course focuses upon a particular problem, theme, or specified chronological period for intensive study.
Prerequisite: FA/VISA 25606.0 and permission of the course director.

FA/VISA 4620 3.0 Major Movements in Modern Art. A seminar on a single major movement in art in the early twentieth century. Teaching is based upon discussion, reports, and presentation of papers. Topics vary from year to year, and have included:
B. Fin-de-siecle: Post-Impressionism, Symbolism, Art Nouveau
F. The Artist and the Museum
H. Dada and Surrealism

Prerequisite: Permission of the course director.
Note: Reading knowledge of French is recommended.

FA/VISA 4640 3.0 Problems in Contemporary Art. Seminars consider special problems in the visual arts of this century.
Prerequisite: FA/VISA 26206.0 and preferably one other course in nineteenth or twentieth century art, or permission of course director.

FA/VISA 4720 3.0 Problems in Canadian Art. Seminars on selected topics in historical or contemporary Canadian painting, sculpture, and architecture. Topics vary from year to year and have included:
B. Quebec Art: 1935-1975
E. Canadian Nineteenth-Century Architecture
Prerequisite: FA/VISA 26206.0 or permission of the course director.

FA/VISA 4800 3.0, FA/VISA 4820 6.0 Special Options: Studies. In any given year, one or more courses directly related to the study of art history or theory may be offered.
Prerequisite: Permission of the course director.

## Winters College - Fine Arts <br> Office: <br> 269 Winters, (416) 650-8199 <br> Academic Advisor:

Bruce Powe
Note: Not all courses are necessarily offered in any given year. For details of courses offered, consult the Academic Programme Office.

FA/WC 1940 6.0 Creative Writing: The Process of the New. This course is an innovative combination of creative writing studios and general lecture. This format is to both promote and inspire creativity, and to encourage and develop an imaginative and intellectual perception of the fine arts, literature and the media in the 20th century. (Same as FA/INFA 1940 6.0).

## School of Women's Studies/ École des études des femmes

School of Women's Studies Office/Bureau de l'École des études des femmes:
S711 Ross Building, (416) 650-8144
Web Address:
www.yorku.ca/dept/wsyork
Associate Professor and Chair of the School/Professeure agrégée et directrice de l'École études des femmes:
V. Lindström

Director of Undergraduate Programmes/ Directrice des programmes de premier cycles:
K. McPherson

Programme Office/Bureau du programme :
160 York Hall, (416) 487-6828
Programme Coordinator at Glendon/ Coordonnatrice du programme à Glendon:
G. Mianda

Faculty Members with Academic Links to the School of Women's Studies/Membres du corps enseignant ayant des liens académiques avec l'école d'Etudes des femmes
Distinguished Research Professor/ Professeure-chercheure éminente :
L. Code

University Professor/Professeure de
I'Université :
S. Wilkinson

Professors/Professeures :
S. Ehrlich, E. Greenglass, J. Hellman,
R. King, C. Lipsig-Mummé, M. Luxton,
M. Mossman, D. Pepler, S. Pyke, P. Rogers, G. Wekerle

Professors Emeriti/Professeures émerites:
N. Black, S. Zimmerman

Associate Professors/Professeures agrégées:
V. Agnew, A.-M. Ambert, L. Anderson, S. Arend, I. Bakker, B. Bradbury, P. Bradshaw, L. Briskin, H. Campbell, D. Cooper-Clark, J. Couchman, T. Das Gupta, C. Dent, B. Diamond, L. Erwin, B. Evans, G. Feldberg, L. Gauthier, M. Gewurtz, M. Gilbert, W. Giles, B. Godard,
L. Green, C. Haig-Brown, B. Hanson, P. Head, D. Heller, L. Higgins, M. Kadar, D. Khayatt, M. Ladd-Taylor, J. Lewis, V. Lindström, B. Longfellow, A. Mandel, N. Mandell, P. McDermott, K. McPherson, Arun Mukherjee, J. Newton, S. Odom, L. Peake, V. Preston, A. Propper, N. PupoBarkans, I. Rajagopal, E. Reiter, L. Ripley, H. Rosenberg, L. Sanders, S. Schecter, R. Schlesinger, A. Shteir, M.-F. Silver, P. Stewart, Y. Szmidt, A Testaferri, S. Whitworth, C. Zimmerman

Associate Professor Emeritus/Professeure agrégée émerite :

## E. Hine

Assistant Professor/Professeures adjointes:
D. Barndt, B. Cameron, C. Chataway, S. Chawla, E. Cohen, R. Cohen, J. Gibbons,
L. Gotell, T. Hyun, A. Li, G. Malszecki,
G. Mianda, H. Moghissi, Ananya Mukherjee,
A. O'Reilly, D. Orr, A. Pitt, B. Rahder, C. Sandilands, P. Wood

Associate Lecturer/Chargée de cours :
C. Wilson

## Women's Studies

Women's Studies is both a complement and a corrective to established fields at York and a new academic discipline of its own. Until recently, both the humanities and the social sciences reflected predominantly male perspectives. Women have been largely invisible in literature, art, history, philosophy, politics, social sciences and law. Through cross-cultural and disciplinary assessment, Women's Studies exposes misconceptions about women expressed through myth, ideologies, teachings and writings. It replaces negative cultural images of women with visions that reaffirm women's strength, capability and intelligence.
In December 1997, Women's Studies resources at York University were formally linked under one administrative structure -- the School of Women's Studies. The School of Women's Studies unites academic resources at York University in Women's Studies, bringing together the undergraduate and graduate programmes, the non-credit bridging programme and the Centre for Feminist Research/Le centre de recherches féministes à York.
A feature which distinguishes the Glendon Women's Studies Programme from the other two offered at York is its bilingual focus. Nonparallel courses are offered in both languages. As a result, a genuine dialogue develops between the approaches of anglophones and francophones to theory, philosophy, literature, legal structures and language.

## School of Women's Studies Courses of Instruction/École des études des femmes Description des cours

Note: Not all courses will necessarily be offered in any given year. Courses may be offered at Glendon or on the Keele Campus, during the day or in the evening. For information about specific offerings, or for a listing of other courses that count towards programme credit, please consult the School of Women's Studies Supplemental Calendar, available in Room S711, Ross Building, Keele Campus or 160 York Hall, Glendon College.

Note: For purposes of meeting programme requirements, all Foundations courses will count as 6 credits towards the major.

AS/WMST 2500 6.0 On Women: An Introduction to Women's Studies. This course explores the social, political and economic institutions which shape women's lives, and introduces key theoretical approaches within feminist scholarship to investigate specific feminist issues in areas such as women's writing, visual representations, family, race, sexuality, women and work.

Degree credit exclusions: AS/AK/GL/WMST 2510 9.0, AS/SOSC 2180 6.0, AS/SOSC 2180 9.0, AS/HUMA 2930 6.0, AS/HUMA 2930 9.0, GL/WMST 2950F 6.0, AKWMST 2000 6.0.
Cross-listed to: AK/GL/WMST 2500 6.0, GL/ SOSC 2950 6.0.

AS/WMST 2500 6.0 Femmes, savoirs et sociétés. Ce cours offre une étude pluridisciplinaire de 1) la structure sociale des positions accordées à la femme dans l'économie, le mariage, les professions médicales et légales; 2 ) les rôles que jouent la violence sexuelle, l'idéologie et le langage dans cette structure sociale; 3) les divers mouvements, théories et expressions artistiques féministes qui refusent cette structure.
Cours incompatibles: AS/AK/GL/WMST 2510 9.0, AS/SOSC 2180 6.0, AS/SOSC 2180 9.0, AS/HUMA 2930 6.0, AS/HUMA 2930 9.0, GL WMST 2950F 6.0, AKIWMST 2000 6.0.
Identique à GL/SOSC 2950 6.0, AK/GL/WMST 2500 6.0.

AS/WMST 2501 3.0 Language and Gender. This course explores the relationship between language and sex/gender systems from a feminist perspective. The main areas investigated are language and gender stereotypes; language, power and women's status; and male vs. female communicative style in different socio-cultural contexts.
Cross-listed to: AK/GL/WMST 2501 3.0, AS/ LING 2410 3.0, GL/SOSC 2900 3.0.

AS/WMST 2502 6.0 Western Feminism in a Cultural Context. This course explores feminist ideas in Western culture, and the contexts within which these ideas were produced. We concentrate on works by or about women who question the inferior positions of women in many dominant ideologies, and propose individual or collective solutions.
Degree credit exclusions: GL/WMST 2960E 6.0, GL/WMST 2970F 6.0, AS/AK/GL/WMST 2502 6.0.
Cross-listed to: AK/GL/WMST 2502 6.0, GL/ HUMA 2960 6.O.

AS/WMST 2502 6.0 Les écrits féministes à travers l'histoire occidentale. Ce cours présente et analyse dans leur contexte historique les arguments féministes en faveur d'une amélioration de la condition des femmes. Nous étudions des écrits des femmes, et à propos des femmes, qui questionnent les inégalités entre femmes et hommes, et qui en proposent des solutions individuelles ou collectives.
Cours incompatible: GL/WMST 2960E 6.0, GL/WMST 2970F 6.0, GL/HUMA 2970F 6.0, GL/FRAN 2970F 6.0, AS/AK/GL/WMST 2502 6.0.

Identique à AS/AK/WMST 2502 6.0.
AS/WMST 2503 6.0 Femmes francophones au Canada. Étude de la vie des femmes canadiennes françaises dans des régions différentes - le Québec, l'Ontario, le Manitoba et les Maritimes, utilisant des lettres, des
journaux intimes, des autobiographies. L'expérience individuelle sera examinée dans le context historique.
Cours incompatibles: GL/WMST 2011F 6.0, GL/WMST 2980F 6.0.
Identique à AK/GL/WMST 2503 6.0, GL/ HUMA 2980 6.0, GL/FRAN 2980 6.0.

AS/WMST 2504 3.0 Women and Education. This course critically explores gender patterns in the education process, including: the political economy of education, issues of inequality and access, and the gendered implications of different theories of learning and teaching styles.
Degree credit exclusions: GL/WMST 3960 3.0, GL/SOSC 3014B 6.0.
Cross-listed to: AK/GL/WMST 2504 3.0, GL/ SOSC 2600 3.0.

AS/WMST 2504 3.0 Les femmes francophone et l'éducation. Ce cours présente et analyse le rôle des femmes francophones au Canada en tant qu'étudiantes et en tant qu'enseignantes au sein des divers systèmes d'éducation depuis le 18 e siècle jusqu'à nos jours.
Cours incompatibles: GL/WMST 3930F 3.0, GL/WMST/SOSC 3980B 6.0, GL/SOSC 3014 6.0, GL/WMST 3960F 3.0, GL/WMST 3960F 6.0, GL/SOSC 3011F 3.0.

Identique à AK/GL/WMST 2504 3.0, GL/SOSC 2600 3.0.

AS/WMST 2510 9.0 On Women: An Introduction to Women's Studies. This course explores the social, political and economic institutions which shape women's lives, and introduces key theoretical approaches within feminist scholarship to investigate specific feminist issues in areas such as women's writing, visual representations, family, race, sexuality, women and work. (This course is affiliated with Founders College.)
Degree credit exclusions: AS/SOSC 2180 6.0, AS/HUMA 2930 6.0, GL/WMST 2950 6.0, GL/ SOSC 2950E 6.0 GL/SOSC 2950F 6.0, GL/ WMST 2950 6.0, AK/WMST 2000 6.0.
Cross-listed to: AK/GL/WMST 2510 9.0, AS/ HUMA 2930 9.0, AS/SOSC 2180 9.0.

AS/WMST 2801 6.0 Women's Lives Today: Issues and Experiences. This course uses interdisciplinary approaches to explore various dimensions of women's lives today including ecology, education, spirituality, health, and culture. The course will investigate, from both a humanities and social science perspective, the complexity of women's lives today.
Cross-listed to: AK/GL/WMST 2801 6.0, GL/ SOSC 2955 6.0.

AS/WMST 3500 6.0 The Meaning of Feminist Inquiry. This course examines the basic questions of feminist inquiry as they arise in theology, science, history, history of ideas, literature and the arts. It focuses in particular on how meaning is constructed in different discourses.
Degree credit exclusions: AK/WMST 3000 6.0.

Cross-listed to: AK/GL/WMST 3500 6.0, GL/ HUMA 3610 6.0.

AS/WMST 3501 6.0 Feminist Research Methods. This course examines methodological and qualitative issues related to doing feminist research in the Social Science disciplines, including: objectivity, standpoint theory, interdisciplinarity, feminist challenges to specific disciplines, inclusivity, methodological tools, and postmodernism. We also explore appropriate research.
Degree credit exclusions: AS/SOSC 3990U 6.0, AS/SOCI 4600 6.0, GL/WMST 3900E 6.0, AK/ WMST 4300 6.0.
Cross-listed to: AK/GL/WMST 3501 6.0, AS/ SOSC 3501 6.0, GL/SOSC 3604 6.0.

AS/WMST 3501 6.0 Méthodologies et recherches en études des femmes. Ce cours analyse les problèmes spécifiques que l'on doit surmonter lorsqu'on entreprend des recherches multidisciplinaires et interdisciplinaires en études des femmes. Le cours vise également à développer les méthodes de recherche requises par ces études.
Cours incompatibles: AS/SOCI 4600 6.0, GL/ WMST 3900 3.0.
Identique à AK/GL/WMST 3501 6.0, GL/SOSC 3604 6.0.

AS/WMST 3502 6.0 Diversities of Women: Gender, Race and Class in a Western Context. This course examines gender, race/ ethnicity and class as interacting social structures and lived experiences within a Western context. It reviews theories about how to understand these phenomena as well as issues affecting aboriginal, visible minority working-class, and lesbian women's lives.
Degree credit exclusions: AK/WMST 3020 6.0, AS/SOSC 3190B 6.0.
Cross-listed to: AK/GL/WMST 3502 6.0, GL/ SOSC 3602 6.0.

AS/WMST 3502 6.0 Rapports sociaux d'ethnicité et de sexe. Ce cours élabore sur les problématiques de l'identité ethnique et des rapports sociaux de sexe et tente, à la fois, d'analyser leur articulation et d'identifier leurs moments de rupture et de solidarité. Thèmes que seront abordés: Les rapports sociaux de sexe, l'ethnicité (race), l'immigration (en rapport avec les femmes), les femmes autochtones, le pouvoir, la solidarité féminine.
Cours incompatibles: AS/SOSC 3190B 6.0, GL/ WMST 3300F 6.0, AKWMST 3020 6.0.
Identique à AK/GL/WMST 3502 6.0, GL/SOSC 3602 6.0.

AS/WMST 3503 6.0 Contemporary Global Feminist Issues. This course reviews debates about the impact of colonization and development on women in a non-western context. It looks at how transformations in the global economy affect women's lives and how women organize globally and locally to empower themselves economically and politically.
Degree credit exclusions: AK/WMST 3010 6.0, GL/WMST 3665E 6.0.

Cross-listed to: AK/GL/WMST 3503 6.0, GL/ILST/ SOCI/SOSC 3665 6.0.

AS/WMST 3503 6.0 Femmes et mondialisation. Ce cours porte sur la situation des femmes dans un contexte de mondialisation. II traite de l'impact de la colonisation, de la modernisation sur les conditions de vie des femmes et analyse leur capacité à s'autoorganiser économiquement et politiquement.
Identique à AK/GL/WMST 3503 6.0, GL/SOCI/ SOSC 3665 6.0.
Cours incompatible: AS/AK/GL/WMST 35036.0 (English).

AS/WMST 3504 6.0 Women and Aging. This course analyses the experience of women as they move into old age. We analyse myths that surround the concept of old woman using story, biography, poetry and film. Topics include: sexuality beyond menopause; isolation and poverty; relationships between women; anger and creative energy; patterns of language and the effects of self-imposed silencing; the reevaluation of the crone.
Degree credit exclusions: AS/SOCI 4090P 3.0, AS/SOCI 4680 3.0, AK/WMST 3001K 3.0.
Cross-listed to: AK/GL/WMST 3504 6.0, GL/ HUMA 3604 6.0.

AS/WMST 3505 3.0 Gender and the City. This course examines the relationship between socially constructed gender relations and the changing nature and form of contemporary urban areas.
Cross-listed to: AK/GL/WMST 3505 3.0, GL/ SOSC 3617 3.0, AS/SOSC 3790A 3.0.

AS/WMST 3507 6.0 Les femmes et la santé. Sous une perspective historique et sociologique, ce cours aborde ces sujets: la santé physique et mentale des femmes, les traitements qu'elles reçoivent au sein de la profession médicale, leurs rôles en tant que guérisseuses au sein de cette profession.
Cours incompatibles: GL/WMST 3995E 3.0, GL/ WMST 3995 3.0, AS/AK/GL/WMST 3507 3.0.
Identique à GL/NATS 3995 6.0, GL/SOSC 3995 6.0, AK/GL/WMST 3507 6.0.

Ce cours ne satisfait pas aux exigences des sciences naturelles de la Faculté des Arts.

AS/WMST 3508 6.0 Mothering and Motherhood. This course examines motherhood as it is theorized and analysed in interdisciplinary feminist scholarship and as it is portrayed in women's fictional and autobiographical writings. The history, sociology, psychology, and politics of motherhood with emphasis on class, cultural and racial differences are investigated.
Degree credit exclusions: AK/WMST 3040 6.0, AK/WMST 3001N 6.0.
Cross-listed to: AK/GL/WMST 3508 6.0, AS/ HUMA 3960 6.0, GL/SOSC 3608 6.0.

AS/WMST 3509 6.0 Women Organizing. Women have a long tradition of organizing to expand their rights, resist oppression, challenge and defend traditional values, and to change their societies. This course documents and analyses
the patterns of women's activism using historical, cross-cultural and contemporary sources.
Degree credit exclusions: AS/SOSC 3990B 3.0.

Cross-listed to: AK/GL/WMST 3509 6.0, AS/ SOSC 3125 6.0.

AS/WMST 3510 6.0 Women and Work: Production and Reproduction. This course explores the conditions of women's work, paid and unpaid. The historical development of a sexual division of labour and the roles played by the family, employers, trade unions and government policy in the gendering of jobs is examined.
Cross-listed to: AK/GL/WMST 3510 6.0, AS/ SOSC 3130 6.0, AK/SOSC 3380 6.0, GL/ WKST 3610 6.0.

AS/WMST 3511 3.0 Women's Sexualities. This course examines the constructions of women's sexualities historically and currently. The influence of religion, medicine, law, media and the state are critically examined as are women's attempts to shape their own sexuality as heterosexuals, bi-sexuals and lesbians.
Degree credit exclusions: GL/WMST 3625E 6.0, GL/WMST 3625F 3.0, GL/WMST 3990E 6.0, GL/WMST 3990E 3.0, GL/SOSC 3990E 6.0, GL/SOSC 3990E 3.0, GL/SOSC 3990F 3.0, GL.SOSC 3990F 6.0, GL/SOSC 3016E 6.0, GL/WMST 3013 3.0, AS/AK/GL/WMST 35113.0 (French version).

Cross-listed to: AK/GL/WMST 3511 3.0, GL/ SOSC 3625 3.0.

AS/WMST 3511 3.0 Femmes, sexualités, pouvoir. Ce course examine les différents débats féministes actuels qui encadrent, et, à la fois, définissent la sexualité des femmes dans le milieu canadien d'aujourd'hui. Les lectures proposent d'analyser les structures socio-politique et économique qui influencent l'idéologie étatique à propos de la sexualité féminine.
Cours incompatibles: GL/WMST 3990E 3.0, GL/WMST 3990F 3.0, GL/SOSC 3990E 3.0, GL/WMST 3625F 3.0, GL/WMST 3625E 3.0, GL/SOSC 3625E 3.0, GL/WMST 3013E 3.0, GL/SOSC 3016 3.0.
Identique à AK/GL/WMST 3511 3.0, GL/SOSC 3990 3.0.

AS/WMST 3512 6.0 Gender and the Law: International Perspectives. This course takes a comparative look at gender within the context of legal systems, with a focus on common law jurisdictions. Topics such as marriage breakdown, abortion, and sexual assault are examined from both a Canadian and international perspective.
Cross-listed to: AK/GL/WMST 3512 6.0, GL/ ILST 3600 6.0.

AS/WMST 3513 6.0 Les femmes et la loi. Ce cours examine les questions relatives au sexe à l'égard des lois fédérales et ontariennes: la constitution canadienne, la nouvelle loi sur la famille; le droit criminel, le contrôle législatif du travail, la loi et la profession médicale, la loi et l'hébergement.

Cours incompatibles: GL/WMST 3975F 6.0. Identique à AK/GL/WMST 3513 6.0, GL/SOSC 3975 6.0.

AS/WMST 3514 6.0 Les femmes immigrées au Canada. Ce cours combine une analyse de la situation des femmes immigrées au Canada avec un travail sur le terrain, stratégie qui permet aux étudiant(e)s d'examiner les orientations théoriques portant sur le statut des femmes immigrées par rapport aux situations actuelles.
Cours incompatibles: AK/SOSC 3370 6.0, GL/ WMST 3695F 6.0.
Identique à AK/GL/WMST 3514 6.0, GL/SOSC 3695 6.0.

AS/WMST 3515 3.0 Renaissance Women. This course explores the images of women, their activities, and their artistic and literary production in Europe between 1400 and 1600. Materials analyzed include historical, theological, medical, literary and artistic works by and about individual women and groups of women.
Degree credit exclusions: GL/HUMA 3230B 3.0, GL/WMST 3945B 3.0.

Cross-listed to: AK/GL/WMST 3515 3.0, GL/ HUMA 3945 3.0.

AS/WMST 3515 3.0 La femme à la Renaissance. Les images, les activités, et les expressions de la femme en Europe entre 1400 et 1600 . Les documents étudiés comprennent des oeuvres historiques, théologiques, médicales, littéraires et artistiques réalisées par et sur des femmes ou groupe de femmes.
Cours incompatibles: GL/HUMA 3230B 3.0, GL/WMST 3945B 3.0.
Identique à AK/GL/WMST 3515 3.0, GL/ HUMA 3945 3.0.

AS/WMST 3516 3.0 Women and Politics. This course examines women's political position in advanced capitalist countries. The focus is historical, theoretical and issueoriented. Issues examined include the politics of racism, sexuality, reproduction, pornography within formal political structures and community organizing.
Degree credit exclusions: GL/POLS 4960E 6.0, GL/WMST 4960E 6.0.

Cross-listed to: AK/GL/WMST 3516 3.0, AS/ POLS 3450 3.0, AS/SOSC 3170 3.0.

AS/WMST 3800 3.0/3800 6.0 Special Topics. The School of Women's Studies will occasionally offer 3 or 6 credit special topics courses. Specific course proposals will be submitted as required and course description will be published annually in the School of Women's Studies Supplemental Calendar.

AS/WMST 4500 6.0 Feminist Theories. This course engages with theoretical debates within feminism. Sections may focus on: jurisprudence, pedagogy, postmodernism, psychoanalysis, praxis/agency, or identity and difference. The course is informed by a range
of political positions and addresses the complexity of differences based on race, class, ability and sexual identity.
Degree credit exclusions: AK/WMST 3030 6.0, AS/SOCI 4600 6.0, GL/WMST 4685 6.0.
Cross-listed to: AK/GL/WMST 4500 6.0, AS/ SOSC 4160 6.0, GL/SOSC/SOCI 4685 6.0.

AS/WMST 4501 6.0 Une analyse comparative des théories féministes. Ce cours propose une analyse comparative des différentes théories féministes et offre une méthode d'exploration et de compréhension de la division des sexes dans notre société. II analyse également les présupposés et les implications socio-politiques et idéologiques de ces théories divergentes.
Cours incompatibles: GL/WMST 4685B 6.0, GL/WMST 4685F 6.0, GL/SOSC 4300B 6.0.
Identique à AK/GL/WMST 4501 3.0, GL/SOSC 4685 6.0, GL/SOCI 4685 6.0.

AS/WMST 4502 6.0 Violence Against Women. This course examines gender-based violence in its many forms, such as domestic violence, state violence, legal violence (punishment) and cultural violence (rituals), and analyses the global context in which gender and power are constructed and violence against women is perpetuated and tolerated.
Degree credit exclusions: AK/SOSCI 3850 6.0, AS/SOCI 4830 6.0, AS/SOCI 4810 6.0, GL/ WMST 3965F 3.0, GL/SOSC 3965F 3.0, AK/ WMST 3001L 6.0, GL/WMST 4600E 6.0.
Cross-listed to: AK/GL/WMST 4502 6.0, GL/ SOSC 4602 6.0.

AS/WMST 4502 3.0 La femme et la violence. Ce cours examine la violence faite à la femme, les différentes formes dans lesquelles cette violence s'exprime et les diverses analyses féministes qui essaient de comprendre du point de vue théorique, sociopolitique et psychologique les causes et les effets de cette violence.
Cours incompatibles: GL/SOSC 3400 3.0, GL/ SOSC 3014 3.0, GL/WMST 3965F 3.0, GL/ WMST 3965E 3.0, GL/WMST 4600E 6.0, GL/ WMST 4011E 6.0 (FW94), GL/SOSC 4011E 6.0 (FW94), AK/SOCI 3850 6.0, AS/SOCI 4810 6.0.
Identique à AK/GL/WMST 4502 3.0, GL/SOSC 4602 3.0.

AS/WMST 4503 3.0 Politics of the Canadian Women's Movement. This course examines the politics of the Canadian women's movement, emphasizing its historical and contemporary development. We examine the suffrage movement, the inter-war years, and the development of second wave feminism in light of Canada's unique political structures and current challenges to feminism.
Cross-listed to: AK/GL/WMST 4503 3.0, AS/ POLS 4155 3.0, GL/POLS 4603 3.0.

AS/WMST 4504 6.0 Groupes de femmes et travail communautaire en Ontario français. Ce course permettra aux étudiantes d'acquérir une perspective théorique et une formation de travail pratique et communautaire
auprès de groupes de femmes francophones en Ontario. Ce cours se divise en deux parties: l'une théorique, l'autre d'insertion et supervision.
Cours incompatible: GL/WMST 4200F 6.0.
Identique à AK/GL/WMST 4504 6.0, GL/WKST
46046.0 . 4604 6.0.

AS/WMST 4505 6.0 Family Issues: Feminist Perspectives. This course explores feminist attempts to understand families within an international context. It reviews theoretical debates around key feminist issues including the history of changing family forms, paid and unpaid labour, sexuality, violence, and crosscultural understandings of family.
Degree credit exclusions: AK/SOSCI 4350 3.0, AK/SOCI 4290 3.0, AK/SOCI 4060 3.0, AK/ SOSC 4170 6.0, AS/SOCI 3660 6.0, AK/SOCI 2520A 6.0, AK/SOCI 3860 6.0, ASISOCI 4090B6.0.

## Cross-listed to: AK/GL/WMST 4505 6.0.

AS/WMST 4506 3.0 Colonialisms and Women's History. This course draws on recent feminist studies to examine the history of the relations of race, gender and sexuality forged in selected contexts of European occupation and conquest and on the related reshapings of Western understandings of race, class and gender.
Cross-listed to: AK/GL/WMST 4506 3.0, GL/ HIST 4606 3.0.

AS/WMST 4507 3.0 Writing Women's History. This course examines how feminist issues and theories have influenced the ways women's history has been written, the questions asked and the themes studied. Students are encouraged to develop the conceptual and methodological skills to undertake their own historical research.
Degree credit exclusion: GL/WMST 4670E 3.0.

Cross-listed to: AK/GL/WMST 4507 3.0, GL/ SOSC 4670 3.0, GL/HIST 4670 3.0.

AS/WMST 4550 6.0 Women and Aesthetics: The Canadian Context. This course focuses on women's creative works, both literary and artistic and the social and cultural contexts of these creative productions. The course explores the connection between social reality, personal experience and women's creativity in the Canadian context.
Degree credit exclusions: GL/WMST 3210E6.0, GL/WMST 3940E 6.0, GL/WMST 4610E 6.0.
Cross-listed to: AK/GL/WMST 4550 6.0, GL/ HUMA 3940 6.0.

AS/WMST 4551 6.0 Women and Aesthetics: Modern European Contexts. This course focuses on women's creative works, both literary and artistic, and the social and cultural contexts of their creative productions. Literary and artistic works by women from Germany, Italy, Spain, Scandinavian countries and Eastern Europe are examined.
Cross-listed to: AK/GL/WMST 4551 6.0, GL/ HUMA 4651 6.0.

AS/WMST 4800 3.0/4800 6.0 Special Topics in Women's Studies. The School of Women's Studies will occasionally offer special topics courses. Specific course descriptions will be available annually in the School of Women's Studies supplemental calendar.

AS/WMST 4801 3.0/4801 6.0 Directed Reading. This course is designed to enable honours students to undertake a detailed independent study of their own choosing. The student will undertake intensive reading and writing in one or two selected areas.

AS/WMST 4801 3.0/4801 6.0 Travaux individuels. Les travaux individuels permettent d'approfondir un sujet de son choix sous la direction d'un membre du corps enseignant du Collège. Les propositions doivent être acceptées par la professeure désignée ainsi que la coordonnatrice du programme.

AS/WMST 4802 3.0 Gender and International Relations. This course explores theoretical and empirical issues raised by the consideration of gender in international relations (IR). We examine theoretical concerns raised by feminists and feminist IR scholars, and issues including: gender and the environment, militarism, international political economy and human rights.
Cross-listed to: AK/GL/WMST 4802 3.0, AS/ POLS 4245 3.0.

## Departmental and Divisional Courses in Women's Studies

For an up-to-date listing of courses in other departments and divisions that count for programme credit, please refer to the School of Women's Studies annual Supplemental Calendar.


[^0]:    Cross-listed to: AS/HUMA 3781 6.O.

