

Religious Studies **RELS**

Instruction offered by members of the Department of Religious Studies in the Faculty of Humanities.

Department Head – E. Segal

Religious Studies Table of Streams

For use in selecting courses to meet stream requirements:

Western Religions	Nature of Religion	Eastern Religions
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Religious Studies 399, 495, 577, 590 and 595 will be designated as Western, Eastern or Nature of Religion depending on the topic covered. Religious Studies 377 is not counted in any of the three streams.

Note: To obtain "consent of the Department" to take a course without the specified prerequisite, the student should consult with the instructor of the course. If the instructor is not available, then the student can consult with the Department Head.

Note: Religious Studies 333, 339, 341, 349 are senior level courses with no prerequisite.

Junior Courses

Religious Studies 201 **H(3-0)**

World Religions - Western

Introduction to Judaism, Christianity and Islam.

Religious Studies 203 **H(3-0)**

World Religions - Eastern

Introduction to Eastern religions such as Jainism, Hinduism, Buddhism, Confucianism and Taoism.

Religious Studies 205 **H(3-0)**

The Nature of Religion

An introduction to the academic study of religion with particular emphasis on the nature of religion

and the relationship of religion to contemporary thought and culture.

Religious Studies 207 **H(3-0)**

Classical Hebrew I

Classical or Biblical Hebrew language; the development of ability in the critical reading of ancient texts. No attempt will be made to provide any competence in medieval or modern Hebrew.

Religious Studies 209 **H(3-0)**

Classical Hebrew II

Continuation of Religious Studies 207.

Prerequisite: Religious Studies 207.

Religious Studies 211 **H(3-0)**

Sanskrit I

Classical Sanskrit language; the development of ability in the critical reading of ancient Hindu or Buddhist texts.

Religious Studies 213 **H(3-0)**

Sanskrit II

Continuation of Religious Studies 211.

Prerequisite: Religious Studies 211 or consent of the Department.

Religious Studies 215 **H(3-0)**

Tibetan I

Classical Tibetan language; the development of ability in the critical reading of ancient Bon and Buddhist texts. Religious Studies 217 H(3-0)

Tibetan II

Religious Studies 217 **H(3-0)**

Tibetan II

Continuation of Religious Studies 215.

Prerequisite: Religious Studies 215 or consent of the Department.

Religious Studies 219 **H(3-0)**

Classical Chinese for Religious Texts I

Introduction to Classical Chinese language, with emphasis on developing the ability to read ancient Chinese religious texts.

Religious Studies 221 **H(3-0)**

Classical Chinese for Religious Texts II

A continuation of Religious Studies 219.

Prerequisite: Religious Studies 219 or consent of the Department.

Religious Studies 273 **H(3-0)**

Introduction to the Bible

Selected readings and topics from the Bible in English translation. The course introduces the Bible's role as a mythological foundation in Western culture. Topics include: human origins, value structures, world views; mythological and cultural evolution in the ancient Mediterranean culture that produced the Bible.

Religious Studies 277 **H(3-0)**

Quranic and Classical Arabic I

An introduction to the script, vocabulary, and grammar of Quranic and Classical Arabic.

Prerequisite: Religious Studies 201 or 347, or consent of the Department.

Note: Not open to students with credit in Religious Studies 355.

Religious Studies 279 **H(3-0)**

Quranic and Classical Arabic II

Continuation of Religious Studies 277.

Prerequisite: Religious Studies 277 or consent of the Department.

Senior Courses

Religious Studies 301 **H(3-0)**

Studies in the Hebrew Bible/Old Testament

An introduction to the critical study and reading of the books of the Hebrew Bible/Old Testament in English translation. The course focuses on the Bible as religious literature.

Prerequisite: Religious Studies 201 or 273, or consent of the Department.

Religious Studies 303 **H(3-0)**

Introduction to Hinduism

The history, textual traditions, schools and sectarian traditions of Hinduism.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 305 **H(3-0)**
(Greek and Roman Studies 305)

Greek and Roman Religion

A survey of religious beliefs and practices in the pre-Christian Greek and Roman World.

Prerequisite: One of Greek and Roman Studies 205, 209, Religious Studies 201, 205, or 273, or consent of the Department.

Religious Studies 309 **H(3-0)**

Religious Experience

A study of philosophical and psychological theories of the nature and function of religious experiences and an introduction to a variety of religious experiences, which may include theophany, mysticism, enlightenment, conversion, and guilt.

Prerequisite: One of Religious Studies 201, 203, 205, 273 or consent of the Department.

Religious Studies 313 **H(3-0)**

Early Buddhism

Buddhist developments from Buddha to Mahayana.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 315 **H(3-0)**

Islamic Mysticism

Principal figures, ideas, and writings of Islamic mysticism in the early, medieval, and modern periods.

Prerequisite: Religious Studies 201 or 273 or 357 or consent of the Department.

Religious Studies 319 H(3-0)

Vajrayana Buddhism

The development of the Vajrayana tradition in India, Tibet, China, Japan and in the West from medieval times to the present.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 323 H(3-0)

Mahayana Buddhism

Mahayana developments in India and China or Tibet or Japan.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 325 H(3-0)

Female Saints and Sacred Figures in Eastern Religions

Feminine images in eastern religions such as goddesses, women as saintly persons, the Ultimate in female symbols.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 327 H(3-0)

Tibetan Religious Traditions

The religious developments in Tibet, with emphasis on religious history, literature and philosophy and their contemporary implications.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 329 H(3-0)

Buddhism in East Asia

The history, doctrines, literature and leading figures of Buddhism in China and Japan.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 331 H(3-0)

Religious Perspectives on Suffering

An examination of various religious perspectives on the nature and causes of human suffering.

Prerequisite: One of Religious Studies 201, 203, 205, 273 or consent of the Department.

Religious Studies 333 H(3-0)

Religious Perspectives on Death and Afterlife

An examination of various religious perspectives on the nature of death and life after death.

Religious Studies 335 H(3-0)

Feasts, Fasts and Rites of Passage: Religious Rituals and Practices

A major form of religious expression is the various practices and rituals performed by individuals and the community. Various ritual theories and approaches will be examined along with different examples of religious ritual expressions.

Prerequisite: One of Religious Studies 201, 203, 205, 273, or consent of the Department.

Religious Studies 337 H(3-0)

Daughters of Eve: Female Images and Figures in Western Religion

A study of selected female images and important female figures in Judaism, Christianity and/or Islam.

Prerequisite: Religious Studies 201 or consent of the Department.

Religious Studies 339 H(3-0)

Transformations of Religion in Africa

Nature of religion through a study of religious transformations in Africa.

Religious Studies 341 H(3-0)

New Religious Movements

An examination of the beliefs, practices and developments of new religious movements of both Eastern and Western origins (e.g. Krishna Consciousness, Transcendental Meditation, Unification Church, Children of God, etc.).

Religious Studies 343 H(3-0)

Religion and Social Morality

Critical examination of social theories of religion and religious perspectives on ethical issues of social, economic, and political consequence in contemporary cultures.

Prerequisite: Religious Studies 205 or consent of the Department.

Religious Studies 345 H(3-0)

God and Transcendence

Comparative and theoretical discussion of various traditions, Eastern and Western, regarding the object of religious belief and devotion.

Prerequisite: One of Religious Studies 201, 203, 205, or consent of the Department.

Religious Studies 347 H(3-0)

Scripture and Religions

Comparative study of selected scriptures in Eastern and Western religions to identify how scripture functions in a range of religious settings and to establish a basis for theoretical analysis of the nature of scripture.

Prerequisite: One of Religious Studies 201, 203, 205, 273 or consent of the Department.

Religious Studies 349 H(3-0)

Nationalism and Religion

The complex relationship between religion and nationalism. Topics may include the origin of apartheid in South Africa, Black Theology, the rise of the New Christian Right in America, Emperor Worship in Japan and the Muslim-Hindu relationship in India.

Religious Studies 353 H(3-0)

Islam in the Modern World

Reform, revivalist and sectarian movements and significant thinkers in Modern Islam.

Prerequisite: Religious Studies 201 or consent of the Department.

Religious Studies 357 H(3-0)

The Religious Civilization of Islam

A survey of the basic religious ideas, texts, figures, and practices in Islam, including their historical development.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Note: Not open to students with credit in Religious Studies 351.

Religious Studies 359 H(3-0)

East Asian Religious Traditions

The history, doctrines, literature and leading figures of traditions including Confucianism, Taoism and Shinto. Buddhism will not be examined in this course.

Prerequisite: Religious Studies 203 or consent of the Department.

Religious Studies 369 H(3-0)

Introduction to Judaism

An introduction to the major practices, beliefs, institutions and religious literature of the Jewish religion, as developed from antiquity to modern times.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Religious Studies 377 H(3-0)

Researching, Writing, and Thinking about Religion

Provides students with systematic instruction in research, writing, and the practice of critical analysis in the field of Religious Studies. Besides practical instruction, students will be introduced to a variety of theoretical approaches used in the academic study of religion.

Prerequisite: One of Religious Studies 201, 203, 205, or 273, or consent of the Department.

Note: Open only to Religious Studies minor, major, and honours students and students registered in combined programs with Religious Studies.

Religious Studies 379 H(3-0)

Eastern Religions in the West

Examines the historical emergence and contemporary manifestations within Western culture of Eastern religions such as Buddhism, Confucianism, Hinduism and/or Taoism.

Prerequisites: Religious Studies 203 and 341, or consent of the Department.

Religious Studies 381 H(3-0)

Women and Religion

An examination of the views on and participation of women in selected religious traditions.

Prerequisite: One of Religious Studies 201, 203, 205, 273 or any Women's Studies course or consent of the Department.

Religious Studies 383 H(3-0)

Origins of Christianity: 100 BCE-200CE

Study of formative Christianity in its political, social and religious contexts with particular attention to its origins within Second Temple Judaism.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Religious Studies 385 H(3-0)***Councils, Canons and Creeds: Christianity 200-800 CE***

Examination of social, economic, cultural, religious and political factors that influenced the evolution of early Christian identities as expressed through doctrine, rituals, practices, clerical structures and scripture.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Religious Studies 387 H(3-0)***Scholastics, Mystics and Reformers: Christianity 800-1600 CE***

An overview of medieval Christianity and of various sixteenth century Protestant and Catholic Reform movements.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Religious Studies 389 H(3-0)***Modern Christianity: 1600 - Present***

An overview of the Christian response to modernity, from the early modern and enlightenment periods through to the contemporary period.

Prerequisite: Religious Studies 201 or 273 or consent of the Department.

Religious Studies 391 H(3-0)***Intermediate Sanskrit***

Further development of reading skills through the study of selected religious texts.

Prerequisite: Religious Studies 213 or consent of the Department.

Note: Not open to students with credit in Religious Studies 409.

Religious Studies 393 H(3-0)***Intermediate Tibetan***

Further development of reading skills through the study of selected Buddhist texts.

Prerequisite: Religious Studies 217 or consent of the Department.

Note: Not open to students with credit in Religious Studies 411.

Religious Studies 395 H(3-0)***Intermediate Classical Chinese for Religious Texts***

Further development of reading skills through the study of selected religious texts.

Prerequisite: Religious Studies 221 or consent of the Department.

Religious Studies 397 H(3-0)***Religion and Science***

The relationship between religion and science with emphasis on contemporary discussions regarding the intersection of religious thought and theories in the natural sciences.

Prerequisite: Religious Studies 205 or consent of the Department.

Religious Studies 399 H(3-0)***Religion in Popular Culture***

The intersection of religion with popular culture is explored through specific topics.

Note: May be counted only once towards the major field requirements in Religious Studies.

MAY BE REPEATED FOR CREDIT

Religious Studies 401 H(3-0)***Studies in Biblical Hebrew Literature I***

Continued readings in the grammar and literature of classical Hebrew and the Hebrew Bible. Focuses on the study of classical Hebrew as a tool for the study of religion. Designed to meet the needs of Religious Studies majors.

Prerequisites: Religious Studies 209 and 301, or consent of the Department.

Religious Studies 403 H(3-0)***Studies in Biblical Hebrew Literature II***

Continued readings in the grammar and literature of classical Hebrew and the Hebrew Bible. Focuses on the study of classical Hebrew as a tool for the study of religion. Designed to meet the needs of Religious Studies majors.

Prerequisite: Religious Studies 401.

Religious Studies 417 H(2-1T)***Recent Religious Thought***

Detailed examination of a selected writer, topic, or intellectual current in recent religious thought. Possible topics include process thought, liberation theology, post-Holocaust theology, and existentialism.

Prerequisite: At least one 300-level Nature of Religion course (see box at beginning of Department offerings) or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 423 H(3-0)***Advanced Studies in Indian Religion and Philosophy***

Selected themes, movements and texts in Indian religion and philosophy (e.g. Bhakti, Islam in India, Yoga Sutras, philosophy of language).

Prerequisite: One of Religious Studies 311, 313, 321, 323 or consent of the Department.

Religious Studies 437 H(3-0)***Hermeneutics and Religion***

Significance of the hermeneutical tradition for an understanding of religious issues and traditions with attention to the thought of Schleiermacher, Dilthey, Husserl, Heidegger, Gadamer, and Ricoeur.

Prerequisites: Open to Religious Studies Major and Honours students who have completed Religious Studies 377 and one other 300-level Religious Studies course, or consent of the Department.

Religious Studies 439 H(3-0)***Advanced Studies in New Religious Movements***

Detailed study of selected topics in New Religious Movements.

Prerequisite: Religious Studies 341 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 441 H(3-0)
(Political Science 441)***Millenarian Movements***

A study of religious and political millenarianism. Persons such as Louis Riel, Thomas Muntzer, Karl Marx and William Aberhart. Movements such as cargo cults, nativism, Seventh Day Adventists, Jehovah's Witnesses, and Nichiren Shoshu Buddhism.

Prerequisite: Religious Studies 341, or Political Science 310, or consent of the Department.

Religious Studies 443 H(3-0)***Comparative Mystical Traditions***

An examination of experiences and beliefs of mystics in selected religious traditions as well as theoretical discussion of the nature of mysticism.

Prerequisite: At least one 300-level Nature of Religion course (see box at beginning of Department offerings) or consent of the Department.

Religious Studies 445 H(3-0)***Comparative Spiritual Disciplines***

A critical investigation of techniques (e.g., asceticism, meditation, ritual) prescribed in selected religions to promote spiritual transformation.

Prerequisite: Religious Studies 309 or 335 or consent of the Department.

Religious Studies 447 H(3-0)***Methodology in the Study of Religion***

A critical examination of various approaches used in the academic study of religion.

Prerequisites: Open to Religious Studies Major and Honours students who have completed Religious Studies 377 and at least one other 300-level Religious Studies course, or consent of the Department.

Religious Studies 449 H(2-1T)***The Rationality of Theism***

An examination of traditional and contemporary arguments for the rationality of theistic belief and recent critiques of the assumptions and aims of such efforts.

Prerequisite: Religious Studies 345 or Philosophy 331, or consent of the Department.

Religious Studies 451 H(3-0)***Advanced Studies in Hinduism***

In-depth study of the historical developments of Hinduism (Vedic, Classical, Medieval, Modern) in a seminar or independent study format.

Prerequisite: Religious Studies 303 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 453 H(3S-0)***Advanced Studies in Buddhism***

A seminar course that focuses on selected traditions, or philosophical or historical themes, such as Madhyamaka, Yogacara, T'ien T'ai, Hua Yen, Zen, Pure Land, Nyingma, Kargyud, Abhidharma, Tathagatagarbha, and Dhyana.

Prerequisite: One of Religious Studies 313, 323, 327, 329, or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 461 H(3S-0)

Advanced Studies in East Asian Religions

A seminar course that focuses on selected topics related to the Confucian, Taoist or Shinto tradition. Buddhism will not be examined in this course.

Prerequisite: Religious Studies 359 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 469 H(3-0)

Advanced Studies in Judaism

Selected topics in Jewish practices, institutions, beliefs and religious literature. Possible topics include: Jewish Movements of the Second Temple Era; Jewish Rituals and Observances; Midrash and Jewish Biblical Interpretation; Law and Religion in Judaism; Jewish Philosophy and Theology; Judaism in the Modern World; Kabbalah and Jewish Mysticism.

Prerequisite: Religious Studies 369 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 473 H(3-0)

Advanced Studies in Islam

Thematic considerations of topics, such as Islamic philosophy, mysticism, theology, or contemporary trends, based on primary sources. Although no knowledge of Arabic is required, students with backgrounds in Arabic will have the option of working with texts in their original languages.

Prerequisite: Religious Studies 315 or 353 or 357 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 477 H(3-0)

Further Studies in the Hebrew Bible/Old Testament

Selected readings, in English translation, from the three major divisions (Pentateuch, Prophets, and Writings) of the Hebrew Bible/Old Testament. Covers topics such as creation, miracles in Egypt, ark of the covenant, sacrifice, prophecies of the Bible, and biblical views of death and immortality.

Prerequisite: Religious Studies 301, or consent of the Department.

Religious Studies 479 H(3-0)

Contemporary Issues in Women and Religion

Examination of the religious views and evaluations of traditional religious structures by contemporary women writers such as E. Schüssler-Fiorenza, R. Gross, J. Plaskow, F. Memissi, K. Lekshe Tsomo, K. McCarthy Brown, and D. Williams.

Prerequisite: Religious Studies 381.

Religious Studies 483 H(3-0)

Advanced Studies in the Origins of Christianity

A thematic study of early Christian group formation, maintenance and self-definition represented in gospels, Pauline epistles and other selected resources from the first two centuries of the common era.

Prerequisite: Religious Studies 383 or consent of the Department.

Religious Studies 485 H(3-0)

Advanced Studies in Early Christianity

A thematic study of Christianity's emergence as a separate religion intended to provide students with an opportunity to explore specific topics such as the role of scripture, material culture or women in the formation of Christian religious identity.

Prerequisite: Religious Studies 385 or consent of the Department.

Religious Studies 487 H(3-0)

Advanced Studies in Medieval and Reformation Christianity

A thematic study of medieval and Reformation Christianity based on selected primary and secondary sources.

Prerequisite: Religious Studies 387 or consent of the Department.

Religious Studies 489 H(3-0)

Advanced Studies in Modern Christianity

A thematic study of modern Christianity based on selected primary and secondary sources.

Prerequisite: Religious Studies 389 or consent of the Department.

Religious Studies 491 H(3-0)

Readings in Eastern Religious Texts

Study of religious texts in original languages such as Sanskrit, Tibetan, Chinese or Japanese.

Prerequisite: Religious Studies 391, 393, 395, or consent of the Department.

MAY BE REPEATED FOR CREDIT

Religious Studies 577 H(2-1T)

Senior Project Seminar

Students will complete an independent research project on a topic within their area of concentration in Religious Studies and present their research in a seminar setting.

Prerequisites: Religious Studies 377 plus one full-course equivalent at the 400/500 level in Religious Studies, or consent of the Department.

Note: Open only to Religious Studies majors and students registered in joint programs with Religious Studies.

Religious Studies 590 F(0-3T)

Honours Thesis

Students compose a major research paper under the close supervision of a member of the Department and defend the thesis before an examining committee.

Prerequisites: Religious Studies 377 plus one full-course equivalent at the 400/500 level in Religious Studies, or consent of the Department.

Note: Open only to students registered in the Religious Studies Honours program.

Religious Studies 595 H(3-0)

Directed Reading in Religious Studies

Prerequisite: Consent of the Department.

MAY BE REPEATED FOR CREDIT

Graduate Courses

Religious Studies 601 H(3-0)

Studies in Western Religions

MAY BE REPEATED FOR CREDIT

Religious Studies 603 H(3-0)

Studies in Eastern Religions

MAY BE REPEATED FOR CREDIT

Religious Studies 605 H(3-0)

Studies in the Nature of Religion

MAY BE REPEATED FOR CREDIT

Religious Studies 681 H(3-0)

Specialized Studies in Western Religions

MAY BE REPEATED FOR CREDIT

Religious Studies 683 H(3-0)

Specialized Studies in Eastern Religions

MAY BE REPEATED FOR CREDIT

Religious Studies 685 H(3-0)

Specialized Studies in the Nature of Religion

MAY BE REPEATED FOR CREDIT

Religious Studies 701 H(3-0)

Method and Theory in the Study of Religion

MAY BE REPEATED FOR CREDIT

Religious Studies 703 H(3-0)

Advanced Analysis of Religious Claims

MAY BE REPEATED FOR CREDIT

Risk Management and Insurance RMIN

Instruction offered by members of the Haskayne School of Business.

Risk Management and Insurance Chairperson – A. Kleffner

Note: Students have the opportunity to take courses offered by the Haskayne School of Business without the stated prerequisites, with the written permission of the Associate Dean (Undergraduate Programs) upon the recommendation of the instructor of the course. However, should a student fail to achieve satisfactory standing in any course for which the stated prerequisite(s) is (are) lacking, he/she may be required to successfully complete the stated prerequisite(s) prior to being permitted to repeat the course.

Senior Courses

Risk Management and Insurance 317 H(3-0)
(formerly Risk Management and Insurance 375)

Introduction to Risk Management and Insurance

Covers risk management, economics of insurance, and Canadian life/health and property/liability insurance institutions. Both consumer and industry perspectives are provided.

Prerequisites: Admission to the Haskayne School of Business and second year standing or third year standing in the Actuarial Science program, or consent of the business school.

Risk Management and Insurance 439 H(3-0)
(formerly Insurance and Risk Management 439)**Life and Health Insurance**

Analysis of the need for life and health insurance. Types of policies, principles of rate making, underwriting, marketing, and claims management. Integration of life and health insurance into estate planning. Investment practices of insurers and their role in the financial services field.

Prerequisites: Third year standing in the Haskayne School of Business or third year standing in the Actuarial Science program.

Corequisite: Risk Management and Insurance 317 or Finance 479.

Risk Management and Insurance 449 H(3-0)
(formerly Insurance and Risk Management 449)**Employee Benefits and Social Insurance**

The nature of employee benefits as a major component of the compensation package. Group life and group health insurance, pensions and other retirement programs, workers' compensation, unemployment insurance, social security and other social insurance plans. Insurer group operations, reinsurance and the legal aspects of employee benefits and social insurance programs.

Prerequisite: Third year standing in the Haskayne School of Business or third year standing in the Actuarial Science program.

Risk Management and Insurance 459 H(3-0)
(formerly Insurance and Risk Management 459)**Managing Commercial Property and Liability Risks**

Examines risk management for commercial property and liability exposures. The first half of the course focuses on common property loss exposures that firms face and examines methods of handling such risks. The second half focuses on liability exposures of commercial enterprises, including premises and operations liability, product liability, employment practices liability and director's and officers' liability.

Prerequisite: Third year standing.

Corequisite: Risk Management and Insurance 317 or Finance 479.

Risk Management and Insurance 559 H(3-0)
(formerly Insurance and Risk Management 559)**Selected Topics in Risk Management and Insurance**

Combines a fundamental understanding of insurance and risk management with current issues confronting the insurance industry and risk managers. Topics include: enterprise risk management, the cost of risk, trends in insurance distribution, reinsurance and alternative risk financing methods, and environmental risk management.

Prerequisites: Risk Management and Insurance 317 and fourth year standing.

MAY BE REPEATED FOR CREDIT

Romance Studies ROST

Instruction offered by members of the Department of French, Italian and Spanish in the Faculty of Humanities.

Department Head – A.J. Wall

Junior Course**Romance Studies 299 H(3-1T)****Topics in Romance Culture**

France, Italy and Spain: cultures of the Mediterranean.

Senior Courses**Romance Studies 341 H(3-0)****Italian Literature of the Renaissance**

Major authors of the Italian Renaissance whose works have influenced artists and writers in England, France and Spain.

Note: This course is given in English and no knowledge of Italian is required.

Romance Studies 399 H(3-0)**The Romance Languages**

An introduction to the history and structure of the major Romance languages.

Romance Studies 409 H(1-2)**Introduction to Translation and Practice**

An introduction to translation theory and practice. Lectures will normally be given in English, with practical work in French or Spanish seminars. Format and content of course may vary from year to year.

Prerequisites: One of (a) French 317 or 320 or 321 plus two half-course equivalents in French at the 300 level; or (b) Spanish 303, 321 and 323; or (c) consent of the Department.

Note: May be counted as one of the required courses at the 400 level for French and Spanish Majors.

Russian RUSS

Instruction offered by members of the Department of Germanic, Slavic and East Asian Studies in the Faculty of Humanities.

Department Head - X-J. Yang

Note: Russian 317, 355, 357 and 359 are given in English and no knowledge of Russian is required. These courses do not count as prerequisites to other senior Russian courses.

Note: Consent of the Department can be received in lieu of a stated prerequisite when equivalent knowledge can be demonstrated.

Junior Courses**Russian 201 H(1-IT-1)****Introductory Russian**

Introductory course to Russian in its cultural context. The basic phenomena of Russian, the principles of language learning, strategies for observing and interpreting "cultural" phenomena.

Note: Not open to students with credit in Russian 205.

Russian 203 H(3-0)**Reading Russian**

A computer-based reading course. General strategies for the decoding of texts, introduction to basic text types and texts for analysis.

Prerequisite: Russian 201.

Note: Not open to students with credit in Russian 209.

Russian 209 H(3-2)**Russian I**

First semester of a three-semester sequence of four-skills language learning, covering the principal elements of modern Russian

Prerequisite: Russian 201 or 205.

Note: Not open to students with credit in Russian 203 or 207.

Senior Courses**Russian 301 H(3-1)****Russian II**

The second semester of a three-semester sequence of four-skills language learning, covering the principal elements of modern Russian.

Prerequisite: Russian 207 or 209.

Russian 303 H(3-1)**Russian III**

The third semester of a three-semester sequence of four-skills language learning, covering the principal elements of modern Russian.

Prerequisite: Russian 301.

Russian 311 Q(3-0)**Russian Information Sources**

Introduction to information sources, with a specific component of electronic resources, pertaining to Russian (Library; internet, e-mail in target language, electronic processing of cyrillic alphabet materials, including different codings).

Prerequisite: Russian 201 or consent of the Department.

Note: A basic familiarity with computers and electronic resources (such as the internet) is expected.

Russian 317 H(3-0)**Issues in Russian Civilization and Thought**

Major aspects contributing to the development of Russian civilization and thought.

Note: This course is given in English and no knowledge of Russian is required.

Russian 331 H(3-1)**Intermediate Russian I**

Strategies for accelerated proficiencies in the areas of vocabulary, the deciphering of written and oral texts and the relating of learned linguistic patterns to communicative contexts, with attention to appropriate discourse level in a variety of situations.

Prerequisite: Russian 303 or consent of the Department.

Russian 333 **H(3-1)**

Intermediate Russian II

A continuation of Russian 331.

Prerequisite: Russian 331.

Russian 355 **H(3-0)**

Russian Literature in Translation

Selected texts by author, genre or period designed to explore issues of significance in the context of Russian culture.

Note: This course is given in English and no knowledge of Russian is required.

Russian 361 **H(3-0)**

Russian Literature of the 19th and 20th Centuries

Overview of Russian literature of the 19th and 20th centuries in a historical perspective, with attention to issues of particular significance in Russian literary culture. Initial experience of literary analysis on the basis of diverse Russian -texts.

Prerequisites: Russian 303 and 355 or 317.

Russian 363 **H(3-0)**

Current Issues in Russian Culture

Selected significant issues in Russian culture, as manifested in written and/or oral texts, with particular attention to language function and usage.

Prerequisite: Russian 303.

MAY BE REPEATED FOR CREDIT

Russian 397 **H(3-0)**

Inter-Cultural Immersion Experience I

Independent study course. Project with inter-cultural theme, derived from an immersion experience, most likely abroad. Permission MUST be obtained before embarking on the immersion experience or enrolling in this course.

Prerequisite: Consent of the Department. Departmental permission to enroll in this course depends on a faculty member's agreement to sponsor the course of study. To obtain that agreement, a student must first discuss the project with a faculty member orally, then present in written form a coherent and well-formulated project which will demonstrate learning (guidelines are available).

NOT INCLUDED IN GPA

Russian 401 **H(3-0)**

Advanced Russian I: The Consolidating Year

An advanced course in the use of Russian, including experiential learning in the form of a practicum, leading to supervised "teaching" in a suitable lower-level language class.

Prerequisite: Russian 333 or consent of the Department.

Russian 403 **H(3-0)**

Advanced Russian II: The Consolidating Year

A continuation of Russian 401.

Prerequisite: Russian 401 or consent of the Department.

Russian 451 **H(3-0)**

Cross-Cultural Explorations

Cross-cultural comparison of events, cultural patterns, historical periods, or social movements which find a parallel in more than one of the cultural traditions represented in the Department. The language of instruction is English.

Prerequisite: Russian 361, 371, 381 or 391.

MAY BE REPEATED FOR CREDIT

Russian 461 **H(3-0)**

Topics in Russian Literature

Development of a topic, issue, period or author introduced in Russian 361. Topic for current year is listed in the Master Timetable.

Prerequisite: Russian 361, 371, 381 or 391.

MAY BE REPEATED FOR CREDIT

Russian 463 **H(3-0)**

Topics in Russian Language and Culture from a Historical Perspective

Concentration on a linguistic and/or cultural topic in its historical development.

Prerequisite: Russian 361, 363, 371, 381 or 391.

MAY BE REPEATED FOR CREDIT

Russian 497 **H(3-0)**

Inter-Cultural Immersion Experience II

Independent study course. Project with inter-cultural theme, derived from an immersion experience at an advanced level, most likely abroad. Permission MUST be obtained before embarking on the immersion experience or enrolling in this course.

Prerequisite: Russian 397 and consent of the Department. Departmental permission to enroll in this course depends on a faculty member's agreement to sponsor the course of study. To obtain that agreement, a student must first discuss the project with a faculty member orally, then present in written form a coherent and well-formulated project which will demonstrate learning (guidelines are available).

NOT INCLUDED IN GPA

Russian 541 **Q(3-0)**

Interdisciplinary Topic

Consolidation of interdisciplinary experience for students who have completed an approved micro-focus (at least two full-course equivalents) pertaining to the Russian and East European area through the writing of a major project from a specifically interdisciplinary perspective.

Prerequisites: Micro-focus in Russian and East European area and consent of the Department.

Note: May not be offered every year.

Russian 551 **H(3-0)**
(formerly Russian 501)

Independent Study

An independent research project on a topic that is not normally a part of the program's course offerings.

Prerequisite: Consent of the Department. Departmental permission to enroll in this course depends on a faculty member's agreement to sponsor the project.

Note: May not be offered every year.

Russian 561 **H(0-3S)**

Research Seminar

Centered around a professor's current research project, the course will engage senior students as members of a collaborative research team. Independent research, discussion, group presentations, dissemination of results in an appropriate venue, e.g. G.S.E.A. "Work-in-Progress" series.

Prerequisite: Consent of the Department.

Note: May not be offered every year.

MAY BE REPEATED FOR CREDIT

Science

SCIE

Instruction offered by members of the Faculty of Science.

Senior Course

Science 311 **H(3-3T)**

Writing and Reviewing Scientific Reports

Elements of writing and reviewing scientific reports, use and enhancement of library skills, ethical principles of reviewing reports, and exposure to the literature of science. Papers and reviews will be transmitted electronically.

Prerequisite: Any 200-level course offered by the Faculty of Science.

Note: Enrollment in this course is limited.

Note: Only declared majors in Earth Science will be admitted prior to August 15.

Science 501 **H(1-3)**

Project Course in Natural Sciences

Intended to achieve integration and interdisciplinarity within the Natural Sciences program.

Prerequisite: Fourth-year standing in the Natural Sciences program.

Science 502 **F(0-9)**

Research Project in Natural Sciences

Research projects may be disciplinary or may be interdisciplinary with the latter involving more than one Science discipline or, possibly, a Science discipline combined with a non-Science discipline.

Prerequisite: Fourth-year standing in the Natural Sciences Honours program or consent of the Director.

Science 503 **H(0-3)**

Interdisciplinary Seminar

Students explore interdisciplinarity between science and non-science areas in various ways including by written and oral presentations.

Prerequisite: Fourth-year standing in the Natural Sciences program.

Note: The non-science components of each participant must be based on a background that includes at least a half course in that non-science area.

Science, Technology and Society STAS

Instruction offered under the direction of the Faculty of Communication and Culture. For information contact the Program Director or the Academic Programs Office, 220-6343.

Additional interdisciplinary courses are offered under the course headings African Studies, Canadian Studies, Central and East European Studies, Communications Studies, Development Studies, East Asian Studies, General Studies, Latin American Studies, Law and Society, Leisure, Tourism and Society, Museum and Heritage Studies, Northern Planning and Development Studies, South Asian Studies, and Women's Studies.

Junior Course

Science, Technology and Society 201 H(3-0)

The Process of Inquiry in the Natural Sciences

Provides an introduction to scientific thought. Topics covered will be selected from among: debate and consensus building in science; abstractions, models, and the importance of mathematics; the value systems of the scientific community; scientists as experts in policy matters; and public appreciation of science. Particular attention will be given to the public impact of science and the role of science as a cultural and political force. Current issues such as climate change, genetically modified food, and the dynamics of pharmaceutical innovation will be studied as particular cases.

Senior Courses

Science, Technology and Society 325 H(2-2T)

Technology Within Contemporary Society

Definitions of technology; theories of technology/society interaction; innovation and waves of technological change; technology as a system; automation and "post-industrial" society; impact of new technology on work; growth and its limits; alternative technology; energy technology; biotechnology and the Green Revolution; human reproductive technology; information technology; controlling technology; ethical problems in technology.

Science, Technology and Society 327 H(3-0)

Science in Society

A case study analysis of the practice of science as a human activity. The theories linking the emergence of modern science to western culture are considered. An analysis of ideas of the social structure of scientific activity including: the role of examples in forming scientific theories, the value system of scientists in both basic research and applied research environments, "individual genius" vs multiple discovery, and the influence of "leading" figures. The linkages of scientific activity with other cultural dimensions are explored and the bases for formulation of "science policy" are considered.

Science, Technology and Society 343 H(3-0) (formerly Canadian Studies 443)

Canadian Science Policy and Technology Development

Examination and analysis of Canadian science policy and technology development. Factors which influence policies and strategies, and factors which should influence them. Evaluation of success and failures through case studies and policy analysis.

Science, Technology and Society 401 H(3-0)

Special Topics in Science, Technology and Society

An examination of selected topics in Science, Technology and Society. See Master Timetable for current topic(s).

MAY BE REPEATED FOR CREDIT

Science, Technology and Society 501 H(3-0)

Research in Selected Topics

Supervised individual study of a special topic.

Prerequisites: Consent of the Science, Technology and Society Director and the Associate Dean (Academic).

Note: Students should contact the Office of the Associate Dean (Academic) prior to the first day of classes to arrange an independent study course.

MAY BE REPEATED FOR CREDIT

Science, Technology and Society 591 H(3-0)

Integrative Seminar

An integrative seminar on the central themes of science and technology studies.

Prerequisites: Two of Science, Technology and Society 325, Historical Studies 477.01, 477.02, Philosophy 367, Sociology 435; or consent of the Faculty.

Note: This course may not be offered every year. It may be taken as a reading course if an instructor is available.

Slavic

SLAV

Instruction offered by members of the Department of Germanic, Slavic and East Asian Studies in the Faculty of Humanities.

Department Head – X-J. Yang

Senior Course

Slavic 355 H(3-0)

Modern East-European Literature in Translation

Selected works from the literatures of Central European countries in the twentieth century with particular attention to the impact of successive totalitarian régimes and issues associated with post-totalitarian societies.

Note: Lectures and texts will be in English. This course can count toward the Major and Honours in Russian.

Social Sciences

SOSC

Instruction offered by the Faculty of Social Sciences.

Contact - J.A. Archibald

Junior Course

Social Sciences 201 H(3-2)

Exploring Social Issues

An introductory study of selected topics that are currently engaging scholars across the social sciences. Organized around a broad theme (e.g., Globalization and Its Critics; Nature and Culture; Sex, Sexuality and Society) and interdisciplinary both in terms of course materials and presentation. A combination of large-group lectures and small-group seminars, with a particular focus on reading, discussion and writing assignments.

Social Work

SOWK

Instruction offered by members of the Faculty of Social Work.

Note: Social Work 201, 317, 319, 321, 327 and 329 are open to all students; all other Social Work courses are restricted to BSW students.

Junior Course

Social Work 201 H(3-0)

Introduction to Social Work

Provides an overview of the profession of social work and the social policy context within which it is practiced.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work course requirements.

Senior Courses

Note: Social Work 353 and 367 may be offered to non-Social Work students in Edmonton and Lethbridge who will be seeking admission into the University Transfer routes in those locations.

Social Work 300 F(6-0) (formerly Social Work Access 300)

Generalist Practice in Context Theme Course

Examination of knowledge, values, and skills pertaining to the practice of generalist social work practice in rural, remote, and Aboriginal communities.

Social Work 301 H(1S-2T) (formerly Social Work Access 301)

Generalist Practice in Context Portfolio Project

Individual preparation and presentation of major project on social work practice models in the local context.

Prerequisite or Corequisite: Social Work 300.

Social Work 302 F(6-0) (formerly Social Work Access 302)

Communication and Information Theme Course

Effective communication and information management practices for social work in rural, remote, and Aboriginal communities.

Social Work 303 H(1S-2T) (formerly Social Work Access 303)

Communication and Information Portfolio Project

Individual preparation and presentation of major project demonstrating competence in interviewing and research process with sensitivity to local applications and issues.

Prerequisite or Corequisite: Social Work 302.

Social Work 304 F(6-0) (formerly Social Work Access 304)

Diversity and Oppression Theme Course

Issues of diversity, colonization, and intergroup relations associated with the practice of social work in rural, remote, and Aboriginal communities.

Social Work 305 H(1S-2T)
(formerly Social Work Access 305)

Diversity and Oppression Portfolio Project

Individual preparation and presentation of major project assessing local policies and programs with respect to diversity issues and colonial assumptions.

Prerequisite or Corequisite: Social Work 304.

Social Work 306 F(6S-0)
(formerly Social Work Access 306)

Social Work Methods Theme Course

Intervention approaches and skills for the practice of generalist social work in rural, remote, and Aboriginal communities.

Social Work 307 H(1S-2T)
(formerly Social Work Access 307)

Social Work Methods Portfolio Project

Individual preparation and presentation of major project demonstrating appropriate assessment and relevant intervention plan at different levels of practice for a social problem at the local level.

Prerequisite or Corequisite: Social Work 306.

Social Work 317 H(3-0)

Human Sexuality

Psychosocial aspects of human sexuality.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work course requirements.

Social Work 319 H(3-0)

Death and Dying

Biopsychosocial and spiritual factors involved in death and dying.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work course requirements.

Social Work 321 H(3-0)

Social Work and Social Problems

Analysis of social problems within a social welfare context.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work requirements.

Social Work 327 H(3-0)

Alcohol and Drug Abuse

Analysis of problems related to addictions and the abuse of alcohol and drugs.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work course requirements.

Social Work 329 H(3-0)

Introduction to Children's Mental Health

Analysis of problems related to children's mental health.

Prerequisite: A course in developmental psychology or human behaviour and the social environment, or equivalent.

Note: Alberta Social Work Post-Diploma students cannot take this course as fulfillment of their non-Social Work course requirements.

Social Work 351 H(3S-0)

Seminar on Critical Thinking, Professional Writing and Information Literacy in Social Work

Using inquiry-based approaches to define and practice critical thinking and professional writing within generalist social work contexts.

Note: Post Diploma route only.

Social Work 353 H(3S-0)
(formerly Social Work 361)

Research Foundations

Introduction to basic research methodology and data analysis within a "reflective practitioner" model of practice.

Social Work 357 H(3S-0)

Critical Issues: Practice Perspectives and Theories

A critique of practice concepts, perspectives and skills across diverse contexts and populations.

Note: Post Diploma route only.

Social Work 367 H(3S-0)

Human Behaviour and the Social Environment

Examines perspectives on human behaviour within multiple environments across the lifespan from a social work practice framework.

Social Work 383 H(3S-0)
(formerly Social Work 369)

Social Policy and Social Justice

Provides an understanding of Canadian social policy, its impact on social justice and how it influences social work practice.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 385 H(3S-0)
(formerly Social Work 589)

Ethical Issues in Social Work Practice

Challenges separation of ethical and practice issues, using a model of ethical decision-making.

Prerequisites: Social Work 201, 367 and 353 or equivalent or admission into the Post Diploma route.

Social Work 388 F(6S-0)

Anti-Opressive Generalist Practice

Introduction to the scope of generalist practice and the history, philosophy, and cultural values underlying generalist practice approaches in diverse settings.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: Not open to students with credit in Social Work 363.

Note: University Transfer route only.

Social Work 389 H(3S-0)

Integrative Seminar: Portfolio-Based Reflection on Theory and Research in Professional Practice

Integration of concepts, perspectives and skills with experiences, developing conceptual frameworks of practice.

Prerequisites: Social Work 201, 367 and 353 or equivalent or admission into the Post Diploma route.

Social Work 391 H(3S-0)
(formerly Social Work 365)

Inquiry-Based Practice with Individuals

Skills such as interviewing and psycho-social interventions within a context of relevant practice theories and assessment frameworks.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 393 H(3S-0)
(formerly Social Work 371)

Inquiry-Based Practice with Families

Working with families from multiple perspectives and within diverse contexts including theoretical frameworks and assessment strategies.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 395 H(3S-0)
(formerly Social Work 373)

Inquiry-Based Practice with Groups

Introduction to theories and skills for working with groups within a context of practice and assessment frameworks.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 397 H(3S-0)
(formerly Social Work 375)

Inquiry-Based Practice with Communities

Introduction to communities and community practice within a generalist social work perspective.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 399 H(3S-0)
(formerly Social Work 377)

Inquiry-Based Practice with Organizations

Introduction to strategies and assessments for working effectively within organizations.

Prerequisites: Social Work 201, 367 and 353 or equivalent.

Note: University Transfer route only.

Social Work 400 F(0-32)
(formerly Social Work Access 400)

Field Practicum A

Direct and indirect social work practice opportunities in the local region with educational supervision.

Prerequisites: Social Work 300, 301, 302, 303, 304, 305, 306 and 307 or consent of the Faculty.

Corequisite: Social Work 403.

Note: Exempt for Alberta social work diploma graduates.

NOT INCLUDED IN GPA

Social Work 402 F(0-32)
(formerly Social Work Access 402)**Field Practicum B**

Direct and indirect social work practice opportunities in the local region with educational supervision.

Prerequisite: Social Work 400 or consent of the Faculty.

Corequisite: Social Work 403.

NOT INCLUDED IN GPA

Social Work 403 H(3S-0)
(formerly Social Work Access 403)**Integrative Practice Seminar**

The integration of theory and practice within local region practicum.

Corequisite: Social Work 402.

Social Work 404 F(312 hours within one session)**Introductory Practicum**

Application of conceptual framework, experience, knowledge and skills within a specific practice setting.

Prerequisite: Fourth year standing.

Corequisite: Social Work 405.

Note: Not open to students with credit in Social Work 381.

Note: University Transfer route only.

NOT INCLUDED IN GPA

Social Work 405 H(3S-0)
(formerly Social Work 379)**Integrative Seminar: Portfolio-Based Application of Research and Theory in Practice**

Integration of theory and practice within field practicum and inquiry-based approach to assessment, critique and evaluation.

Prerequisite: Fourth year standing.

Corequisite: Social Work 404.

Note: University Transfer route only.

Social Work 407 H(3S-0)
(formerly Social Work 479)**Integrative Seminar: Portfolio-Based Application of Research and Theory in Practice**

Advanced integration of concepts, perspectives and skills with experiences, developing conceptual frameworks of practice.

Prerequisites: Fourth year standing and consent of the Faculty.

Corequisites: Social Work 408/409.

Social Work 408 F(256 hours within one session)**Senior Practicum A**

Application of professional theory and skills in supervised social work practice settings.

Prerequisites: Fourth year standing and consent of the Faculty.

Corequisites: Social Work 407 and 409.

Note: Not open to students with credit in Social Work 481 or 482.

NOT INCLUDED IN GPA

Social Work 409 H(160 hours within one session)**Senior Practicum B**

Application of professional theory and skills in supervised social work practice settings.

Prerequisites: Fourth year standing and consent of the Faculty.

Corequisites: Social Work 407 and 408.

Note: Not open to students with credit in Social Work 481 or 482.

NOT INCLUDED IN GPA

Social Work 551 H(3S-0)**Selected Topics: Social Work Interventions**

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Social Work 553 H(3S-0)**Selected Topics: Fields of Practice**

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Social Work 555 H(3S-0)**Selected Topics: Practice with Selected Populations**

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Social Work 557 H(3S-0)**Selected Topics: Contexts for Practice**

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Graduate Courses

Note: Not all options are offered every academic year. The number of options will vary across the program locations.

Note: Students admitted into an MSW program prior to Fall Session 2003 should seek advice from the Faculty of Social Work Student Affairs Office with regard to course equivalencies.

Social Work 621 H(3S-0)**History and Foundation of the Profession**

An examination of the relationship between knowledge, values, ethics and power and how they shape interventions in social work.

Prerequisite: Consent of the Faculty.

Social Work 625 H(3S-0)**Practice with Individuals, Families and Groups**

A basic understanding of social work practice theory with respect to work with individuals, families and groups.

Prerequisite: Consent of the Faculty.

Social Work 627 H(3S-0)**Practice with Organizations and Communities**

A basic understanding of social work practice theory with respect to work with organizations and communities.

Prerequisite: Consent of the Faculty.

Social Work 629 H(3S-0)**Professional Communication and Interviewing**

Offers experiential learning aimed at developing basic professional competencies and practice skills along with critical self-reflection.

Prerequisite: Consent of the Faculty.

Social Work 632 H(3S-0)**Social Policy and Social Justice**

An exploration of the social, political and economic forces, social movements and social structures that are transforming the Canadian welfare state and the practice of social work.

Prerequisite: Consent of the Faculty.

Social Work 633 H(225 hours)**Foundational Field Practicum**

Direct and indirect social work practice opportunities with professional supervision.

Prerequisite: Consent of the Faculty.

NOT INCLUDED IN GPA

Social Work 637 H(3S-0)**Human Behaviour in the Social Environment**

Human development and diversity within a social work context.

Prerequisite: Consent of the Faculty.

Social Work 641 H(3S-0)**Models of Practice**

Provides the conceptual and theoretical foundation for students to acquire the skills to practice in Social Work.

Prerequisite: Consent of the Faculty.

Social Work 645 H(3S-0)**Research and Evaluation**

An introduction to research methodology and evaluative strategies.

Prerequisite: Consent of the Faculty.

Social Work 655 H(3S-0)**Research I**

Conceptualization of social work research problems, research design, data collection and analysis within a chosen specialization.

Prerequisite: Consent of the Faculty.

Social Work 661 H(3S-0)**Children's Mental Health**

A clinical specialized option that focuses on the knowledge required by mental health professionals who work with children and adolescents.

Prerequisite: Social Work 329 or consent of the Faculty.

Social Work 665 H(3S-0)**Policy**

An exploration of social welfare policy, structures and programs within a chosen specialization or concentration within the context of examining the impact of oppression on populations-at-risk.

Prerequisite: Consent of the Faculty.

Social Work 667 H(3S-0)

Theory and Methods I

An in-depth and advanced understanding of social work theory and practice within a chosen specialization.

Prerequisite: Consent of the Faculty.

Social Work 669 H(3S-0)

Theory and Methods II

Application of theories learned in Social Work 667 to various problems and diversity issues encountered by social workers within a chosen specialization.

Prerequisites: Social Work 667 and consent of the Faculty.

Social Work 679 H(3S-0)

Special Topics Seminar I

Selected topics related to area of specialization or concentration.

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Social Work 695 H(3S-0)

Research II

Extends students' abilities to utilize research knowledge as a problem-solving tool in social work practice within a chosen specialization.

Prerequisites: Social Work 655 and consent of the Faculty.

Social Work 696 F(450 hours within two consecutive sessions)

Advanced Practicum A

Direct and indirect Social Work practice opportunities with professional supervision in student's area of specialization or concentration.

Prerequisite: Consent of the Faculty.

Corequisite: Social Work 697.

Note: Not open to students with credit in Social Work 687, 688 or 689.

NOT INCLUDED IN GPA

Social Work 697 H(225 hours within two consecutive sessions)

Advanced Practicum B

Direct and indirect Social Work practice opportunities with professional supervision in student's area of specialization or concentration.

Prerequisite: Consent of the Faculty.

Corequisite: Social Work 696.

Note: Not open to students with credit in Social Work 687, 688 or 689.

NOT INCLUDED IN GPA

Social Work 699 H(3S-0)

Special Topics Seminar II

Advanced selected topics related to area of specialization or concentration.

Prerequisite: Consent of the Faculty.

MAY BE REPEATED FOR CREDIT

Social Work 701 H(2-1)

Statistics I

Advanced social science statistics.

Note: Restricted to Social Work PhD students.

Social Work 703 H(2S-0)

Research Methods I

Methodological and design options in social work research.

Note: Restricted to Social Work PhD students.

Social Work 705 H(2S-0)

Doctoral Seminar I

Foundations of clinical practice and policy.

Note: Restricted to Social Work PhD students.

Social Work 711 H(2-1)

Statistics II

Multivariate models.

Prerequisite: Social Work 701.

Note: Restricted to Social Work PhD students.

Social Work 713 H(2S-0)

Research Methods II

Practice and program evaluation.

Prerequisite: Social Work 703.

Note: Restricted to Social Work PhD students.

Social Work 715 H(2S-0)

Doctoral Seminar II

Special issues respecting student's methodological or policy focus.

Prerequisite: Social Work 705.

Note: Restricted to Social Work PhD students.

Social Work 717 H(2S-0)

History and Philosophy of Social Work

An exploration of the history of the social work profession, social policies, fields of practice intervention, and types of research; and the philosophical assumptions underlying these considerations. Provides students with the foundation from which to understand the profession's development and major contributions to society, and consideration of the major ontological and epistemological positions of different approaches to research and practice.

Note: Restricted to Social Work PhD students.

Social Work 719 H(2S-0)

Social Work Education

An exploration of theories of adult and experiential learning, social work education, curriculum development, use of technology in teaching, and preferred styles of teaching and learning. Consists of both classroom instruction and a brief practicum that allows students to reflect on the teaching process and develop practical skills of teaching and course management. Provides graduates with specific training in education, and particularly education in social work.

Note: Restricted to Social Work PhD students.

Social Work 721 H(2S-0)

Integrative Research Colloquia

A concluding course offered as final component of student's course work. Allows doctoral students and the instructor to engage in a series of research colloquia, thereby facilitating critical analysis, feedback and synthesis of materials covered and skills learned in other course work. This process will help students to develop conceptual and methodological skills.

Note: Restricted to Social Work PhD students.

Social Work 725 H(2S-0)

Doctoral Seminar III

Theories of clinical practice and policy.

Prerequisite: Social Work 715.

Note: Restricted to Social Work PhD students.

Social Work 735 H(2S-0)

Doctoral Seminar IV

Synthesis and extension of policy and clinical practice issues previously studied in the development of a fully completed dissertation proposal.

Prerequisite: Social Work 725.

Note: Restricted to Social Work PhD students.

Sociology

SOCL

Instruction offered by members of the Department of Sociology in the Faculty of Social Sciences.

Department Head – R.A. Wanner

Junior Courses

Sociology 201 H(3-1T)

Introductory Sociology

The sociological study of society, social institutions, group behaviour, personality formation and social change.

Sociology 205 H(3-1T)

Canadian Society

An examination of the major institutions of Canadian society. Consideration given to the diversity of the Canadian population and to the dynamics of contemporary patterns of social change.

Note: Not open to students with credit in Social Sciences 202.

Note: This course is not a substitute for Sociology 201.

Senior Courses

Sociology 303 H(3-0)

Sociology of Gender Relations

An analysis of the condition of women in relationship to that of men in modern society, studying the impact of certain institutional structures. Examination of the nature of sex differences, gender role socialization, the sexual division of labour and liberationist movements.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 305 H(3-0)***French-Canadian Society***

The focus is on the major social structures and institutions of French Canada examining the course of social change. Nationalist ideologies, the separatist movement, French-Canadian identity, and French-Canadians outside Quebec.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 307 H(3-0)***Sociology of First Nations in Canada***

The dynamics of Native Indian groups' relations with each other and the larger society. Topics include decolonization and relations with the state, demography, Indian organizations, Indian nationalism and nation-building, power, social class and public policy.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 309 H(3-0)***Alberta Society***

Sociological introduction to the ideology, composition, dynamics, and institutions of Albertan society, using external comparisons where relevant.

Sociology 311 H(3-3)***Introductory Social Statistics I***

Basic descriptive statistics for survey research including cross tabular analysis, regression and correlation, and related inferential statistics.

Prerequisite: Sociology 201 or consent of the Department.

Note: Credit towards degree requirements will be given for only one of Anthropology 307, Applied Psychology 301/303, Engineering 319, Political Science 399, Psychology 312, Sociology 311/315, Statistics 201/211, 213/217, 333, 357; that one being a course appropriate to the degree program.

Sociology 313 H(3-2)***Introductory Social Research Methods***

Research processes including problem definition, data collection and analyses; quantitative and qualitative strategies. Students are expected to acquire skills through doing research.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 315 H(3-3)***Introductory Social Statistics II***

Introduction to multivariate analysis for sociological research, including multivariate tabular analysis, multiple regression and correlation, and structural equation models.

Prerequisite: Sociology 311 or consent of the Department.

Sociology 321 H(3-0)***Medical Sociology***

Medical institutions and professionalization, social attitudes toward illness and care, and how society structures the "sick role."

Prerequisite: Sociology 201 or consent of the Department.

Sociology 325 H(3-0)***Introduction to Deviance and Social Control***

Systematic analysis of theories of deviant, delinquent and criminal behaviours and the social responses to them.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 331 H(3-0)***Classical Sociological Theory***

The development of sociological theory from the nineteenth century to the Second World War.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 333 H(3-0)***Contemporary Sociological Theory***

The development of sociological theory from the Second World War to the present.

Prerequisite: Sociology 331 or consent of the Department.

Sociology 341 H(3-0)***Social Psychology***

The study of individual and group behaviour observed in social processes.

Prerequisite: Sociology 201 or consent of the Department.

Note: Not open to students with credit in Psychology 345.

Sociology 345 H(3-0)***Mass Communication***

The analysis of socio-psychological effects of mass media of communication, radio, television, movies, comic books, etc.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 353 H(3-0)***Urban Sociology***

Institutional and ecological factors in the social life of cities.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 355 H(3-0)***Population and Society***

The study of population structure (size, composition, distribution) and process (fertility, mortality, migration); its relation to society, including world population problems.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 365 H(3-0)***Social Stratification***

An introduction to theories of social stratification and different types of social stratification systems.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 367 H(3-0)***Ethnicity in Social Organizations in Canada***

Impact of racial, ethnic, and linguistic heterogeneity and of various patterns of immigration on economic, political, social and cultural institutions.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 369 H(3-0)***Political Sociology***

An introduction to the study of the social bases of political institutions and practices, and of the impact of these institutions and practices on society.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 371 H(3-0)***Sociology of Families***

Structure and functions of the family, family systems, sociology of family life stages (such as childhood, adolescence, adulthood, old age), contemporary trends and problems of the family.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 373 H(3-0)***Sociology of Aging***

Social and institutional factors associated with aging in modern society.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 375 H(3-0)***Theories and Patterns of Ethnic Relations***

A sociological introduction to the forms and dynamics of relations among ethnic groups around the world. Such concepts as prejudice, racism, assimilation, pluralism, and de-colonization are examined in theoretical and cross-national contexts.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 377 H(3-0)***Sociology of Religion***

An introduction to the theories and concepts utilized by sociologists to interpret religious behaviour and the organization of religion.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 393 H(3-0)***The Sociology of Work***

A sociological analysis of the nature and meaning of work; economic, social, cultural and institutional factors associated with work; the effects of changing technology on work in industrial and post-industrial societies.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 399 H(3-0)***Sociology of Sport***

Organized around the theme of social problems in sport, this course examines sports-related behaviour, consumption, and sponsorship. A variety of approaches shows how sport is socially

constructed and embodies different meanings for different groups of people.

Prerequisite: Sociology 201 or consent of the Department.

Sociology 400 **F(3S-0)**

Honours Thesis

Research project under the direction of a member of the Department. Required of, and open only to, fourth year honours Sociology students.

Prerequisite: Consult Department for assignment to faculty member.

Sociology 401 **H(3-0)**

Special Topics in Sociology

Selected themes as announced by the Department.

Prerequisites: Sociology 313, 331 and 333 are recommended. Consult Department for specific course topics.

MAY BE REPEATED FOR CREDIT

Sociology 403 **H(3-0)**

Special Topics in Gender Relations

Selected themes and issues in the sociology of gender relations as announced by the Department.

Prerequisites: Sociology 303 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

MAY BE REPEATED FOR CREDIT

Sociology 405 **H(3-0)**

Special Topics in Canadian Social Structure

A macro-level examination of Canadian social structure including a socio-developmental analysis of selected Canadian institutions such as bilingualism, regionalism, multiculturalism, multinational corporations, and ethnic stratification. Critical examination of sociological models for the study of Canadian society.

Prerequisite: Sociology 313 or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 411 **H(3-0)**
(formerly Sociology 401.02)

Graphic Presentation of Sociological Data

Methods of graphic presentation and data analysis techniques using secondary data sources particularly the Canadian censuses, vital statistics and immigration data.

Prerequisites: Sociology 313 and 315 or consent of the Department.

Sociology 413 **H(3-0)**

Qualitative Research Methods

Research methods such as participant observation, naturalistic observation, interviewing, nonreactive techniques, and life histories, and methodological issues such as gaining access to subjects, and issues pertaining to the ethics of research.

Prerequisite: Sociology 313 or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 415 **H(3-0)**

Sociological Analysis of Survey Data

Methodological and substantive issues in the creation and utilization of social surveys and their

role in testing theories and informing social policies.

Prerequisites: Sociology 313 and 315 or consent of the Department.

Note: Not open to students with credit in Sociology 401.05.

Sociology 421 **H(3-0)**

Advanced Topics in Deviance and Criminology

Advanced study of contemporary issues in the research in deviance and crime.

Prerequisites: Sociology 325 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

Note: May be used for credit toward the concentration in Criminology, Deviance and Social Control a maximum of twice.

MAY BE REPEATED FOR CREDIT

Sociology 423 **H(3-0)**

The Sociology of Youth Crime

Explanations of the criminal activities of young people including an assessment of treatment strategies and legal regimes developed in response to this behaviour.

Prerequisites: Sociology 325 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 427 **H(3-0)**

The Social Organization of Criminal Justice

Comparative social organization of the criminal justice system from a sociological perspective; special attention to and analysis of the structure of the Canadian criminal justice system.

Prerequisites: Sociology 325 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 429 **H(3-0)**

The Sociology of Law

Sociological problems regarding the origin, impact and definition of law, dispute resolution, and the relationship between law and social change.

Prerequisites: Sociology 325 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 435 **H(3-0)**

The Sociology of Knowledge

The study of knowledge as a social practice; theories of knowledge, representation and interpretation; practical knowledge in everyday life; the role of organized knowledge in social domains such as science, biomedicine, bureaucracy, social service administration and professional occupations.

Prerequisites: Sociology 331 and 333 or equivalents; or consent of the Department. Sociology 313 is recommended.

Sociology 439 **H(3-0)**

The Construction of Sociological Theory

Discussion of existing approaches to theory construction - e.g., classical, grounded theory, concept formation, hypothesis construction. Propositional inventories and causal modelling will also be examined through analysis of examples of explanations in the social sciences.

Prerequisites: Sociology 313 and either 331 or 333; or consent of the Department.

Sociology 441 **H(3-3)**

Social Interaction and Group Dynamics

Investigates the interplay between interpersonal interaction and group processes. Uses interdisciplinary concepts to establish sociological connections between ongoing behaviour in the group and personal experience.

Prerequisite: Sociology 313 or consent of the Department. Sociology 333 is recommended.

Sociology 443 **H(3-0)**

Special Topics in Social Psychology

An advanced study of social processes and interactions of persons in groups with some methodological considerations.

Prerequisites: Sociology 341 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 453 **H(3-0)**

Special Topics in Urban Sociology

Critical analysis of theories of urban institutional and ecological characteristics. Emphasis is on comparative data derived from a sample of world cities.

Prerequisite: Sociology 353 or consent of the Department. Sociology 313, 331 and 333 are recommended.

Sociology 461 **H(3-0)**

Worker Movements and Labour Unions

A social movement perspective on working class struggle and accommodation in capitalist societies. Historical and contemporary movements will be considered, with an emphasis on Canada.

Prerequisite: One of Sociology 331/333, 347, 365 or 369; or consent of the Department.

Sociology 467 **H(3-0)**

Ethnic Relations in Canada

An introduction to the structure and form of ethnic (racial) group relations in Canada. Contemporary relations will be analysed from a historical perspective.

Prerequisite: Sociology 313 or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 471 **H(3-0)**

Special Topics in the Sociology of Families

Selected themes and issues in the sociology of families as announced by the Department.

Prerequisites: Sociology 371 and 313; or consent of the Department. Sociology 331 and 333 are recommended.

MAY BE REPEATED FOR CREDIT

Sociology 475 **H(3-0)**

Special Topics in Race and Ethnic Relations

Advanced analysis of selected themes and issues in race and ethnic relations within the framework of theory and research.

Prerequisites: Sociology 313 and either 367 or 375 or consent of the Department. Sociology 331 and 333 are recommended.

Note: May be used for credit toward the concentration in Ethnicity, Population and Canadian Society a maximum of twice.

MAY BE REPEATED FOR CREDIT

Sociology 481 H(3-0)
Socio-Cultural Change

An introduction to the theories of social change with an emphasis on their relevance to pre-industrial and industrial societies.

Prerequisites: Sociology 331 and 333; or consent of the Department.

Sociology 487 H(3-0)
Sociology of Development

A study of the process of change and modernization in the developing areas of the world.

Prerequisite: One of Sociology 313, 331/333, 347 or 361; or consent of the Department. Sociology 331 and 333 are recommended.

Sociology 493 H(3-0)
Special Topics in the Sociology of Work

Selected themes and issues in the sociology of work as announced by the Department.

Prerequisites: Sociology 313 and 393; or consent of the Department. Sociology 331 and 333 are recommended.

Note: May be used for credit toward the concentration in Work and Organizations a maximum of twice.

MAY BE REPEATED FOR CREDIT

Sociology 499 Q(3-0)
Special Topics in Sociology

Prerequisite: Consent of the Department.

MAY BE REPEATED FOR CREDIT

Sociology 501 H(3-0)
Conference Course in Sociology

Arranged for various topics of Sociology on the basis of special interest and need.

Prerequisite: Consult Department for assignment to Faculty member.

MAY BE REPEATED FOR CREDIT

Graduate Courses

Only where appropriate to a student's program may graduate credit be received for courses numbered 500-599.

Sociology 601 H(3-0)
Conference Course in Sociology

Arranged for various topics of Sociology on the basis of special interest and need.

Prerequisite: Consult Department for assignment to Faculty member.

MAY BE REPEATED FOR CREDIT

Sociology 602 F(3-0)
Master's Project

Directed study in selected topics in Sociology for course-based MA students. A research project and preparation of a Research Project Report are required.

Prerequisite: Consent of the Department for assignment of Faculty members.

Sociology 605 H(3-0)
Seminar in Canadian Society

Prerequisite: Consent of the Department.

Sociology 611 H(3S-3)
Social Statistics: The General Linear Model

Multiple regression and correlation with applications to sociological research; regression diagnostics; extensions of linear regression such as nonlinear models, analysis of variance, analysis of covariance, and causal modelling.

Prerequisite: Consent of the Department. (Sociology 311 and 315 normally required.)

Sociology 613 H(3S-2)
Seminar in Sociological Research Methods

Prerequisite: Sociology 313 or consent of the Department.

Sociology 615 H(3S-2)
Seminar in Qualitative Research Methods

Advanced study in the theory and practice of qualitative research methods. Topics may include participant observation, in-depth interviews, narrative analysis, conversation and discourse analysis, autoethnography, archival research, and feminist research methods.

Prerequisite: Sociology 313 or consent of the Department. Sociology 413 is recommended.

Sociology 625 H(3S-0)
Seminar on Deviant Behaviour

Prerequisite: Sociology 324 or 325 or consent of the Department.

Sociology 631 H(3S-0)
Seminar in Classical Sociological Theory

The history of Sociological theory from the beginnings to World War II, including readings from Marx, Weber, Durkheim, and the early Parsons.

Prerequisites: Sociology 331 and 333 or equivalents; or consent of the Department.

Sociology 633 H(3S-0)
Seminar in Contemporary Sociological Theory

Sociological theory from World War II to the present.

Prerequisite: Sociology 631 or consent of the Department.

Sociology 653 H(3S-0)
Seminar on Urban Sociology

Prerequisite: Sociology 353 or consent of the Department.

Sociology 665 H(3S-0)
Seminar on Social Stratification and Inequality

Prerequisite: Consent of the Department.

Sociology 667 H(3S-0)
Seminar on Ethnic Relations

Prerequisite: Sociology 375 or consent of the Department.

Sociology 671 H(3S-0)

Seminar on the Sociology of Families

Prerequisite: Sociology 471 or consent of the Department.

Sociology 677 H(3S-0)

Seminar in Sociology of Gender Relations

Prerequisite: Consent of the Department.

Sociology 681 H(3S-0)

Seminar in Socio-Cultural Change

Prerequisite: Consent of the Department.

Sociology 695 H(3S-0)

Seminar in Work

Prerequisite: Consent of the Department.

Sociology 701 H(3S-0)

Doctoral Seminar in Sociology

Seminar on selected topics. Consult Department for details.

Prerequisite: Consent of the Department.

MAY BE REPEATED FOR CREDIT

Sociology 703 H(3S-0)

Seminar in Professional Sociology

Prerequisite: Consent of the Department.

NOT INCLUDED IN GPA

Sociology 705 Q(3S-0)

Seminar in Advanced Methodological Issues

Prerequisite: Sociology 613 or consent of the Department.

Sociology 711 H(3S-0)

Selected Topics in Advanced Quantitative Analyses in Sociology

Prerequisite: Consent of the Department.

Software Engineering SENG

Instruction offered by members of the Department of Computer Science in the Faculty of Science and the Department of Electrical and Computer Engineering in the Faculty of Engineering.

Computer Science Department Head – K. Barker

Electrical and Computer Engineering Department Head– J. Leon

Registration in each course requires the consent of the Department teaching the course.

Senior Courses

Software Engineering 311 H(3-1T-2)

Principles of Software Engineering

Introduction to software development problems and to the processes and methods used to address them. Software life cycle models. Goals and methods for requirements analysis and specification, software design, implementation, integration and testing of software. An introduction to one or more informal methods (focusing on object-oriented approaches) currently in widespread use. Techniques are applied in a team project.

Prerequisite: Computer Science 331.

Note: Not open to students with credit in Computer Science 333.

Software Engineering 411 **H(3-3)**

Human and Organizational Aspects in Software Engineering

Addresses the human and organizational aspects of software development. Topics will include requirements engineering techniques, formal specifications, human factors, software documentation and manuals, software project management, social, ethical, and professional issues. Emphasizes a large-group project.

Prerequisite: Software Engineering 311 or Computer Science 333.

Note: Not open to students with credit in Computer Science 451.

Software Engineering 421 **H(3-2)**

Software Metrics

The theory of measurement, experimental design, software metrics collection, statistics for analyzing measurement data, software size and software structure, resource measurement, prediction of software characteristics, planning software measurement, software quality and reliability.

Prerequisite: Software Engineering 311 or Computer Science 333.

Software Engineering 443 **H(3-2)**

Software Architectures

Software architecture, architectural styles, design patterns, software components and reuse, frameworks, distributed system design.

Prerequisite: Software Engineering 311 or Computer Science 333.

Software Engineering 501 **H(3-2)**

Advanced Topics in Software Engineering

Aspects of the next generation of software development methods, techniques, and tools. Topics will change as technology changes.

Prerequisite: Consent of the Department.

Note: Consult Department (Computer Science or Electrical and Computer Engineering) for details regarding offerings in the upcoming academic year.

MAY BE REPEATED FOR CREDIT

Software Engineering 511 **H(3-2)**

Software Process Improvement

Software processes, the Capability Maturity Model, ISO 9000, SPICE, Total Quality Management, inspection and reviews, software testing, configuration and change management, process modelling, process support systems, experience management and experience bases.

Prerequisites: Software Engineering 421 and one of Software Engineering 411 or Computer Science 451.

Software Engineering 513 **H(3-2)**

Web-Based Systems

An overview of software engineering methods and technologies for developing web-based software systems.

Prerequisite: Software Engineering 411 or Computer Science 451.

Corequisite: Computer Science 471.

Software Engineering 521 **H(3-2)**

Software Reliability and Testing

Principles of reliability, software reliability models, techniques to improve and predict reliability, software testing, quality assurance, Cleanroom development.

Prerequisite: Software Engineering 421.

Software Engineering 523 **H(3-2)**

Formal Methods

Software specification using a mathematically rigorous approach, formal methods concepts, formal specification languages, algebraic and model-based specification, verification and validation.

Prerequisites: Software Engineering 411 or Computer Science 451; and Philosophy 279 or 377.

Software Engineering 531 **H(3-2)**

Software Evolution

Introduction to state-of-the-art methods in software evolution and maintenance. Topics will be drawn from areas such as design principles, usability vs. usefulness, empirical background, improving modularization, program comprehension, static and dynamic analyses, visualization, reverse engineering, restructuring, refactoring.

Prerequisite: Software Engineering 443.

Graduate Courses

Software Engineering 609 **Q(3-1)**

Special Topics in Software Engineering

A study of problems of particular interest to students specializing in Software Engineering.

Note: Consult Department (Computer Science or Electrical and Computer Engineering) for details regarding offerings in the upcoming academic year.

MAY BE REPEATED FOR CREDIT

Software Engineering 611 **Q(3-1)**

Requirements Engineering I

The elicitation, modelling, expression, and validation of requirements.

Software Engineering 613 **Q(3-1)**

Requirements Engineering II

Applications of requirements engineering to the management of the lifecycle of software development from requirements elicitation through analysis, design, coding, testing, enhancement and reuse.

Prerequisite: Software Engineering 611.

Software Engineering 621 **Q(3-1)**

Software Process Management

Analysis of software process maturity models from repeatability, through definition and management, to optimization.

Software Engineering 623 **Q(3-2)**

Software Quality Management

Analysis of applicable quality, measures for software processes, the role of reviews, metrics and tools for the automatic derivation of quantitative measures.

Prerequisite: Software Engineering 621.

Software Engineering 625 **Q(3-1)**
(formerly Software Engineering 609.18)

Software Engineering Decision Making

Provides methodological foundations of software engineering decision-making and how to apply them to make better decisions about processes, products, and resources as well as for selection of tools and techniques.

Software Engineering 631 **Q(3-2)**
(formerly Software Engineering 609.31)

Introduction to Dependability in Computing Systems

Principles of hardware and software dependability techniques. Topics include: Faults, errors and failures, probability measures of reliability, availability, MTTF, assessment methods, mechanisms to improve and analyze the dependability of a system, structural view of systems for high availability.

Note: Students are expected to have a background in elementary probability theory.

Software Engineering 633 **Q(3-2)**
(formerly Software Engineering 609.25)

Software Fault Tolerance Techniques

Strategies, methods and techniques to tolerate faults that remain in the code after testing, verification and validation. Perspectives on high availability/reliability software systems using fault tolerance techniques.

Prerequisite: Software Engineering 631.

Software Engineering 635 **Q(3-2)**
(formerly Software Engineering 609.11)

Software Reliability and Testing

Introduces software reliability growth models and shows techniques to improve and predict software reliability. The principles of software testing, black box testing, white box testing, unit testing, system testing, and integration testing will be explained.

Prerequisite: Software Engineering 631.

Software Engineering 651 **H(3S-0)**

Half-Course Project

A project in either software development or software best practice and experience.

Note: Credit for both Software Engineering 651 and 652 will not be allowed.

Note: This course is only available to students registered in the course-based MSc in Computer Science with the Software Engineering Specialization.

Note: Students should register for this course in the semester when they will complete it.

Software Engineering 652 **F(3S-0)**

Full-Course Project

A project in either software development or software best practice and experience.

Note: Credit for both Software Engineering 652 and either 651 or Electrical Engineering 698 will not be allowed.

Note: This course is only available to students registered in the course-based MSc in Computer Science with the Software Engineering Specialization or to MEng students with a specialization in Software Engineering.

Note: Students should register for this course in the semester when they will complete it.

Software Engineering 691 Q(3S-0)**Managing the Software Engineering Research Process**

Research methods for software engineering in an industrial setting.

Software Engineering 693 Q(3S-0)**Trends in Software Engineering**

Recent developments in various areas in software engineering.

Software Engineering 695 H(3-1)**Software Engineering for Internet Applications**

Methods and techniques that support the development of Internet-based applications. Life cycle models for developing Internet-based applications, advanced software technologies for Internet applications (e.g. distributed object systems, application servers, web technologies), quality assurance for web applications, design and code inspections.

Software Engineering for Engineers ENSF

Instruction offered by members of the Department of Electrical and Computer Engineering in the Faculty of Engineering.

Department Head – L.J. Leon

Associate Heads – S.A. Norman (Undergraduate), A. Sesay (Graduate)

Director of Undergraduate Program for Electrical Engineering – L.E. Turner

Director of Undergraduate Program for Computer Engineering – S.A. Norman

Director of Undergraduate Program for Software Engineering – A. Eberlein

Software Engineering for Engineers 007 H(20 hours)**Software Engineering Fourth-Year Block Course**

This block course is intended to provide the necessary background material to prepare students for the fourth year Team Design Project. Topics covered include: personal responsibilities and interpersonal relationships involved in a team project; team projects from a current industrial perspective; tools to automate project management, e.g. PERT charts, critical path analysis, resource management, report generation and project tracking.

Prerequisite: Fourth year standing in the Department of Electrical and Computer Engineering.

NOT INCLUDED IN GPA

Senior Courses**Software Engineering for Engineers 519 H(3-2)****Special Topics in Software Engineering**

Current topics in software engineering.

Prerequisite: Consent of the Department.

Note: Consult Department for announcement of topics.

MAY BE REPEATED FOR CREDIT

Software Engineering for Engineers 583 H(2-4) (formerly Electrical Engineering 519.03)**Fourth Year Software Engineering Team Design Project, Part A**

Introduction to the theory, experience and practice of project management. Theory includes generally accepted project management principles, the structure of both project and team, together with ancillary topics that commonly affect project outcome. The experience is gained from a series of guest lectures by industrial practitioners with engineering background. The practice is obtained through the performance of a "customer suggested" team project through the stages of project requirement and specification analysis, high level and detailed low level designs. The project is executed, and progress measured against a plan developed by the team participants.

Prerequisite: Software Engineering for Engineers 007.

Software Engineering for Engineers 589 H(2-4) (formerly Electrical Engineering 519.04)**Fourth Year Software Engineering Team Design Project, Part B**

Continues upon the foundations of theory, experience and practice of project management established in Part A. The detailed low-level project design developed by the team in Part A will be implemented, unit tested, integrated and system tested before undergoing customer trials. The project is executed and progress is measured against a plan developed by the participants.

Prerequisite: Software Engineering for Engineers 583.

Note: Software Engineering for Engineers 007, 583 and 589 are a required three-course sequence that shall be completed in the same academic year.

Software Engineering for Engineers 591 H(2-4)**Individual Software Engineering Project, Part II**

This individual project is intended for students who have completed a suitable Software Engineering 599 Individual Project and wish to continue the assigned research project by completing a more extensive investigation. A comprehensive written report is required which is defended and presented orally in a department seminar.

Prerequisites: Software Engineering for Engineers 599 and formal approval from the project supervisor and course coordinator(s).

Software Engineering for Engineers 598 F(2-4)**Individual Software Engineering Research Project**

The project involves individual work on an assigned Software Engineering research topic under the supervision of a Departmental faculty member. Submission and defense of a mid-year written report is required. A final comprehensive written report is required which is defended and presented orally in a departmental seminar format.

Prerequisites: Fourth year standing and formal approval from the project supervisor and course coordinator(s).

Note: Credit for both Software Engineering for Engineers 598 and either 591 or 599 will not be allowed.

Software Engineering for Engineers 599 H(2-4)**Individual Software Engineering Project**

This project involves individual work on an assigned Software Engineering topic under the supervision of a faculty member. The topic would normally involve a literature review, theoretical and experimental or computer work. Submission and defence of a written formal report is required.

Prerequisite: Formal approvals from the project supervisor and course coordinator(s).

South Asian Studies SAST

Instruction offered under the direction of the Faculty of Communication and Culture. For information contact the Program Co-ordinator or the Academic Programs Office, 220-6343.

Additional interdisciplinary courses are offered under the course headings African Studies, Canadian Studies, Central and East European Studies, Communications Studies, Development Studies, East Asian Studies, General Studies, Latin American Studies, Law and Society, Leisure, Tourism and Society, Museum and Heritage Studies, Northern Planning and Development Studies, Science, Technology and Society, and Women's Studies.

Senior Courses**South Asian Studies 315 H(3-0)****Understanding South Asia**

The roots of ancient civilization; society, resources and environment; racial, ethnic and cultural diversities; philosophic and religious traditions; arts and aesthetics; historical bases of tradition and modernity; role of education in social development; ideological differences and economic development. Primary focus on India, Sri Lanka, Pakistan, Bangladesh, Bhutan and Nepal.

South Asian Studies 415 H(3-0)**Contemporary Indian Society and Culture**

This interdisciplinary course will discuss the culture and society of India today. Emphasis will be on casteism, communalism, religion, regionalism, globalization, ethnicity, class and gender in Indian society.

Prerequisite: South Asian Studies 315 or consent of the Faculty.

Space Physics SPPH

Instruction offered by members of the Department of Physics and Astronomy in the Faculty of Science.

Department Head – R.B. Hicks

Note: For listings of related courses, see Applied Physics, Astronomy, Astrophysics, Medical Physics and Physics.

Senior Course**Space Physics 577 H(3-0) (formerly Space Physics 677)****Physics of the Upper Atmosphere**

The processes which affect the neutral upper atmosphere. Topics will include the structure and composition of the earth's atmosphere, photochemical reactions, diffusion, circulation, radiative transfer, and measurement techniques.

Prerequisite: Consent of the Department.

Graduate Courses

Space Physics 671 H(3-0)
(formerly Physics 671)

Physics of the Magnetosphere

Physics of the interaction between the earth's magnetic field and the fields and plasmas of the surrounding interplanetary environment. Topics include magnetic field models and coordinate systems, reconnection, current flow in the magnetosphere, substorms, and particle acceleration.

Note: It is expected that a student's background will include Physics 509 and 555 or equivalent.

Space Physics 673 H(3-0)

Waves and Instabilities in Plasmas

An introduction to the observations and theory of wave phenomena in space plasmas. Topics include dispersion relations for waves in both magnetized and unmagnetized plasmas, various kinetic and MHD instabilities, Alfvén waves, and effects of inhomogeneous plasmas.

Note: It is expected that a student's background will include Physics 457 and 509 or equivalent.

Space Physics 699 H(0-9)

Project in Space Physics

Each student will select a project in consultation with a staff member. The project may be experimental or theoretical in nature. A written report and an oral presentation are required.

Spanish

SPAN

Instruction offered by members of the Department of French, Italian and Spanish in the Faculty of Humanities.

Department Head – A.J. Wall

Students are encouraged at all times to seek Departmental guidance in planning any aspect of their programs. Upon admission to the Major in Spanish each student will be assigned a departmental advisor who will assist with program planning and course selection.

French, Italian and Spanish-speaking students or students with more than matriculation in these languages (including graduates of a bilingual or immersion program) MUST consult the Department to be placed in a course corresponding to their ability. Native speakers are not eligible to take language courses by special assessment or to receive advanced credit for them.

To register in Senior Courses (300 level and above), students must have completed Spanish 203, or have obtained the consent of the Department.

Not all Senior Courses are offered every year. Current course offerings are listed in the Master Timetable.

Note: All university-level prerequisites for Spanish language courses must be met with a grade of "C-" or better.

Junior Courses

Spanish 201 H(4-1)

Beginners' Spanish I

A comprehensive course for students with no prior knowledge of the language. Includes training in listening, speaking, reading and writing of Spanish in its cultural context.

Note: Not open to students with credit in Spanish 30 or equivalent.

Spanish 203 H(4-1)

Beginners' Spanish II

A continuation of Spanish 201.

Prerequisite: Spanish 30, Spanish 201 or equivalent.

Spanish 235 H(0-3T)

Reading Spanish I

An introduction to Spanish for the purpose of developing a beginning level reading skill. Second language learning strategies, basic grammar and vocabulary. No previous knowledge of Spanish required. Web-based self study.

Note: Not open to students with credit in Spanish 30 or in any University Spanish course. May not be counted towards a Minor, Major or Honours in Spanish.

Spanish 237 H(0-3T)

Reading Spanish II

A continuation of Spanish 235. Web-based self study.

Note: Not open to students with credit in Spanish 30 or in any University Spanish course other than Spanish 235. May not be counted towards a Minor, Major or Honours in Spanish.

Spanish 299 H(3-0)

Hispanic Cultural Experience

Independent learning course for students with no background in Spanish, who have studied in a Spanish-speaking country.

Prerequisite: Consent of the Department.

Note: May not be counted toward a Minor, Major or Honours in Spanish. Not open to students with credit in Spanish 30 or in any University Spanish course.

NOT INCLUDED IN GPA

Senior Courses

Note: To register in courses at the 500 level, students must have completed Spanish 421 or 423.

Spanish 301 H(3-1T)

Intermediate Spanish I

Further development of communication skills in Spanish (listening, speaking, writing), as well as the study of cultural issues in the Hispanic world with emphasis on reading.

Prerequisite: Spanish 203 or consent of the Department.

Spanish 303 H(3-1T)

Intermediate Spanish II

A continuation of Spanish 301.

Prerequisite: Spanish 301 or consent of the Department.

Spanish 321 H(3-1T)

Contemporary Hispanic Cultures and Oral Practice

Study of current issues in the Hispanic world as seen through various media sources such as newspapers, magazines, television and the web. Introduction to tools and resources for such study.

Written and oral presentations with emphasis on oral work.

Prerequisite: Spanish 203 or consent of the Department.

Note: Not open to students with credit in 400-level Spanish courses or higher.

Spanish 323 H(3-0)

Introduction to Textual Analysis and Composition

Course designed to develop writing skills. Review of composition strategies, spelling, punctuation and argumentation using various original sources taken from journalistic, scientific, and literary texts as well as from other media.

Prerequisite: Spanish 203 or consent of the Department.

Note: Not open to students with credit in 400-level Spanish courses or higher.

Spanish 405 H(3-1)

High-Intermediate Spanish

Intensive study of Spanish grammar with the goal of attaining greater proficiency in written and oral communication. Grammatical analysis, vocabulary enrichment and development of conversation skills dealing with cultural issues.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Note: Not open to students with credit in Spanish 401 or 403.

Spanish 407 H(3-0)

Critical Thinking in Spanish

Survey of major rhetorical theories and methodological tools. Analysis of selected texts and practical work in research and documentation. Provides instruction in the gathering and evaluation of information and its presentation in persuasive and well-organized expository prose.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department

Spanish 421 H(3-0)

Literary Genres

Analysis of selected texts from Spain and Spanish America, with an emphasis on issues related to genres.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 423 H(3-0)

History of Hispanic Literatures

Analysis of selected texts from Spain and Spanish America with particular attention to the evolution and development of literature in the Hispanic world.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 433 H(3-0)

Spanish American Literature to 1900

A survey of Spanish American literature in its cultural and historical context. Includes the study of indigenous voices, literature of the conquest, as well as the colonial period and the major authors of the nineteenth century. Format and content of course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Note: Not open to students with credit in Spanish 431.

Spanish 441 **H(3-0)**

Women's Perspectives

Literary, artistic and other cultural works produced by Spanish, Latin American, Caribbean and Latina women. A variety of topics and disciplines (film, art, photography, philosophy, etc.) will be examined. Class material will include theoretical and critical texts, primarily from feminism. Format and content of course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 471 **H(3-2)**

Hispanic Cinema

Study of Spanish, Latin American, Caribbean and Chicano cinema in its historical, political, and social context. Examines a variety of topics (national and gender identities, construction of myths, relations of cinema to popular culture, relations of cinema and literature, etc). Use of contemporary theories of cinematographic expression. Format and content of course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 473 **H(3-0)**

Hispanic Cultures

Overview of Hispanic history, literature and art. Use of essays, journalism, films and electronic media for classroom discussion. Format and content of course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Spanish 475 **H(3-0)**

Topics in Spanish Language

Topics in Spanish phonology, dialectology, and other general aspects of the Spanish language. Format and content of course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 481 **H(3-0)**

Spanish Literature and Culture from the 18th Century to the Spanish Civil War

Survey of major works and cultural movements from the 18th century to the early 20th century. Focus on reading and analytical skills. Format and content of the course may vary from year to year.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

Spanish 499 **H(3-0)**

General Topics in Hispanic Studies

Discussion of selected topics in Hispanic language, literature or culture.

Prerequisites: Spanish 303, 321 and 323 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Spanish 505 **H(3-T1)**
 (formerly Spanish 521)

Advanced Spanish

Advanced course in Spanish language and culture with particular emphasis on composition, vocabulary building and linguistic accuracy. Includes a capstone interdisciplinary project to link the knowledge and skills learned from concentrations outside the Major (either another Major, a Minor or a Micro-focus) with those learned in the Major (Spanish).

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 523 **H(3-0)**

Translation

Introduction to the theory and practice of translation from Spanish into English and from English into Spanish. Format and content of course may vary from year to year to include other languages in addition to English.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421, 423 and Romance Studies 409 or consent of the Department.

Spanish 533 **H(3-0)**

Uses of Spanish as a Second Language

Introduction to basic issues related to the teaching of Spanish as a second language. In special circumstances the theoretical component may be taught in English. The practical component may vary.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 and consent of the Department.

Spanish 555 **H(3-0)**

Spanish American Literature after 1900

Study of the major movements and authors of the twentieth century. Format and content of course may vary from year to year.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 557 **H(3-0)**

Current Trends in Hispanic Studies

In-depth study of literary and cultural issues which could include marginalization, identity, nationalism, the emergence of silenced voices, or other new developments. Format and content of course may vary from year to year.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 565 **H(3-0)**

Medieval and Golden Age Literature

Representative works of literature in the Spanish language from the 10th to the 17th centuries. Format and content of course may vary from year to year.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Note: Not open to students with credit in Spanish 561 or 563.

Spanish 571 **H(3-0)**

Art and Literature

Study of the interrelations of the visual arts and literature, using as its reference Hispanic literary texts and works of art. Format and content of course

may vary from year to year.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 583 **H(3-0)**

Spanish Literature and Culture from the Spanish Civil War to the Present

Interdisciplinary course stressing the relationship between various cultural manifestations and their sociopolitical background. Format and content of course may vary from year to year.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 593 **H(3-0)**

Literary Theory

An introduction to modern literary theory and its various schools of thought, with application to works of Hispanic literature.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

Spanish 595 **H(0-3T)**

Research Methodology

Refinement of research skills. Preparation of specialized bibliographies. Writing of summaries and research proposals in accordance with current scholarly practice. Appropriate use of technology and electronic resources.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421, 423, and 593 and consent of the Department.

Note: Restricted to Spanish Honours students.

Spanish 597 **H(0-3T)**

Honours Thesis

Prerequisites: Spanish 593 and 595 or consent of the Department.

Note: Restricted to Spanish Honours students.

Spanish 599 **H(3-0)**
 (formerly Spanish 591)

Advanced Topics in Hispanic Studies

A specialized course for advanced students. Course may function as a seminar or as a directed readings course.

Prerequisites: Spanish 405 (or 401), 407 (or 403), 421 and 423 or consent of the Department.

MAY BE REPEATED FOR CREDIT

Graduate Course

Spanish 601 **H(3-0)**

Literary and Cultural Theory

MAY BE REPEATED FOR CREDIT

Spanish 613 **H(3-0)**

Critical Analysis of Medieval Texts

MAY BE REPEATED FOR CREDIT

Spanish 615 **H(3-0)**

Golden Age Literature

MAY BE REPEATED FOR CREDIT

Spanish 617 H(3-0)

Theatre and Performance in the 19th or 20th Centuries

MAY BE REPEATED FOR CREDIT

Spanish 619 H(3-0)

Post-Franco Literature, Art and Film

MAY BE REPEATED FOR CREDIT

Spanish 621 H(3-0)

Art, Film and Literature in the Spanish Avant-Garde

MAY BE REPEATED FOR CREDIT

Spanish 623 H(3-0)

Spanish American Literature and Culture to 1900

MAY BE REPEATED FOR CREDIT

Spanish 625 H(3-0)

20th Century Spanish American Literature

MAY BE REPEATED FOR CREDIT

Spanish 627 H(3-0)

Avant-Garde Movements in Spanish America

MAY BE REPEATED FOR CREDIT

Spanish 631 H(3-0)

Popular Culture

MAY BE REPEATED FOR CREDIT

Spanish 633 H(3-0)

Writings in Exile

MAY BE REPEATED FOR CREDIT

Spanish 635 H(3-0)

Literature and the Visual Arts in Hispanic Culture

MAY BE REPEATED FOR CREDIT

Spanish 637 H(3-0)

Identities and Post-Colonial Voices

MAY BE REPEATED FOR CREDIT

Spanish 639 H(3-0)

Hispanic Female Voices

MAY BE REPEATED FOR CREDIT

Spanish 641 H(3-0)

Hispanic Cinema

MAY BE REPEATED FOR CREDIT

Spanish 643 H(3-0)

Special Topics in Hispanic Culture, Language or Literature

MAY BE REPEATED FOR CREDIT

Statistics

STAT

Instruction offered by members of the Department of Mathematics and Statistics in the Faculty of Science.

Department Head – T. Bisztriczky

Note: Not every 400- and 500-numbered Statistics course is offered every year. Check with the divisional office to plan for the upcoming cycle of offered courses.

Note: For listings of related courses, see Actuarial Science Applied Mathematics, Mathematics, and Pure Mathematics.

Note: Credit towards degree requirements will be given for only one of Anthropology 307, Applied Psychology 301/303, Engineering 319, Political Science 399, Psychology 312, Sociology 311, Statistics 201/211, 213/217, 333, 357; that one being a course(s) appropriate to the degree program.

Note: Statistics 201, 211, 213, 217, 333, 357 are not available to students who have previous credit for Mathematics 321 or are concurrently enrolled in Mathematics 321.

Junior Courses

Students requiring one half course in Statistics should take Statistics 211.

Statistics 201 H(3-1T)

Elements of Finite Probability

Sets and events, counting techniques. Axioms of probability, conditioning and independence, Bayes' theorem. Random variables and their distributions. Expectations, variances and the law of large numbers.

Prerequisite: Mathematics 30 or Pure Mathematics 30.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Statistics 211 H(3-1T)

Concepts of Statistics

The systematic treatment of fundamental statistical ideas culminating in the discussion of parameter estimation and hypotheses testing.

Prerequisite: Mathematics 30 or Pure Mathematics 30.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Statistics 213 H(3-2)

Introduction to Statistics I

Collection and presentation of data, introduction to probability, including Bayes' law, expectations and distributions. Properties of the normal curve. Introduction to estimation and hypothesis testing.

Prerequisite: Mathematics 30 or Pure Mathematics 30.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Statistics 217 H(3-2)

Introduction to Statistics II

Estimation of population parameters; confidence intervals for means; choice of sample size. Tests of hypotheses including 2-sample tests and paired

comparisons. The Chi-squared tests for association and goodness-of-fit. Regression and correlation; variance estimates; tests for regression and correlation coefficients. Non-parametric methods and associated tests. Time series, forecasting.

Prerequisite: Statistics 213 or consent of the Division.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Senior Courses

Statistics 333 H(3-3)

Statistics for the Life Sciences

Exploratory data analysis, relationships between variables, elementary probability, random variables, statistical inference, application of statistical methods to medical and biological problems.

Prerequisite: Mathematics 30 or Pure Mathematics 30.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Statistics 357 H(3-1T)

Statistics for the Physical Sciences

Introduction to the basic notions of probability, including Bayes' Law. Discrete and continuous distributions and their generating functions. Point estimates and confidence intervals. Regression analysis. Acceptance sampling plans. Error analysis.

Prerequisite: Mathematics 251 or 249.

Note: See the statements regarding credit which appear at the beginning of the Statistics course listings.

Statistics 407 H(3-1T)

Applied Probability

Markov chains. Limit distributions for ergodic and absorbing chains. Classification of states, irreducibility. The Poisson process and its generalizations. Continuous-time Markov chains. Brownian motion and stationary processes. Renewal theory. Introduction to basic simulation methods.

Prerequisite: Mathematics 321.

Statistics 409 H(3-0)

Theoretical Probability

Elementary measure theory, zero-one laws, weak and strong laws of large numbers, characteristic functions, central limit theorems and infinitely divisible distributions.

Prerequisite: Mathematics 323.

Statistics 419 H(3-0)
(Pure Mathematics 419)

Information Theory and Error Control Codes

Information sources, entropy, channel capacity, development of Shannon's theorems, development of a variety of codes including error correcting and detecting codes.

Prerequisites: Mathematics 311 and Mathematics 321 or any Statistics course, or consent of the Division.

Note: Credit for both Statistics 419 (Pure Mathematics 419) and Statistics 405 will not be allowed.

Statistics 421 H(3-1T)**Mathematical Statistics**

Multivariate Normal distribution. Limit distributions. Sufficient statistics. Completeness of families of distributions. Exponential families. Likelihood ratio tests. Chi-square tests. Analysis of variance. Sequential tests. Introduction to nonparametric methods, Bayesian theory, the general linear model.

Prerequisite: Mathematics 323.

Statistics 423 H(3-1T)**Sampling Theory of Surveys**

Principles of sampling. Questionnaire design. Various types of sampling designs: simple random, stratified, systematic, cluster, multi-stage cluster. Ratio and regression estimates. Estimation of required sample size. Estimation of population size and density. Problems of nonresponse.

Prerequisite: Any one of Statistics 217, 333, 357, Applied Psychology 301, Engineering 319, Mathematics 323, Psychology 312, Sociology 311, 312 or consent of the Division.

Statistics 425 H(3-1T)**Experimental Design**

The objective and structure of an experiment, cause and effect, randomization, the estimation of error, replication, interaction, confounding. Using a computer as an aid in the analysis.

Prerequisite: Any one of Statistics 217, 333, 357, Applied Psychology 301, Engineering 319, Mathematics 323, Psychology 312, Sociology 311, 312 or consent of the Division.

Statistics 429 H(3-1T)**Applied Regression Analysis**

Multiple linear regression model including parameter estimation, simultaneous confidence intervals and general linear hypothesis testing using matrix algebra. Applications to forecasting. Residual analysis and outliers. Model selection: best regression, stepwise regression algorithms. Transformation of variables and non-linear regression. Computer analysis of practical real world data.

Prerequisite: Mathematics 323.

Note: Credit for both Statistics 429 and 431 will not be allowed.

Statistics 433 H(3-1T)**Survival Models**

Nature and properties of survival models; methods of estimating tabular models from both complete and incomplete data samples including actuarial, moment and maximum likelihood techniques; estimations of life tables from general population data.

Prerequisites: Mathematics 323, Actuarial Science 327.

Statistics 437 H(3-1T)**Risk Theory**

Economics of insurance; individual risk models for short term; collective risk models for single period; collective risk models over an extended period; application of risk theory to insurance.

Prerequisite: Mathematics 323.

Statistics 505 H(3-1T)**Time Series Analysis**

Trend fitting, auto-regressive schemes, moving average models, periodograms, second-order stationary processes, ARCH models, statistical software for time series. Additional topics may include Bayesian analysis, spectral theory, Kalman filtering.

Prerequisite: Statistics 429 or consent of the Division.

Statistics 509 H(3-0)**Operations Research**

Topics selected from: decision analysis, linear programming, dynamic programming, integer programming, probabilistic models of queues and inventories, project scheduling, systems reliability.

Prerequisite: Mathematics 323 or consent of the Division.

Note: Credit for both Statistics 509 and Actuarial Science 435 will not be allowed.

Statistics 511 H(1.5-0)**Practice of Statistics**

Intended for students in their final year of study. Introduction to real-world statistical practice. Model selection. Messy data. Statistical software. Report writing and presentation. Working in groups. Ethical considerations in statistics.

Prerequisite or Corequisite: Statistics 429.

Statistics 519 H(3-0)**Bayesian Statistics**

Fundamentals of Bayesian inference, single and multiparameter models, hierarchical models, regression models, generalized linear models, advanced computational methods, Markov chain Monte Carlo.

Prerequisite: Mathematics 323 or consent of the Division.

Note: Statistics 421 is recommended.

Statistics 523 H(3-0)**Nonparametric Statistics**

Nonparametric estimation and tests of hypotheses. Distributions useful to handle nonparametric inference. Distribution-free tests. Asymptotic Theory.

Prerequisite or Corequisite: Mathematics 323 or consent of the Division.

Note: May not be offered every year. Consult the department for listings.

Statistics 525 H(3-1)**Multivariate Analysis**

Normal distribution. Statistical inference: confidence regions, hypothesis tests, analysis of variance, simultaneous confidence intervals. Principal components. Factor Analysis. Discrimination and classification. Canonical correlation analysis.

Prerequisite: Statistics 421 or consent of the Division.

Note: May not be offered every year. Consult the department for listings.

Statistics 529 H(3-1)**Special Topics in Applied Statistics**

Content of the course will vary from year to year. Consult the Statistics Division for information on choice of topics.

Prerequisite: Consent of the Division.

MAY BE REPEATED FOR CREDIT

Statistics 531 H(3-1)**Monte Carlo Methods and Statistical Computing**

Introduction to a variety of statistical languages and packages and introductory statistical programming in SPLUS. Pseudo-random variate generation. Bootstrapping. Variance reduction techniques. Computation of definite integrals. Model design and simulation, with applications.

Prerequisite: Mathematics 323 or consent of the Division.

Graduate Courses

Note: Some 500- and 600-level statistics courses may have concurrent lectures. Extra work in these courses (e.g., extra assignments, advanced examination questions, a term project) will be required for credit at the 600 level.

Statistics 601 H(3-0)**Topics in Probability and Statistics**

The content of this course is decided from year to year in accordance with graduate student interest and instructor availability. Topics include but are not restricted to: Advanced Design of Experiments, Weak and Strong Approximation Theory, Asymptotic Statistical Methods, the Bootstrap and its Applications, Generalized Additive Models, Order Statistics and their Applications, Robust Statistics, Statistics for Spatial Data, Statistical Process Control, Time Series Models.

MAY BE REPEATED FOR CREDIT

Statistics 619 H(3-0)**Bayesian Statistics**

Fundamentals of Bayesian inference, single and multiparameter models, hierarchical models, regression models, generalized linear models, advanced computational methods, Markov chain Monte Carlo.

Note: Lectures may run concurrently with Statistics 519.

Statistics 621 H(2S-0)**Research Seminar**

Reports on studies of the literature or of current research.

Note: All graduate students in Mathematics and Statistics are required to participate in one of Applied Mathematics 621, Pure Mathematics 621, Statistics 621 each year.

MAY BE REPEATED FOR CREDIT

NOT INCLUDED IN GPA

Statistics 623 H(3-0)**Nonparametric Statistics**

Nonparametric estimation and tests of hypotheses. Distributions useful to handle nonparametric inference. Distribution-free tests. Asymptotic Theory.

Note: Lectures may run concurrently with Statistics 523.

Statistics 625 H(3-0)

Multivariate Analysis

Normal distribution. Statistical inference: confidence regions, hypothesis tests, analysis of variance, simultaneous confidence intervals. Principal components. Factor Analysis. Discrimination and classification. Canonical correlation analysis.

Note: Lectures may run concurrently with Statistics 525.

Statistics 631 H(3-0)

Computational Tools for Statistical Inference

Topics include but are not restricted to selections from: Monte Carlo methods; the Bootstrap; the EM algorithm; data augmentation and imputation; Markov chain Monte Carlo methods.

Statistics 633 H(3-0)

Survival Models

Advanced topics in survival models such as the product limit estimator, the cox proportional hazards model, time-dependent covariates, types of censorship.

Statistics 635 H(3-0)

Generalized Linear Models

Review of linear model theory. Exponential family of distribution, binary data models, loglinear models, overdispersion, quasi-likelihood methods, generalized additive models, longitudinal data and generalized estimating equations, model adequacy checks.

Statistics 637 H(3-0)

Nonlinear Regression

Topics include but are not restricted to selections from: linear approximations; model specification; various iterative techniques; assessing fit; multiresponse parameter estimation; models defined by systems of DEs; graphical summaries of inference regions; curvature measures.

Statistics 639 H(3-0)

Conference Course in Actuarial Modelling

Topics in advanced actuarial theory and practice, such as: insurance risk models; practical analysis of extreme values; advanced property and casualty rate making; actuarial aspects of financial theory.

MAY BE REPEATED FOR CREDIT

Statistics 701 H(3-0)

Theory of Probability I

Statistics 703 H(3-0)

Theory of Probability II

Statistics 721 H(3-0)

Theory of Estimation

Statistics 723 H(3-0)

Theory of Hypothesis Testing

Statistics 761 H(3-0)

Stochastic Processes I

Statistics 798 F(0-6)

Statistics Project

MAY BE REPEATED FOR CREDIT

In addition to the numbered and titled courses shown above, the department offers a selection of advanced level Graduate Courses specifically designed to meet the needs of individuals or small groups of students at the advanced doctoral level. These courses are numbered in the series 800.01 to 899.99. Such offerings are, of course, conditional upon the availability of staff resources.

Strategic Studies STST

Instruction offered by members of the Faculty of Social Sciences.

Graduate Coordinator – H. H. Herwig

Graduate Courses

Only where appropriate to a student's program may graduate credit be received for courses numbered 500-599.

Strategic Studies 609 H(3-0)
(Historical Studies 609)

Canada in the Second World War

An examination of the Canadian military's ability to cope with the harsh realities of war. Topics to include Leadership in the Canadian Army; Adapting to Warfare in the Royal Canadian Navy and Air Force. Emphasis will be placed on the political parameters imposed by the government on the military, the quality of Canadian military leadership, and the "fit" between British and Canadian military organizations and personnel.

Strategic Studies 651 H(3-0)

Reading Seminar I

MAY BE REPEATED FOR CREDIT

Strategic Studies 653 H(3-0)

Research Seminar I

MAY BE REPEATED FOR CREDIT

Strategic Studies 655 H(3-0)
(Historical Studies 655)

(formerly Historical Studies 481)

Classics of Strategy

Strategic thought from Sun Tzu to Clausewitz, Mahan to Corbett. Analyzes the writings of classic strategic thinkers, and then by way of case studies examines their theories as they pertain to military and political planners from the Peloponnesian War to the present.

Strategic Studies 751 H(3-0)

Reading Seminar II

MAY BE REPEATED FOR CREDIT

Strategic Studies 753 H(3-0)

Research Seminar II

MAY BE REPEATED FOR CREDIT

Strategy and General Management SGMA

Instruction offered by members of the Haskayne School of Business.

Strategy and General Management Chairperson – M. Javidan

Note: Students have the opportunity to take courses offered by the Haskayne School of Business without the stated prerequisites, with the written permission of the Associate Dean (Undergraduate Programs)

as appropriate, upon the recommendation of the Instructor of the course. However, should a student fail to achieve satisfactory standing in any course for which the stated prerequisite(s) is (are) lacking, he/she may be required to successfully complete the stated prerequisite(s) prior to being permitted to repeat the course. Students are required to have consent of the Haskayne School of Business Office before registering in 600-level courses offered by the Haskayne School of Business.

Senior Courses

Strategy and General Management 301 H(3-0)

Elements of Effective Communication

Examination of the communication process. The course focuses on elements of written and oral communication in management. Students are expected to demonstrate improved skills in both these areas.

Prerequisite: One half-course English elective.

Strategy and General Management 375 H(3-0)

Introduction to Petroleum Land Management

Petroleum land management including both technical and economic considerations in the search for and development and marketing of oil and gas resources. A field trip and/or simulation exercise may be required.

Prerequisites: Admission to the Bachelor of Commerce program, second year standing and Strategy and General Management 395, or holder of a Bachelor of Commerce degree or equivalent or consent of the business school

Corequisite: Strategy and General Management 377.

Note: One half course in Geology is recommended but not required. Priority is given to Bachelor of Commerce students.

Strategy and General Management 377 H(3-0)

Introduction to Oil and Gas Agreements

The concepts of ownership in the Canadian oil and gas industry, including Crown and freehold leases, basic oil and gas agreements, and assignment documentation.

Prerequisites: Admission to the Bachelor of Commerce program, second year standing and Strategy and General Management 395, or holder of a Bachelor of Commerce degree or equivalent or consent of the business school.

Corequisite: Strategy and General Management 375.

Note: One half course in Geology is recommended but not required. Priority is given to Bachelor of Commerce students.

Strategy and General Management 395 H(3-0)

Business Law for Strategic Decision-Makers

Topics include legal services, regulatory compliance and environment management, tort and contractual liability, legal issues affecting the strategic management of sole proprietorships, partnerships, corporations and joint ventures, personal liability of corporate directors and officers, legal issues in the technological environment, advertising and promotion, consumer protection legislation, legal issues affecting employees and independent contractors, and the strategic management of international business.

Strategy and General Management 401 H(3-0)***Business in Canada***

A comparative analysis of Canada's competitive position in the global economy with case studies of the strategies employed by Canadian corporations to win in world markets.

Prerequisite: Entrepreneurship and Innovation 201 or Management Studies 291 and fourth year standing.

Note: Not available for credit toward the Bachelor of Commerce Degree. Until August 15, preference in enrollment is given to students who have declared a Management and Society minor.

Strategy and General Management 473 H(3-0)***Petroleum Business Agreements***

Legal requirements in the acquisition and exploration of and production from oil and gas rights in Canada.

Prerequisites: Third year standing, Strategy and General Management 375, 377 and 395.

Strategy and General Management 479 H(3-1)***Petroleum Land Management Policy***

Prepare graduates to effectively contribute to the management of oil and gas properties throughout the life of the properties by increasing the understanding and awareness of corporate resource property valuation techniques.

Prerequisites: Third year standing, Strategy and General Management 375, 377, 395 and 473.

Strategy and General Management 483 H(3-0)***Management of Energy Regulation***

Overview of key regulations and regulatory principles important to energy resources.

Prerequisites: Third year standing, Strategy and General Management 375, 377 and 395.

Strategy and General Management 485 H(3-0)***Oil and Gas Marketing***

Practical introduction to crude oil (light and heavy) and natural gas marketing. Marketing of refined oil products and retail gasoline are not covered.

Prerequisites: Admission to the business school and fourth year standing.

Strategy and General Management 559 H(3-0)***Selected Topics in Strategy and General Management***

Examination of selected topics in Strategy and General Management.

Prerequisite: Fourth year standing.

MAY BE REPEATED FOR CREDIT

Strategy and General Management 561 H(3-0)***Ethical Issues And The Professional Manager***

Covers major principles of ethics from different perspectives to provide tools for making sound ethical decisions in various business situations and in the face of moral dilemmas.

Prerequisites: Consent of the business school and fourth year standing.

Note: Not open to students with credit in Policy and Environment 559.06.

Strategy and General Management 571 H(3-0)***Business Under Nafta***

Legal, political, economic and social considerations important to Canadian firms pursuing the US and/or Mexican markets, including the implications of the North American Free Trade Agreement.

Prerequisites: Consent of the business school and fourth year standing.

Note: Not open to students with credit in Policy and Environment 559.07.

Strategy and General Management 573 H(3-0)***Business with Japan***

An integrated approach to the cultural, governmental and structural factors influencing the conduct of business with Japan, whether as a supplier, customer, partner or investor.

Prerequisites: Consent of the business school and fourth year standing.

Note: Not open to students with credit in Policy and Environment 559.08.

Strategy and General Management 575 H(3-0)***International Business***

Covers the concepts and knowledge base required to understand how foreign cultural, economic and political developments affect the strategies of firms involved in international trade and investment, as well as of firms often seen as principally domestic in orientation.

Prerequisites: Admission to the business school and third year standing.

Graduate Courses**Strategy and General Management 691 H(3-0)**
(Civil Engineering 691)***Fundamentals of Project Management***

Application of management principles to the project environment; planning, control, scope, time and cost processes; project organization and human resource issues. Students review a current major capital project and submit and defend a project report.

Prerequisite: Consent of Program Director.

Strategy and General Management 701 H(3-0)***Strategic Management I***

The role of the CEO and other senior executives in formulating and implementing corporate strategies, and provides an overview of key strategic issues and topics. Covers such areas as industry analysis executive leadership, corporate strategy, corporate diversification, strategic change, global strategy, mergers and acquisitions, and strategic implications of new technologies.

Strategy and General Management 719 H(3-0)***Project External Issues***

Corporate influences; financial interfaces; sources of funds; lending environment, owner's and lender's risks; government involvement; regulatory requirements; public interfaces; public information; compensation; project commissioning.

Prerequisite: Strategy and General Management 691.

Strategy and General Management 725 H(3-0)***e-Strategy***

The impact of internet technology on strategic management of large corporations. How the technology influences industry structure and how it drives companies' competitive strategies and their organizational structures and systems. Explores the implications for strategic leadership in organizations.

Corequisite: Management Information Systems 725.

Strategy and General Management 775 H(3-0)***International Business Environment***

The environment which influences international business activities including economic, legal, political and socio-cultural factors. Foreign direct investment in Canada will also be considered.

Strategy and General Management 777 H(3-0)***Global Environment of Canadian Business***

Economic, political, social and legal factors affecting management decisions. Topics include Canada in the world economy, business and government relations, business ethics, legal environment for business. Develops knowledge and ability to analyze and deal with complexities of the business environment.

Strategy and General Management 789 H(3-0)***Seminar in Strategy and General Management***

Study and discussion of current research literature and contemporary issues on topics related to Strategy and General Management in the private and/or the public sectors.

MAY BE REPEATED FOR CREDIT

Strategy and General Management 793 H(3-0)***Legal Environment of Business***

The study of the various areas of law which are particularly relevant to someone developing their business: contracts, patents and copyrights, product liability, incorporation, etc.

Prerequisites: Human Resources and Organizational Dynamics 601, Operations Management 601, Management Information Systems 601, Accounting 601 or equivalent.

Strategy and General Management 795 H(3-0)***Strategic Management II***

Application of strategic concepts and frameworks of analysis. Decisions and the processes to mobilize resources for the attainment of objectives. Measurement of performance through industry and competitive analysis.

Prerequisite: Strategy and General Management 791 or 701 or consent of the business school.

Strategy and General Management 797 H(3-0)***Advanced Seminar in Strategy and General Management***

Prerequisite: Consent of the business school.

MAY BE REPEATED FOR CREDIT

PhD Course

Strategy and General Management 799 H(3S-0)

Doctoral Seminars in Strategy and General Management

799.01. Survey of the Field

799.02. Corporate and Competitive Strategy

799.03. Current Topics in Strategic Management

799.04. Business Environment

799.05. Interorganizational Relationships:
Creating and Managing Strategic
Alliances

Term Abroad Program TAP

Instruction offered by the University and individual Faculties depending on the topic(s) being covered.

Junior Courses

Term Abroad Program 201 H(3-0)

National Language I

Instruction in the Language (or one of the languages) of the country of residence as part of a Term Abroad Program.

Term Abroad Program 203 H(3-0)

National Language II

A continuation of Term Abroad Program 201.

Prerequisite: Term Abroad Program 201 or consent of the Faculty of Humanities.

Senior Courses

Term Abroad Program 301 H(3-0)

National Language Intermediate I

A continuation of Term Abroad Program 203.

Prerequisite: Term Abroad Program 203 or consent of the Faculty of Humanities.

Term Abroad Program 303 H(3-0)

National Language Intermediate II

A continuation of Term Abroad Program 301.

Prerequisite: Term Abroad Program 301 or consent of the Faculty of Humanities.

Tourism and Hospitality Management TOUR

Instruction offered by members of the Haskayne School of Business.

Tourism and Hospitality Chairperson: B. Ritchie

Note: Students have the opportunity to take courses offered by the Haskayne School of Business without the stated prerequisites, with the written permission of the Associate Dean, upon the recommendation of the instructor of the course. However, should a student fail to achieve satisfactory standing in any course for which the stated prerequisite(s) is (are) lacking, he/she may be required to successfully complete the stated prerequisite(s) prior to being permitted to repeat the course. Students are required to have consent of the Haskayne School of Business before registering in 600-level courses offered by the Haskayne School of Business.

Senior Courses

Tourism and Hospitality Management 309 H(3-0) (Leisure, Tourism and Society 309)

Introduction to Leisure, Tourism and Society

An interdisciplinary introduction to the concepts, methods and practices of leisure, recreation and tourism studies.

Prerequisites: Admission to the Haskayne School of Business and second year standing.

Tourism and Hospitality Management 409 H(3-0)

Travel and Tourism Management

Economic, social, cultural, political, and technological dimensions of tourism, in particular changing travel markets, industry structure, evolving issues and problems. Introduction and application of managerial principles to resolve these problems.

Prerequisites: Third year standing and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309).

Note: Not available for credit toward the Bachelor of Commerce Program.

Tourism and Hospitality Management 419 H(3-0)

Tourism Marketing

Examination of the travel industry structure, the peculiarities of the tourism "product," market trends, problems and prospects. Tourism demand, supply, and linking components are highlighted, with special emphasis on travel industry marketing in the broader community and regional marketing context and the integration of human resources management and marketing in service operations.

Prerequisites: Third year standing, Marketing 317 and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Note: Priority will be given to commerce students who have declared a concentration in Tourism and Hospitality Management. This course may also be used towards a joint concentration with Marketing.

Tourism and Hospitality Management 429 H(3-0)

Managing Human Resources in Tourism and Hospitality Operations

Analysis of the human resource management problems involved in the delivery of hospitality and travel services including recruitment, selection, training and development, motivation, compensation, communication, unionism and labour market issues. Emphasis will be on the particular human resource challenges in hospitality and travel services, and the linkages between human resources strategy and overall business objectives.

Prerequisite: Third year standing.

Prerequisites or Corequisites: Human Resources and Organizational Dynamics 317 and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Tourism and Hospitality Management 439 H(3-0)

Financial Management in Tourism and Hospitality

Application of principles of financial management to the Tourism and Hospitality industry: balance sheet analysis; ratios; statements; capital budgeting analysis; working capital management; short, medium and long-term financing problems; reorganization.

Prerequisites: Third year standing, Finance 317 or 351 and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Note: Tourism and Hospitality Management 469 is recommended.

Tourism and Hospitality Management 449 H(3-0)

Policy, Planning and Research in Tourism

Focus on the impact of economic, social, cultural, political and technological issues and factors on travel and tourism and the host society. Examination of the structure and functioning of tourism systems and the manner in which general principles of issues management and forecasting can be adapted for effective tourism administration. Application of research on a specific dimension of travel and tourism management.

Prerequisites: Third year standing, admission to the Haskayne School of Business and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Tourism and Hospitality Management 469 H(3-1T)

Profit and Control in Tourism and Hospitality

Examination of the information systems useful in value-added processes within tourism and hospitality organizations. Interpretive, analytical, and judgmental skills will be applied in the study of quality and environmental costs, JIT and ABC costing, cash management, performance evaluation, and other topics.

Prerequisites: Third year standing, admission to the Haskayne School of Business, Accounting 317 or 321, and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Note: Not open to students with credit in Accounting 361.

Note: It is recommended that this course be taken before Tourism and Hospitality Management 439.

Tourism and Hospitality Management 479 H(3-0)

Resort and Recreation Management

Concepts and methods of resort planning, management and marketing, including recreational and event management for the resort environment. Case studies of real and proposed resorts from different environments will be used. Field visits to one or more resorts will be an essential part of the course.

Prerequisites: Third year standing, admission to the Haskayne School of Business and Tourism and Hospitality Management 309 (Leisure, Tourism and Society 309); or consent of the business school.

Note: Enrollment is restricted to Bachelor of Hotel and Resort Management students and Tourism and Hospitality Management concentrators until August 15.

Tourism and Hospitality Management 499 H(3-1)

Convention and Events Management

An introduction to the principles and practice of convention and events management, covering meetings, conventions, sports, arts, entertainment, festivals, exhibitions, trade and consumer shows, functions, and their venues. Specific attention is paid to the economic and tourism impacts of events.

Prerequisites: Third year standing, any two 400-level or higher Tourism and Hospitality Management courses.

Graduate Courses**Tourism and Hospitality Management 741 H(3-0)****Policy Planning and Development in Tourism**

The planning process. The nature of tourism, and its role in national and regional development. Economic, social, psychological, environmental and technological impacts of tourism on the host community. Trade-offs. Strategies in development. Planning and public policy. National, provincial and local tourism Programs. The Alberta example.

Prerequisite: Consent of the business school.

Tourism and Hospitality Management 745 H(3-0)**International Tourism**

The structure, environment and special characteristics of international tourism. Nature, importance and measurement of country/destination image. Host-visitor interaction. Factors motivating, facilitating and constraining international travel. Types of international tourists and their needs. Measurement, forecasting and promotion of international travel. Major issues and elements of planning for international visitors.

Prerequisite: Consent of the business school.

Tourism and Hospitality Management 797 H(3S-0)**Advanced Seminar in Tourism**

Prerequisite: Consent of the business school.

PhD Courses**Tourism and Hospitality Management 799 H(3S-0)****Doctoral Seminars in Tourism**

799.01. General Fields in Tourism Management

799.02. Special Fields in Tourism Management

799.03. Tourism Policy and Strategy

799.04. Theory in Tourism

Transportation Science TRAN

Instruction offered collaboratively by members of the Department of Geography in the Faculty of Social Sciences and the Department of Civil Engineering in the Faculty of Engineering. All Transportation Science courses are Area III in the Faculty of Social Sciences.

Contact – N.M. Waters

Senior Courses**Transportation Science 301 H(3-0)****Transportation Systems and Analysis**

An introduction to sources of data and methods of analysis for describing and analysing transportation systems. Transportation systems will be treated at the municipal, provincial and federal levels and on a modal basis.

Transportation Science 473 H(3-2)
(Civil Engineering 473)**Introduction to Transportation Planning**

Goals and objectives of urban and regional transportation planning; the transportation planning process; trip generation, trip distribution, modal split, traffic assignment; transportation surveys and data collection; fundamentals of traffic flow; capacity and level of service; urban transportation technology;

computer simulation models of urban transportation; environmental impacts; transportation systems management; energy considerations; pedestrian movement systems; urban goods movement; impact of transportation system on city growth; urban transportation policy and financing in Canada.

Prerequisite: Transportation Science 301 or both Engineering 319 and Civil Engineering 371; or consent of the Instructor.

Transportation Science 499 H(5-0)**Group Project in Transportation Issues**

Students will work in groups to examine real-world transportation problems identified by the instructor. Methodology will be based on knowledge acquired in Transportation Science 301.

Prerequisites: Transportation Science 301 and consent of program or Transportation Minor Advisor.

Transportation Science 599 H(5-0)**Independent Research in Transportation Issues**

Individual work on an assigned topic concerning a practical transportation issue under the supervision of a faculty member. The project will normally involve a literature review and the application of theoretical analysis to an actual problem encountered by practitioners. Submission and defence of a midterm progress report and a final report are included.

Prerequisite: Consent of program or Transportation Minor Advisor.

University**UNIV**

Instruction offered by the University and individual Faculties depending on the topic(s) being covered.

Senior Courses**University 400 F(3-0)****Metaphors That Matter - An Interdisciplinary Perspective**

Lectureless course, which will use a wide range of resources to involve self-directed students in the exploration of the metaphors underlying the major disciplines constituting the modern university.

Prerequisite: Consent of the Course Co-ordinator.

University 401 H(3-0)**Topic in Interdisciplinary Studies**

The focused examination of a topic from a variety of interdisciplinary perspectives.

MAY BE REPEATED FOR CREDIT

University 501 H(0-4)**Experiential Learning**

An application of theory in a community or workplace setting.

Prerequisite: Consent of the student's faculty.

Note: Information regarding procedures to be followed in registering for this course is available from Associate Deans (Student Affairs) of undergraduate faculties and the Registrar.

MAY BE REPEATED FOR CREDIT

Graduate Course**University 601 H(3-0)****Ethics of Research with Human Subjects**

A multidisciplinary course addressing issues in research with human subjects. Topics include theoretical approaches to understanding ethics, respect for persons, benefit and harm, confidentiality and publication, and selection of research subjects. Taught by a multidisciplinary team with very broad experience on research ethics boards.

Prerequisite: Consent of the Course Co-ordinator.

Urban Studies**UBST**

Instruction offered under the direction of the Faculty of Social Sciences.

Coordinator: B. Miller

Junior Course**Urban Studies 201 H(3-0)****Topics in Urban Studies**

An introductory survey of urban studies with focus upon some of the basic features of urban society. Topics will include the problems of urbanization and internal city issues, bringing together points of view of the economist, geographer, historian, political scientist and sociologist.

Note: Students entering the program in the third/fourth years, who have completed several urban courses, may substitute Urban Studies 201 with another course from the second list of required courses in the Urban Studies Major.

Senior Courses**Urban Studies 311 H(3-0)****The Gendered City**

Introduction to urban gender issues from historical and spatial perspectives. Issues such as the gendering of urban design and planning, daily urban activities, urban labor markets, gentrification, suburbanization, and identity construction in urban places are addressed.

Prerequisite: Urban Studies 201 or consent of the Faculty.

Urban Studies 313 H3-3)**The City in Film**

Introduction to the representation of cities in film. Theoretical understandings of urban processes are linked to urban experiences as portrayed in urban film. Topics may include changing urban form, suburbanization, economic restructuring, racial conflict, community formation, urban politics, and more. Portions of this course will focus on particular cities such as Montreal, New York and Los Angeles.

Prerequisite: One of Urban Studies 201, Anthropology 379, Geography 351, Sociology 353, or consent of the Faculty.

Urban Studies 451 H(3-0)**Planning in the Canadian City**

Introduction to Canadian urban planning theory and practice. Focuses on the history of planning, and aspects of practice such as neighbourhood planning, historic preservation, urban design and long-range planning.

Urban Studies 501 H(3-0)

Research in Selected Topics

Supervised individual study of a special topic.

Prerequisites: Consent of the Urban Studies Director and the Associate Dean (Academic).

Note: Students should contact the Office of the Associate Dean (Academic) prior to the first day of classes to arrange an independent study course.

MAY BE REPEATED FOR CREDIT

Urban Studies 505 H(3-0)

Special Topics in Urban Studies

An examination of selected topics in Urban Studies. See Master Timetable for current topic(s).

Prerequisites: Consent of the Urban Studies Director and the Associate Dean (Academic).

MAY BE REPEATED FOR CREDIT

Urban Studies 591 H(3S-0) (formerly Urban Studies 501)

Integrative Seminar

Advanced seminar for the interdisciplinary consideration of selected problems in urban studies.

Prerequisites: Urban Studies 201 and two of Economics 361, Geography 351, Political Science 425, Sociology 353, or consent of the Faculty.

Note: May not be offered every year. May be taken as a reading course if an instructor is available.

Women's Studies WMST

Instruction offered under the direction of the Faculty of Communication and Culture. For information contact the Program Director or the Academic Programs Office, 220-6343.

Additional interdisciplinary courses are offered under the course headings African Studies, Canadian Studies, Central and East European Studies, Communications Studies, Development Studies, East Asian Studies, General Studies, Latin American Studies, Law and Society, Leisure, Tourism and Society, Museum and Heritage Studies, Northern Planning and Development Studies, Science, Technology and Society, South Asian Studies.

Junior Course

Women's Studies 201 H(3-0) (formerly Women's Studies 305)

Introduction to Women's Studies

Provides analyses of women's historical and current status, place, and value. Surveys the status of women, explores feminist theories and methods that have been developed to understand women, and examines contemporary Canadian women's place in paid work, education, health and popular culture.

Senior Courses

Women's Studies 303 H(3-0)

Key Writings in Western Feminism: Wollstonecraft to Davis

An introduction to the key writings of the most influential theorists in the Western feminist tradition, from its beginnings in eighteenth and nineteenth century liberalism, through its suffragist First Wave in the early twentieth century, up to the maturing of its Second Wave's women's liberation movement in the early 1980's.

Women's Studies 307 H(3-0)

Contemporary Issues in Feminism

An analysis of some central and contentious issues impacting upon women's lives today. Topics include violence against women and "victim feminism"; sexual identities and transgressions; how women are differentially impacted by racism, colonialism, and economic class.

Prerequisite: Women's Studies 201 or 311.

Women's Studies 311 H(3-0)

Contemporary Feminist Theories

A comprehensive and comparative survey of the theoretical assumptions and the political stances associated with the main forms of feminist theory today - liberal, radical/cultural, socialist/Marxist, and postmodern feminisms.

Women's Studies 313 H(3-0)

Feminist Research Methods

An examination of the ways in which feminist thinking informs approaches to research. Explores, and practices, several feminist methods of social research.

Women's Studies 321 H(3-0)

Women and Health

An interdisciplinary examination of women's experience of physical and psychological health and of perceptions and treatment of women within health care systems. The role of women as health care providers in families and society. Examples will come primarily, but not exclusively, from the Canadian context.

Women's Studies 331 H(3-0)

Women, Work, and the Globalized Economy

Women's domestic labour and "double day"; employment equity; the "feminization of poverty"; the impact of globalization, post-Fordism, and information-based technologies on women's labour North and South; sex work and surrogacy in the New World Economic Order.

Women's Studies 339 H(3-0)

Gender in Popular Culture

Introduction to the analysis of gender in popular culture, focusing on representations of gender in North America in the post Second World War period.

Women's Studies 401 H(3-0)

Special Topics in Women's Studies

An interdisciplinary analysis of topics such as the following: ecofeminism, women's autobiographical writings, feminist perspectives on technology, women's sexual identities, women's roles and identities in a cultural context.

MAY BE REPEATED FOR CREDIT

Women's Studies 405 H(3S-0)

Seminar in Feminist Praxis

An opportunity to develop practical and political skills by participating in grassroots feminism. Students will be asked to volunteer a few hours a month with a feminist organization of their choice. In-class time will be spent reflecting on these experiences and critically situating them within the history and perspectives of Western feminist activism.

Prerequisite: Women's Studies 201.

Women's Studies 431 H(3S-0)

Gender, Bodies, and Knowledge

How do women think about and experience their own bodies in different times and places? This interdisciplinary analysis will draw from studies in medicine, history, psychology and feminist theory, and will consider themes like sexuality, reproductivity, health care, and youth and old age.

Prerequisite: Women's Studies 201 or consent of the Associate Dean (Student Affairs and Curriculum).

Women's Studies 501 H(3-0)

Research in Selected Topics

Supervised individual study of a special topic.

Prerequisites: Consent of the Women's Studies Director and the Associate Dean (Academic).

Note: Students should contact the office of the Associate Dean (Academic) prior to the first day of classes to arrange an independent study course.

MAY BE REPEATED FOR CREDIT

Women's Studies 591 H(3S-0)

Integrative Seminar

Advanced seminar in which students will have the opportunity to apply their knowledge of feminist theory and issues to a more in-depth consideration of feminist research methodology and action.

Prerequisite: Women's Studies 405 or consent of the Associate Dean (Student Affairs and Curriculum).

Zoology ZOOL

Instruction offered by members of the Department of Biological Sciences in the Faculty of Science.

Department Head – D.M. Reid

†Limited amounts of non-scheduled class time involvement will be required for these courses.

Junior Course

Zoology 269 H(3-2T)

Introduction to Human Anatomy and Physiology

The structure and function of human organ systems with emphasis on homeostasis.

Prerequisites: Biology 30 and enrollment in the Faculty of Nursing.

Note: Credit for both Zoology 269 and any of Biology 305, Medical Science 200, 201, Kinesiology 261, Zoology 361, or 363 will not be allowed.

Note: Not open for credit to Majors or Minors in the Department of Biological Sciences or to Natural Sciences program students with a Concentration in Biological Sciences.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Senior Courses

Zoology 361 H(3-3/2)

Introduction to Human Physiology I

Basic physiology of human nervous, muscle, sensory, endocrine and reproductive systems. Emphasis is placed on integrative control of bodily function.

Prerequisite: Biology 231.

Prerequisite or Corequisite: Kinesiology 261 or Biology 233.

Note: Credit for Zoology 361 and any of Medical Science 502, Zoology 461, or 463 will not be allowed. This course is not open for credit to Zoology Majors in the Department of Biological Sciences.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 363 H(3-3/2)

Introduction to Human Physiology II

Basic physiology of human immune, blood, cardiovascular, respiratory, renal and digestive systems, as well as metabolism and thermoregulation.

Prerequisite: Zoology 361.

Note: Credit for Zoology 363 and any of Medical Science 502, Zoology 461, or 463 will not be allowed. This course is not open for credit to Zoology Majors in the Department of Biological Sciences.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

†Zoology 375 H(3-3)

An Introduction to Invertebrate Zoology

A survey of the invertebrate phyla with particular reference to those which exemplify the following grades of organization: protoplasmic, cellular, tissue, and organ-system and within the latter - acoelomate, pseudocoelomate, schizocoelomate and enterocoelomate. Emphasis is placed on functional morphology of the major phyla.

Prerequisite: Biology 233.

†Zoology 377 H(3-3)

The Vertebrates

Comparative anatomy; a basis for understanding the functional organization, development and adaptive radiation of vertebrates.

Prerequisite: Biology 233.

Zoology 461 H(3-1T-3)

Animal Physiology I

Study of control mechanisms in nerves, sensory organs, muscles and endocrine glands.

Prerequisites: One of Biochemistry 341, 393, Chemistry 351 or 354; Biology 331.

Note: Credit for both Zoology 461 and either Medical Science 502 or Zoology 361 will not be allowed.

Note: Prior completion of Physics 211 or 221 and 223 is strongly recommended

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 463 H(3-1T-3)

Animal Physiology II

Study of body fluids and hemostasis, body defence systems, reproductive physiology, respiration, circulation, excretion, gastrointestinal physiology and thermoregulation.

Prerequisite: Zoology 461.

Note: Credit for both Zoology 463 and either Medical Science 502 or Zoology 363 will not be allowed.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 471 H(3-3)

(formerly Zoology 373)

Embryology

The development of vertebrate and invertebrate organisms including gametogenesis, fertilization, cleavage, gastrulation, organogenesis and growth.

Prerequisite: Zoology 377.

Zoology 475 H(3-3)

The Invertebrates

The phylogeny of the invertebrates; the relationships and adaptive radiation of all animal phyla, with emphasis on those structural and functional characteristics that are of evolutionary significance.

Prerequisite: Zoology 375.

†Zoology 477 H(3-3)

Biology of Vertebrates

Systematics, natural history and biology of vertebrates. Laboratory work will emphasize the identification and morphology of native taxa as well as basic techniques of biological systematics.

477.01. Birds and Mammals

477.02. Fishes, Amphibians and Reptiles

Prerequisite: Biology 313 or Zoology 377.

Note: Courses may be taken in any order.

Note: Zoology 477.01 is offered in odd-even dated academic years; Zoology 477.02 is offered in even-odd dated academic years.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 483 H(3-3)

Principles in Parasitism

An introduction to protozoan, helminth, and arthropod parasites of animals; principles of host and parasite adaptations, host defense, disease and epidemiology. Laboratory tutorials emphasize morphology, life cycles and systematics of parasites. This course is delivered via video-broadcasting facilities.

Prerequisite: Cellular, Molecular and Microbial Biology 343 or Zoology 375.

Zoology 507 H(3-3)

Special Problems in Zoology

Lectures, seminars, term papers and training in theoretical and/or laboratory methods. After consultation with a Departmental faculty member who will supervise the chosen problem, a permission form obtained from the Department Office must be signed by the course supervisor before a student can register.

Prerequisites: Third or higher-year standing and consent of the Department.

MAY BE REPEATED FOR CREDIT

Zoology 528 F(0-6)

Independent Studies in Zoology

Original and independent thought, practical research and the completion of written and oral reports. After consultation with a Departmental faculty member who will supervise the chosen problem, a permission form obtained from the Department Office must be signed by the course supervisor before a student can register.

Prerequisites: Biology 315, fourth-year standing and consent of the Department.

Zoology 530 F(0-8)

Honours Research Project in Zoology

Research project under the direction of one or more faculty members in the Department of Biological Sciences. Formal written and oral reports must be presented on completion of this course. Open only to Honours Zoology students or Honours Biological Sciences students. After consultation with a Department faculty member who will supervise the chosen problem, a permission form obtained from the Department Office must be completed before a student can register.

Prerequisites: Biology 315, fourth-year standing and consent of the Department.

Zoology 531 H(3-3)

Histology

Light and electron microscopic morphology of the basic tissues (epithelia, connective tissues, muscles and nerves) in the vertebrates; structural and functional associations of the basic tissues in the primary organs of the body.

Prerequisites: Biology 331 and one of Zoology 373, 377 or 471.

Note: Offered in even-odd dated academic years.

Zoology 567 H(3-1T)

Animal Behaviour

Offered from an evolutionary and ecological perspective. Development of ethological ideas; interaction of genotype and environment in ontogeny of behaviour; role of behaviour in dealing with environmental challenges.

Prerequisites: Biology 313 and one of Zoology 375, 377 or 477.

Note: Credit for both Marine Science 546 and Zoology 567 will not be allowed.

Note: Offered in even-odd dated academic years.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 571 H(3-2)

Vertebrate Palaeozoology

Evolutionary trends in the major groups of vertebrates from both neontological and palaeontological viewpoints. The interpretation of palaeontological data and their applicability to our understanding of vertebrate evolution and systematic theory.

Prerequisite: Zoology 477.

Note: Geology 201 or 209 is strongly recommended.

Zoology 573 H(2-1T-3)

Advanced Embryology

Analysis of mammalian embryology including gametogenesis, fertilization, cleavage, gastrulation, and early organogenesis. Consideration of normal developmental patterns and abnormal events resulting in congenital malformations.

Prerequisite: Zoology 373 or 471.

Note: Credit for both Zoology 573 and Medical Science 607.02 will not be allowed.

Note: Offered in odd-even dated academic years.

Zoology 575 **H(3-0)**

Advanced Topics in Animal Biology

Prerequisites: Biology 313, Zoology 375 and 377.

MAY BE REPEATED FOR CREDIT

†**Zoology 577** **H(3-3)**

Mammalogy

A detailed examination of the evolution, morphology, physiology, ecology and behaviour of mammals.

Prerequisites: Zoology 477.01 and Biology 313.

Note: Offered in even-odd dated academic years.

Note: Enrollment in this course may be limited. See explanation in the Program section of this Calendar.

Zoology 583 **H(3-0)**

Ornithology

An overview of the biology of birds, including their evolution, morphology, ecology and behaviour. The course will emphasize the influence that being a flying homeotherm has had on almost every aspect of avian biology.

Prerequisites: Zoology 477.01 and Biology 313.

Note: Offered in odd-even dated academic years.

Zoology 595 **H(3-0)**

Comparative Neuromuscular Physiology

Examination of the nervous and muscular systems of selected invertebrate animals spanning phyla from the Protozoa to the Echinodermata. Material will be selected that relates the behaviour to the nervous and muscular systems unique to each group. Specializations unique to various groups will be examined as well as the increasing complexity at various levels of organization. Instructional format includes lectures and student seminars.

Prerequisite: Zoology 461.

Zoology 597 **H(3-1S)**

Principles of Endocrinology

General and molecular aspects of endocrine physiology. Topics will include the mechanisms of hormone action (receptor occupancy and transduction of signal), current techniques in endocrinology, synthesis and release of hormones, and the functional role of different endocrine organs. Lectures will include examples from lower vertebrates and invertebrates to emphasize comparative aspects.

Prerequisites: Biochemistry 393 or 441 and Zoology 463.

Graduate Courses

Enrollment in any Graduate Course requires consent of the Department.

Only where appropriate to a student's program may graduate credit be received for courses numbered 500-599.

600-level courses are available with permission to undergraduate students in the final year of their programs.

Zoology 621 **H(3-2)**

Topics in Vertebrate Evolution

Current issues in the evolution of vertebrates, including morphology, systematics, palaeontology and functional biology will be considered. Emphasis

on the critical appraisal of current literature and on project work related and pertinent to topics associated with the dissertation focus of individual graduate students.

Zoology 689 **H(3-1T-3)**

Microscopic Anatomy

Histological and ultrastructural surveys of the four basic tissues (epithelia, connective tissues, muscles and nerves) and their contributions to the construction of the organs of the body.

Note: Offered in even-odd dated academic years.

Zoology 691 **H(3-3S)**

Comparative Respiratory Physiology

A study of the evolution and mechanisms of ventilation and oxygen transport in animals.

Zoology 693 **H(2-2T-3)**

Early Human Development

Gametogenesis, fertilization, cleavage, gastrulation, and organogenesis in the human. Consideration of the normal patterns of embryogenesis as well as abnormal development events culminating in congenital malformations.

Note: Offered in odd-even dated academic years.

Zoology 699 **H(3-3S)**

Fluid Motion and Mechanics in Animal Systems

Topics will be selected from explorations of the interaction of animals with moving fluids; circulating fluids in metazoans; musculo-skeletal mechanics and locomotion of metazoans; the nature of elastic structures in metazoans.