

## EXAMINATION POLICY

All final examinations must be scheduled by the Office of the Registrar except those which are take-home examinations, oral examinations or term projects. In courses where an alternative means of final assessment other than a final examination is more appropriate, the department Chair shall recommend to the dean or director the alternative type of assessment, indicating its rationale. The decision of the dean or director shall be final.

**Students must be available for examinations up to the last day of the examination period as specified in the Academic Schedule section of this calendar.**

Other regulations related to the conduct of examinations appear in the examination booklets.

## LIMITATION ON EXAMINATION WEIGHTING

In the calculation of the final grade average, the final examination shall comprise not less than 20% nor more than 50% of the final grade.

Evaluation accounting for not less than 25% of the total final grade must be completed and the results communicated back to the student at least **five (5)** working days before the final withdrawal date for each semester.

Any tests carried out during the last two weeks of lectures may not account, in total, for more than 10% of the final grade, except in the case of laboratory or oral testing, take-home examinations or term projects.

"Take-home" examinations cannot count for more than 25% of the final grade for a course.

## POSTING THE FINAL EXAMINATION TIMETABLE

The Final Examination Timetable shall be prepared and made available on the College's website by the Office of the Registrar no later than eight weeks before the end of a major (13-week) semester.

## DETERMINATION OF A FINAL GRADE

Each instructor responsible for a course is required to make available to each student in the class, within two weeks of the first day of classes in that course, a written statement of the method of grading and the weights to be assigned to the various components that are to be considered in determining the final grade (term papers, laboratory work, class participation, tests, final examination). This weighting may not be changed during the semester or at the time of final grade reporting. The format of the written outline may be in hardcopy or online as deemed appropriate for the course.

## DEFERRED EXAMINATION

The authority to grant or deny a deferred final examination rests with the Chair of the department in which the course is offered. Under no circumstances is the deferred examination to be granted after a student has written the original examination. A student who is unable, for a valid reason, to write a final examination at the scheduled time may apply for a deferred examination. Valid reasons for requesting deferral of a final examination include but are not restricted to: personal illness, bereavement, personal injury, unavoidable and unanticipated demands in caring for dependents. The department Chair may also consider other compelling reasons that are outside the student's control. The application must be supported by appropriate documentation.

If the intended absence is due to religious conviction, the Registrar and instructor must be informed in writing of the conflict at least two weeks prior to the date of the examination. If a student becomes ill or is notified of an incident that creates severe emotional distress during an examination, he or she should report at once to the invigilating instructor, hand in the unfinished examination paper and request that it be cancelled. If illness is the cause, he or she must report directly to Health Services so that any subsequent application for a deferred examination may be supported by a medical certificate. Should Health Services be closed, a medical certificate must be obtained from an off-campus physician. The instructor and department Chair should be informed of the circumstances in writing, and the medical certificate must be delivered to the Office of the Registrar within 48-hours after the scheduled examination.

**Should a student write an examination, hand in her paper for marking, and later report extenuating circumstances to support the request for cancellation of the paper or examination, such requests will not be considered.**

Students who have more than two exams scheduled on any calendar day may request and shall be granted a deferral of the third and subsequent examination(s) on that day by the appropriate instructor responsible for the examination. The same condition applies if two or more exams are scheduled at the same time.

## LOSS OF PRIVILEGE

Students who are eligible, but who do not apply for a deferred examination by the prescribed deadlines, shall automatically lose this privilege. Students who have been granted deferred final examination privileges, but who do not show acceptable cause for not writing at the prescribed time, shall automatically lose the privilege of further deferral.

## DEFERRED WORK

Instructors are normally free, subject to any established departmental or faculty procedures, to administer their own policies regarding deadlines for the completion of term papers or assignments; students must be made fully aware of these policies. However, should extensions of time for completing term work be requested beyond the deadline for return of final course grades, the procedures for "I" grades must be followed.

## CORRECTION OF GRADES

Once a student's final grade has been recorded by the Office of the Registrar, an instructor may not request that this final grade be changed unless it was assigned in error. A *Change of Grade* form must be submitted certifying the reasons why the first grade is in error. The form must be signed by the instructor and the department Chair offering the course. Requests for a change of grade must reach the Office of the Registrar no later than 30 days after the start of the next major (13-week) semester. **Under no circumstances will instructor-initiated grade changes be accepted after this period.**

# GENERAL GRADUATION REQUIREMENTS

Generally, all students who expect to receive a parchment from Mount Royal College must satisfy the graduation requirements for a baccalaureate degree program, a diploma program or a certificate program as shown in this section. Several programs have special graduation requirements, which must also be met before a degree, diploma or certificate can be awarded. The additional requirements are shown in the program description section of the programs concerned. (Also see Academic Regulations – Graduation). Students are cautioned to note the general statements regarding graduation and the restrictions and interpretations that follow. Do not hesitate to consult the Office of the Registrar if you are uncertain about your graduation status.

## APPLICATION TO GRADUATE

All students who are candidates for the award of a baccalaureate degree, diploma or certificate are responsible for notifying the Office of the Registrar of their intention to graduate. They must complete and submit to the Office of the Registrar the Application to Graduate Form prior to the relevant deadline indicated in the *Academic Schedule* in this calendar. The application form is available online or at the Office of the Registrar.

Candidates graduate in accordance with the conditions and requirements shown in the calendar of the year in which they first enrolled in the program, provided there has been no break in their attendance at the College. Students who discontinue their studies will be subject to the graduation requirements published in the calendar at the time of their return to the College. Also see *Graduation* component of the *Academic Regulations* section.

## ELIGIBILITY TO GRADUATE

In order to graduate from any Mount Royal credit program, a student must satisfy all program requirements specified in the curriculum at the time of admission to the program or the current program curriculum, and meet the requirements for Good Standing (see Academic Standing section) at the time the application to graduate is evaluated.

### Admission to program

To be eligible to graduate from a Mount Royal College program, a student must have been **officially admitted** into the program and must normally complete **at least 25%** of the graduation requirements as a student within the program, except where written approval has been given by the Dean/Director of the faculty/centre/school.

### Residency

Normally, 50% of the academic work completed toward the award of a Mount Royal parchment must be completed at Mount Royal, except where written approval has been given by the Dean/Director of the appropriate faculty/centre/school.

In addition, at least 50% of the Directed Field Study requirement for an applied degree must normally be completed as a student of Mount Royal.

### Program Pattern

A student must successfully complete all requirements as stated in the approved program pattern (see the Academic Program section). This includes earning the number of required credits, successfully completing all courses identified as the program core and the English requirement, meeting the requirements for Arts & Science or General Education as well as any specific requirements identified in the program section of this calendar.

### Cumulative Grade Point Average (GPA)

A student must have a cumulative GPA of at least 2.00 based on all courses required for graduation in the program which will include all the core courses specified in the published curriculum pattern for that program, as well as

all approved options and electives, the English Requirement and all Arts & Science / General Education courses. Some programs may require a higher GPA for graduation.

## Arts & Science / General Education Requirements

As Mount Royal phases out Arts & Science requirements in favour of General Education, students are advised to consult closely with their advisor to ensure that they are meeting program requirements.

<http://www.mtroyal.ca/ProgramsCourses/FacultiesSchoolsCentres/Arts/Programs/GeneralStudiesDiploma/CurriculumCourses/index.htm>

<http://www.mtroyal.ca/ProgramsCourses/FacultiesSchoolsCentres/TeachingLearning/Departments/GeneralEducation/Courses/index.htm>

## Applied Degree Programs With a Diploma Exit Option

In Applied Degree programs with a diploma exit option, students may be eligible to be awarded a diploma after completing their second year of studies **without exiting** from the program. Students wishing to receive the diploma must declare their intention to graduate (without exit from the program) within their second year of studies prior to the relevant deadline indicated in the current Academic Schedule.

## University Transfer Programs

Students in a University Transfer program can apply for a General Studies Certificate upon completion of 10 appropriate courses in recognition of their completion of a full year of undergraduate studies.

## RESTRICTIONS

- No course may be presented to fulfill more than one graduation requirement **within one credential**. (For example, English 1101 may not be used to satisfy a program core requirement and a General Education requirement.)
- No high school or matriculation equivalent course (level 30 or lower) may be used for graduation purposes (see list of high school/matriculation equivalent courses in the section entitled High School Matriculation Equivalents).
- Students may apply credits obtained under one Mount Royal program towards the graduation requirements of another, different program up to **a maximum of 50 per cent** of the graduation requirements of the new program (e.g., transferring credits from a diploma to a baccalaureate degree).
- Students may apply credits obtained under one Mount Royal program towards the graduation requirements of another, similar program up to **a maximum of 75%** of the graduation requirements of the new program (e.g., transferring credit from a Bachelor of Arts to Bachelor of Science). Within Applied Degree programs, transfer credit will normally only be given for 50% of the Directed Field Study requirement of the new program.
- English 2263 is not considered to be a senior-level Arts and Science course for graduation purposes.
- English 0212 is a university-level course but unless it is specifically required for a program, it can only be used to satisfy an elective requirement.
- No more than one course (not to exceed four (4) credits) of Directed Readings can be used for graduation purposes.

## CURRICULUM

### Bachelor of Arts – Criminal Justice

Year 1	Credits
Criminal Justice Studies 1001 – Introduction to Criminology. . . . .	3
Criminal Justice Studies 1003 – Introduction to the Criminal Justice System . . .	3
Criminal Justice Studies 1011 – Introduction to Human Relations. . . . .	3
Criminal Justice Studies 1013 – Diversity Issues and the Criminal Justice System. . . . .	3
General Education Requirement Foundation Level, Cluster 1 . . . . .	3
General Education Requirement Foundation Level, Cluster 2 . . . . .	3
General Education Requirement Foundation Level, Cluster 3 . . . . .	3
General Education Requirement Foundation Level, Cluster 4 . . . . .	3
General Education Requirement Level 2, Cluster 1. . . . .	3
Elective** (3 credits or more) . . . . .	3
<b>Total Credits</b>	<b>30</b>

Year 2	Credits
Criminal Justice Studies 2003 – Young Persons in Conflict with the Law. . . . .	3
Criminal Justice Studies 2005 – Aberrant Behavior . . . . .	3
Criminal Justice Studies 2009 – Selected Issues in Human Justice. . . . .	3
Criminal Justice Studies 2013 – Interviewing Skills . . . . .	3
Criminal Justice Studies 2015 – Introduction to Research Methods. . . . .	3
Criminal Justice Option** . . . . .	3
General Education Requirement Level 2, Cluster 2. . . . .	3
General Education Requirement Level 2, Cluster 3. . . . .	3
General Education Requirement Level 2, Cluster 4. . . . .	3
Elective* (3 credits or more) . . . . .	3
<b>Total Credits</b>	<b>30</b>

Year 3	Credits
Criminal Justice Studies 3001 – Quantitative Research Methods and Data Analysis. . . . .	6
Criminal Justice Studies 3005 – Qualitative Research Methods . . . . .	3
Criminal Justice Studies 3007 – Professional Ethics in Criminal Justice . . . . .	3
Criminal Justice Studies 3009 – Crisis Intervention and Conflict Resolution. . . .	3
Criminal Justice Studies 3011 – Criminal Law. . . . .	3
Political Science 2243 – Law, Politics and the Judicial Process . . . . .	6
General Education Requirement Level 3. . . . .	3
General Education Requirement Level 3. . . . .	3
<b>Total Credits</b>	<b>30</b>

Year 4	Credits
Criminal Justice Studies 4001 – Human Rights and Civil Liberties. . . . .	3
Criminal Justice Studies 4003 – Advanced Criminological Theory . . . . .	3
Criminal Justice Studies 5025 – Capstone Practicum . . . . .	6
Criminal Justice Option** . . . . .	3
Criminal Justice Option** . . . . .	3
General Education Requirement Level 3. . . . .	3
General Education Requirement Level 3. . . . .	3
Elective* (3 credits or more) . . . . .	3
Elective* (3 credits or more) . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits for Graduation</b>	<b>120</b>

\* In order to graduate, students must complete at least four (4) Electives for a minimum of 12 total credits. Students are allowed to take any credit course as an Elective. Students can combine two 1.5-credit offerings as the equivalent of one 3-credit Electives. Students can obtain prior permission from the Chair of the Department of Criminal Justice to substitute a course from another accredited post-secondary institution as an Elective.

\*\* Students can obtain prior permission from the Chair of the Department of Justice Studies to substitute another course offered at Mount Royal or another accredited post-secondary institution as a Criminal Justice Option. Criminal Justice Option courses will be offered in a rotation that allows students to complete their program requirements in four academic years.

### Bachelor of Arts – Criminal Justice – Honours Stream

See previous section on the definition of, and acceptance into, the Honours stream in the Bachelor of Arts – Criminal Justice.

Year 1	Credits
Same as Year 1 in the Bachelor of Arts – Criminal Justice. See above.	
<b>Total Credits</b>	<b>30</b>

Year 2	Credits
Same as Year 2 in the Bachelor of Arts – Criminal Justice. See above.	
<b>Total Credits</b>	<b>30</b>

Year 3	Credits
Same as Year 3 in the Bachelor of Arts – Criminal Justice. See above.	
<b>Total Credits</b>	<b>30</b>

Year 4	Credits
Criminal Justice Studies 4001 – Human Rights and Civil Liberties . . . . .	3
Criminal Justice Studies 4003 – Advanced Criminological Theory . . . . .	3
Criminal Justice Studies 5001 – Honours Seminar (Fall semester only)*** . . . .	3
Criminal Justice Studies 5010 – Honours Research Project – Part A (Fall semester only)*** . . . . .	3
Criminal Justice Studies 5020 – Honours Research Project – Part B (Winter semester only)*** . . . . .	3
Criminal Justice Option** . . . . .	3
General Education Requirement Level 3. . . . .	3
General Education Requirement Level 3. . . . .	3
Elective* (3 credits or more) . . . . .	3
Elective* (3 credits or more) . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits for Graduation</b>	<b>120</b>

\* In order to graduate, students must complete at least four (4) Electives for a minimum of 12 total credits. Students are allowed to take any credit course as an Elective. Students can combine two 1.5-credit offerings as the equivalent of one 3-credit Elective. Students can obtain prior permission from the Chair of the Department of Criminal Justice to substitute a course from another accredited post-secondary institution as an Elective.

\*\* Criminal Justice Options: CRJS 2004, 2006, 2008, 2011, 2019, 4002, 4007, 4013, 4015, 4017, 4021 and Forensic Studies 4401, 4403, 4405, 4407, 4409 or 4411. Students can obtain prior permission from the Chair of the Department of Justice Studies to substitute another course offered at Mount Royal or another accredited post-secondary institution as a Criminal Justice Option. Criminal Justice Option courses will be offered in a rotation that allows them to complete their program requirements in four academic years.

\*\*\* Students must be accepted into the Honours stream.

## GRADUATION REQUIREMENTS

To be eligible for graduation, students must satisfactorily complete all degree program requirements and coursework. Students must achieve a minimum overall GPA of 2.00 to be eligible for graduation.

Students must follow the graduation application procedure outlined in the current Mount Royal Calendar. Applications must be submitted by the date published in the Calendar.

**Note:** For course descriptions refer to:

Bachelor of Arts – Criminal Justice

<http://www.mtroyal.ca/healthcomm/criminal/curriculum.shtml>

## CURRICULUM

### Bachelor of Communication – Information Design

Note: Courses in *italics* are under development

Year 1	Credits
Communications 1600 – Foundations of Information Design . . . . .	3
Communications 1610 – Tools for Information Designers . . . . .	3
Communications 1620 – Foundations of Graphics . . . . .	3
Communications 1661 – Technical Writing I . . . . .	3
Communications 2500 – Communication Introduction to Communication Studies . . . . .	3
Communications 2663 – Rhetoric . . . . .	3
General Education Requirement Foundation Level, Cluster 1 * . . . . .	3
General Education Requirement Foundation Level, Cluster 2 * . . . . .	3
General Education Requirement Foundation Level, Cluster 3 * . . . . .	3
General Education Requirement Foundation Level, Cluster 4* . . . . .	3
<b>Total Credits</b>	<b>30</b>

Year 2	Credits
Communications 2501 – Media History and Contemporary Issues . . . . .	3
Communications 2666 – Typography . . . . .	3
Communications 2667 – Information Architecture . . . . .	3
Communications 2670 – Programming for Information Designers . . . . .	3
Communications 2673 – Introduction to Digital Layout . . . . .	3
Communications 2680 – Intercultural Communication in Information Design . . . . .	3
General Education Requirement Level 2, Cluster 1 . . . . .	3
General Education Requirement Level 2, <b>Cluster 2</b> . . . . .	3
General Education Requirement Level 2, Cluster 3 . . . . .	3
General Education Requirement Level 2, Cluster 4 . . . . .	3
<b>Total Credits</b>	<b>30</b>

#### Spring / Summer

Communications 4691 – Information Design Internship I (non-credit required)

YEAR 3	Credits
Communications 3500 – Media, Culture and Communication Theory . . . . .	3
Communications 3600 – Usability . . . . .	3
Communications 3605 – Research in Information Design . . . . .	3
Communications 3610 – Visual Communication for Information Design I . . . . .	3
Communications 3611 – Visual Communication for Information Design II . . . . .	3
Communications 3620 – Document Production I . . . . .	3
Communications 3670 – Project and Content Management . . . . .	3
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>

#### Spring / Summer (or subsequent semesters)

Communications 4692 – Information Design Internship II (non-credit optional)

Dependent upon when a student completes the Information Design Internship II, the final on-campus semesters can be taken in either order as long as all academic requirements are met.

Year 4	Credits
Communications 4501 – Roles and Practices in Contemporary Communication . . . . .	3
Communications 4620 – Document Production II . . . . .	3
Communications 4665 – Instructional Design . . . . .	3
Communications 4679 – Ethics and Law . . . . .	3
Communications 4680 – Portfolio . . . . .	3
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits Required for Graduation</b>	<b>120</b>

#### Suggested Electives:

Communications 3663 – Editorial Function . . . . .	3
Communications 3664 – Software and Systems Documentation . . . . .	3
Communications 3668 – Multimedia Authoring . . . . .	3
Communications 3671 – Communication Process in Technology Transfer . . . . .	3
Communications 3677 – Science Writing . . . . .	3

## BACHELOR OF COMMUNICATION – JOURNALISM

The world of journalism is varied, challenging and constantly changing, and Mount Royal's goal is to ensure that journalism graduates have a range of skills and understandings that they can draw upon in this ever-changing landscape. The best journalism is accomplished by people with a thorough grasp of the fundamentals of reporting, writing, editing and illustrating news, the ability to think critically about their work and work environment, and a deep curiosity about how and why the world works, or often does not work.

The Journalism major in the four-year Bachelor of Communication program is based on integrating classroom learning with practical experience, including professional internships, and is focused on providing students with a broad-based journalism education in writing, idea and story development, newspaper production, broadcasting, photography, and Internet-based news requirements. It additionally includes:

- Considerable exposure to written, spoken and mediated communications, and to the effective use of computers.
- A focus on critical reflection about journalism generally, and the student's own work through instructor feedback, peer critiques, and self-reflection.
- A social context for practice of journalism including media history, law and ethics.
- Direct workplace experience in communications through a required professional internship.
- A strong General Education component that ensures both breadth of study and the potential to achieve a concentration in a given discipline, such as political science, history, sociology, or a second language among other possibilities.
- Electives students can use to explore a specific discipline more fully.
- Information retrieval techniques and information assessment are presented in a number of courses, while a course in research design and methodology encourages a more comprehensive understanding of the goals and nature of research.

## COOPERATIVE WORK EXPERIENCE

The Bachelor of Computer Information Systems degree requires that all students take one non-credit work experience term. However, the student has the option of participating in the full cooperative program which entails three work terms and requires that the student finish his or her studies on an academic term. Doing so will lead to a "Cooperative" designation on the degree parchment. For more information on the cooperative work experience program please consult the department.

## CONTINUANCE IN THE PROGRAM

Students accepted into the Bachelor of Computer Information Systems degree program must comply with all College policies and regulations relating to baccalaureate degrees and continuance. Students enrolled in the Bachelor of Computer Information Systems degree program must obtain a minimum grade of "C-" in all required computer courses in the program and maintain a minimum cumulative Grade Point Average of 2.00.

## CURRICULUM

Year 1	Credits
Computer Science 1501 – Programming I: Problem Solving using a Programming Toolkit . . . . .	3
Computer Science 1502 – Programming II: Object Oriented Programming . . . . .	3
Computer Science 1511 – Web I: Client Development . . . . .	3
Entrepreneurship 2201 – Introduction to Entrepreneurship . . . . .	3
General Education Requirement Foundation Level, Cluster 1 . . . . .	3
General Education Requirement Foundation Level, Cluster 2 . . . . .	3
General Education Requirement Foundation Level, Cluster 3 . . . . .	3
General Education Requirement Foundation Level, Cluster 4 . . . . .	3
Mathematics 2505 – Puzzling Adventures in Mathematics (General Education Requirement Level 2, Cluster 1) . . . . .	3
Management 3210 – Business Communication Theory and Practice (General Education Requirement Level 3, Cluster 4) . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 2	Credits
Computer Science 2503 – Programming III: Data Structures . . . . .	3
Computer Science 2521 – Database I - Data Modeling and Query Languages . . . . .	3
Computer Science 2531 – Operating Systems and Computer Architecture . . . . .	3
Computer Science 2541 – Systems Analysis . . . . .	3
Human Resources 2170 – Introduction to Human Resources . . . . .	3
Marketing 2150 – Introduction to Marketing . . . . .	3
Accounting 2121 – Financial Accounting Concepts . . . . .	3
General Education Requirement Level 2** . . . . .	3
General Education Requirement Level 2** . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
Required Non-credit Work Experience Term	

Year 3	Credits
Computer Science 3512 – Web II: Web Application Development . . . . .	3
Computer Science 3532 – System Administration and Maintenance . . . . .	3
Computer Science 3533 – Network Infrastructure . . . . .	3
Approved Senior Computer Science Option . . . . .	3
Approved Senior Computer Science or Business Option . . . . .	3
Approved Senior Business Option . . . . .	3
Computer Science 3309 – Information Technology and Society (General Education Requirement Level 3, Cluster 3) . . . . .	3
General Education Requirement Level 2** . . . . .	3
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>

### Optional Non-credit Work Experience Term

Year 4	Credits
Computer Science 4543 – Project Management and Quality Assurance . . . . .	3
Approved Senior Computer Science Option . . . . .	3
Approved Senior Computer Science Option . . . . .	3
Approved Senior Computer Science Option . . . . .	3
Approved Senior Computer Science or Business Option . . . . .	3
Approved Senior Business Option . . . . .	3
Approved Senior Business Option . . . . .	3
General Education Requirement Level 3*** . . . . .	3
General Education Requirement Level 3*** . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits Required for Graduation</b>	<b>120</b>

\*\* Level 2 General Education Cluster 2, 3, or 4. Students must have one Level 2 course from each cluster.

\*\*\* Level 3 General Education courses must be taken from at least two different clusters.

## GRADUATION REQUIREMENTS

To be eligible for graduation a student must

- Satisfy the curriculum requirements for the Bachelor of Computer Information Systems
- Attain a minimum GPA of 2.00 on all courses required for the program.
- Attain a minimum grade of C- in all required computer courses
- Successfully complete a minimum of three courses from General Education Cluster 4, two of which are level 2 or higher.
- Successfully complete at least one Work Experience Term

See General Graduation Requirements section for further requirements

## Bachelor of Science – Cellular and Molecular Biology

Note: Courses in *Italics* are under development

Year 1	Credits
Biology 1202 – An Introduction to Cell Biology . . . . .	3
Biology 1204 – The Evolution of Eukaryotes . . . . .	3
Chemistry 1201 – General Chemistry I . . . . .	3
Chemistry 1202 – General Chemistry II . . . . .	3
Computer Science 1001 – Introduction to Computer-Based Problem Solving for the Sciences . . . . .	3
Mathematics 1200 – Calculus for Scientists I . . . . .	3
Physics 1201 – Classical Physics I . . . . .	3
General Education Requirement Foundation Level, Cluster 1 . . . . .	3
General Education Requirement Foundation Level, Cluster 3 . . . . .	3
General Education Requirement Foundation Level, Cluster 4 . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 2	Credits
Biochemistry 2201 – General Biochemistry . . . . .	3
Biology 2101 – Genetics . . . . .	3
Biology 2202 – Cellular and Molecular Biology . . . . .	3
Chemistry 2101 – Organic Chemistry I . . . . .	3
Chemistry 2102 – Organic Chemistry II . . . . .	3
Mathematics 2201 – Statistics for the Life Sciences . . . . .	3
Microbiology 2201 – Microbiology . . . . .	3
General Education Requirement Foundation Level, Cluster 2 . . . . .	3
General Education Requirement Level 2, Cluster 1 . . . . .	3
General Education Requirement Level 2, Cluster 2 . . . . .	3
<b>Table Total</b>	<b>30</b>

Year 3	Credits
<i>Biochemistry 3202 – Enzymes and Metabolic Systems</i> . . . . .	3
Biology 3101 – Molecular Genetics . . . . .	3
<i>Biology 3203 – Genomes</i> . . . . .	3
<i>Biology 3102 – Intermediate Cell Biology</i> . . . . .	3
General Education Requirement Level 2, Cluster 4 . . . . .	3
General Education Requirement Level 2, Cluster 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 4	Credits
<i>Biology 4101 – Advanced Molecular Biology</i> . . . . .	3
<i>Biology 4202 – Advanced Cell Biology</i> . . . . .	3
<i>Biology 4203 – Current Topics in Cell Biology</i> . . . . .	1
<i>Microbiology 4101 – Medical Microbiology</i> . . . . .	3
Philosophy <b>2223</b> – Bio Ethics . . . . .	3
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
Approved Option* . . . . .	3
Approved Option** . . . . .	2
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits Required for Graduation</b>	<b>120</b>

\* Approved 3 credit option for this degree program may include the following:  
BIOL 3104 – Human Physiology I, *BIOL 3205 – Human Physiology II*, BCEM 3201  
– Protein Chemistry, *BIOL 4103 – Developmental Biology*, *BIOL 4201 – Immunology*,  
*BIOL 4215 – Parasitology*

\*\* Approved 2 credit option for this degree program may include the following:  
*BIOL 4204 – Evolution in Health and Disease*, *BIOL 4205 – Human Genetics*, *BIOL 4206 – Viruses*



## Bachelor of Science – Geology

Note: Courses in *italics* are under development

Year 1	Credits
Chemistry 1201 – General Chemistry I . . . . .	3
Computer Science 1001 –Introduction to Computer-Based Problem Solving for the Sciences. . . . .	3
Geology 1101 – Physical Geology. . . . .	3
Geology 1103 – Historical Geology. . . . .	3
Mathematics 1200 – Calculus for Scientists I. . . . .	3
<i>Mathematics 1203 – Linear Algebra for Scientists and Engineers</i> . . . . .	3
Physics 1201 – Classical Physics I. . . . .	3
General Education Requirement Foundation Level, Cluster 1 . . . . .	3
General Education Requirement Foundation Level, Cluster 2 . . . . .	3
General Education Requirement Foundation Level, Cluster 4 . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 2	Credits
Chemistry 1202 – General Chemistry II . . . . .	3
Geology 2101 – Introduction to Geologic Field Methods. . . . .	3
Geology 2103 – Minerals and Rocks . . . . .	3
Geology 2105 – Structural Geology. . . . .	3
Geology 2107 – Paleontology . . . . .	3
Geology 2109 – Stratigraphy and Sedimentation. . . . .	3
Geology 2111 – Crystallography and Optical Mineralogy. . . . .	3
Physics 1202 – Classical Physics II. . . . .	3
General Education Requirement Foundation Level, Cluster 3 . . . . .	3
General Education Requirement Level 2, Cluster 1. . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 3	Credits
<i>Geology 3101 – Advanced Geologic Field Methods</i> . . . . .	3
Geology 3103 – Igneous Petrology . . . . .	3
Geology 3107 – Geomorphology. . . . .	3
Geology 3109 – Sedimentary Petrology . . . . .	3
Geology 3111 – Metamorphic Petrology . . . . .	3
Geology 3113 – Geochemistry . . . . .	3
Geophysics 3101 – Exploration Geophysics . . . . .	3
<del>Mathematics 2102 – Statistics for the Earth Scientist</del> . . . . .	<del>3</del>
General Education Requirement Level 2, Cluster 3. . . . .	3
General Education Requirement Level 2, Cluster 4. . . . .	3
General Education Requirement Level 3. . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 4	Credits
<i>Geology 4101 – Advanced topics in Sedimentary Geology or</i> <i>Geology 4103 – Advanced topics in Igneous/Metamorphic Geology.</i> . . . .	3
<i>Geology 4105 – Hydrogeology</i> . . . . .	3
<i>Geology 4107 – Geological History of Western Canada</i> . . . . .	3
<i>Geology 4109 – Petroleum Geology</i> . . . . .	3
<i>Geology 4111 – Ore Deposits and Economic Geology</i> . . . . .	3
<i>Geology 4113 – Geoscience Research</i> . . . . .	3
<del>Mathematics 2231 – Statistics for Earth Scientists</del> . . . . .	<del>3</del>
General Education Requirement Level 2, Cluster 2. . . . .	3
General Education Requirement Level 3. . . . .	3
General Education Requirement Level 3. . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits Required for Graduation</b>	<b>120</b>

## Bachelor of Science – Health Science

Year 1	Credits
Biology 1202 – An Introduction to Cell Biology . . . . .	3
Biology 1203 – Human Anatomy. . . . .	3
Chemistry 1201 – General Chemistry I . . . . .	3
Chemistry 1202 – General Chemistry II . . . . .	3
Classics 1111 – The Technical Terms of Medicine and the Life Sciences . . . . .	3
Mathematics 1200 – Calculus for Scientists I. . . . .	3
Physics 1201 <b>or</b> 1211 – Classical Physics I <b>or</b> Physics I . . . . .	3
Physics 1202 <b>or</b> 1212 – Classical Physics II <b>or</b> Physics II . . . . .	3
General Education Requirement Foundation Level, Cluster 1 . . . . .	3
General Education Requirement Foundation Level, Cluster 4 . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 2	Credits
Biology 2101 – Genetics. . . . .	3
Chemistry 2101 – Organic Chemistry I . . . . .	3
Chemistry 2102 – Organic Chemistry II . . . . .	3
Mathematics 2233 – Statistics for the Biological Sciences . . . . .	3
Microbiology 2201 – Microbiology . . . . .	3
General Education Requirement Foundation Level, Cluster 2 . . . . .	3
General Education Requirement Foundation Level, Cluster 3 . . . . .	3
General Education Requirement Level 2, Cluster 1. . . . .	3
General Education Requirement Level 2, Cluster 3. . . . .	3
General Education Requirement Level 2, Cluster 4. . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 3	Credits
Biochemistry 2201 – General Biochemistry . . . . .	3
Biology 2202 – Cellular and Molecular Biology . . . . .	3
Biology 3104 – Human Physiology I . . . . .	3
<i>Biology 3204 – Histology</i> . . . . .	3
Biology 3205 – Human Physiology II . . . . .	3
Philosophy 2223 – Bio Ethics . . . . .	3
General Education Requirement Level 2, Cluster 2. . . . .	3
General Education Requirement Level 3 . . . . .	3
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
Year 4	Credits
<i>Biology 4102 – Pathophysiology</i> . . . . .	3
<i>Biology 4207 – The Biology of Aging</i> . . . . .	3
<i>Biology 4208 – Seminars in Health Science</i> . . . . .	1
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
General Education Requirement Level 3 . . . . .	3
Approved Option* . . . . .	3
Approved Option* . . . . .	3
Approved Option** . . . . .	2
Elective . . . . .	3
Elective . . . . .	3
<b>Total Credits</b>	<b>30</b>
<b>Total Credits Required for Graduation</b>	<b>120</b>

\* Approved 3 credit Options may include the following: *BCEM 3202 - Enzymes & Metabolic Systems*, *BIOL 4209 – Neuroscience*, *BIOL 4210 – Endocrinology*, *BIOL 4211 – Exercise Physiology*, *BIOL 4212 – Pharmacology*, *BIOL 3206 – Embryology*, *BIOL 4213 – Nutrition*, *BIOL 4201 – Immunology*, *BIOL 4215 – Parasitology*

\*\* Approved 2 credit Options include the following: *BIOL 4204 – Evolution in Health and Disease*, *BIOL 4205 – Human Genetics*, *BIOL 4214 – Human Sexuality*

Although Conditional Admission may be granted in advance of receipt of final/official transcripts, confirmation of the achievement of specified minimum grades will take place after all final/official transcripts have been received by the College. Applicants who do not meet these minimum grade requirements will be denied admission.

**Note:** The Bachelor of Applied Ecotourism and Outdoor Leadership degree program will require students to participate in strenuous, multi-day outdoor activities. Applicants should be healthy, physically active and willing to cope with harsh all-season conditions and challenging terrain.

## WORK-RELATED PRACTICA

Practica are designed to provide an extension of the learning process in a relevant work environment. Delivered in two semesters, comprising 25 percent of the curriculum for applied baccalaureate degree programs, practica integrate academic learning with paid work experience. Each practica semester has specific course objectives and outcomes. Students are responsible to complete requirements assigned by Mount Royal faculty and are obligated to fulfill commitments made to employers. Successful completion of each semester receives a total of 4 and 8 credits respectively. Given the fluctuating nature of the local labour market, opportunities for work experience can be located outside Calgary, across Canada and in international markets. Students should be prepared to relocate and to receive entry-level compensation.

Practica are considered an academic component of the program. Therefore, students are advised to refer to other parts of the calendar including *Evaluation of Prior Learning and Fees and Deposits*.

## CONTINUANCE IN THE PROGRAM

Students accepted into the Bachelor of Applied Ecotourism and Outdoor Leadership degree program must comply with all College policies and regulations relating to applied baccalaureate degrees and continuance. Students enrolled in the Bachelor of Applied Ecotourism and Outdoor Leadership degree program must maintain a minimum grade of "C" (2.00 GPA) in each of the required core courses in the program and maintain a minimum cumulative Grade Point Average of 2.00. Core courses are designated with "ETOL", "RECR", and "PHED."

## DURATION OF THE PROGRAM

Students may apply to exit from the Bachelor of Applied Ecotourism and Outdoor Leadership degree with a diploma in Outdoor Pursuits after successfully completing the diploma program requirements. Students who decide to exit the Bachelor of Applied Ecotourism and Outdoor Leadership degree program with a Diploma – Outdoor Pursuits, must apply to the department and declare their intentions prior to January 1 of the second year of the applied baccalaureate degree program. Students who choose the Diploma – Outdoor Pursuits exit may apply for re-admission to the Bachelor of Applied Ecotourism and Outdoor Leadership degree, but must meet the requirements for applied baccalaureate degree continuation and have successfully completed the courses required in the first two-years of the applied baccalaureate degree. Students continuing in the applied baccalaureate degree after January 1 of the second-year of the program are not eligible to apply for an exit Diploma – Outdoor Pursuits unless they meet the diploma exit requirements. Students choosing the diploma exit option must consult with an academic advisor in the Department of Physical Education and Recreation Studies.

## CURRICULUM

### Bachelor of Applied Ecotourism and Outdoor Leadership

Semester 1 (Fall)	Credits
Ecology 1210 – Ecology	3
English 1101 – Critical Writing and Reading	3
Ecotourism and Outdoor Leadership 2201 – Foundations of Outdoor Leadership	3
Physical Education 2402 – Backpacking	1.5
Physical Education 2404 – Introductory Rock Climbing	1.5
Physical Education 2414 – Introductory Canoeing	1.5
Total Credits	13.5

Semester 2 (Winter)	Credits
Applied Communications 2245 – Interpersonal Communications	3
Computer Science 1209 – Introduction to Computing for Applied Degrees	3
Ecotourism and Outdoor Leadership 2203 – Sustainable Tourism	3
Geography 1101 – The Physical Environment	3
Physical Education 2410 – Wilderness Survival Techniques	1.5
Physical Education 2416 – Introduction to Kayaking	1.5
Total Credits	15

Semester 3 (Fall)	Credits
Ecotourism and Outdoor Leadership 3305 – Program Planning	3
Natural Science 1112 – Introduction to Current Environmental Issues	3
Physical Education 2408 – Mountain Bike Trekking	1.5
Recreation Studies 1217 – Marketing for Sport and Recreation	3
Recreation Studies 1247 – Theory and Practice in Leadership	3
Arts and Science Requirement	3
Total Credits	16.5

Semester 4 (Winter)	Credits
Ecotourism and Outdoor Leadership 2401 – Ecotourism Facilitation Skills	3
Ecotourism and Outdoor Leadership 3307 – Administration of Outdoor Centres	3
Physical Education 2618 – Back Country Skiing	1.5
Physical Education 2418 – Introductory Mountaineering	1.5
Arts and Science Requirement	3
Elective 1	3
Total Credits	15

Semester 5 (Spring/Summer)	Credits
Ecotourism and Outdoor Leadership 2011 – Practicum I	3
Ecotourism and Outdoor Leadership 3303 – Expedition (in May or August)*	3
Total Credits	6

Semester 6 (Fall)	Credits
Ecotourism and Outdoor Leadership 3309 – Individual Projects	3
Entrepreneurship 1232 – Entrepreneurship Studies	3
Geography 2443 – Tourism and Recreation Geography	3
Arts and Science Requirement	3
Arts and Science Requirement	3
Total Credits	15

Semester 7 (Winter)	Credits
Arts and Science Requirement	3
Arts and Science Requirement	3
Arts and Science Requirement	3
Elective 2	3
Elective 3	3
Total Credits	15



## PROPOSED OPTION AREAS

Students can select from any of the approved options below to satisfy requirements for Approved Option 1 and Approved Option 2. Students may take options other than those below with approval of their department. Courses selected to satisfy Approved Option requirements may not also be used to satisfy Arts and Science Requirements.

### Human Services Options

For students who wish to specialize in the human services area of the nonprofit sector:

	Credits
Anthropology 2213 – Contemporary Aboriginal Issues in Canada . . . . .	3
Child Studies 2201 – Social and Environmental Conditions . . . . .	1.5
Child Studies 2211 – Disabling Conditions . . . . .	1.5
Child Studies 4405 – Ethics and Ethical Issues. . . . .	2
Disability Studies 1111 – Overview of Disability Studies: Services and Partnerships . . . . .	2
Disability Studies 1205 – Disability Work Management . . . . .	3
Gerontology 4401 – Perspectives in Gerontology. . . . .	3
Gerontology 4403 – Health and Aging . . . . .	3
Criminal Justice Studies 2003 – Young Persons in Conflict with the Law . . . . .	3
Recreation Studies 1203 – Recreation and Community Development. . . . .	3

### Social Policy Options

For students who wish to specialize in social or public policy issues relevant to the nonprofit sector:

	Credits
Child Studies 3301 – Policies and Issues . . . . .	3
Political Science 1123 – Conflict and Unity: Canadian Issues . . . . .	3
Political Science 1183 – Issues and Trends in World Politics . . . . .	3
Political Science 2298 – Policies and the Media. . . . .	3

## Business and Communications Options

For students who wish to develop advanced business, communications, or technical skills for special positions within the nonprofit sector:

	Credits
Accounting 3224 – Management Accounting I . . . . .	3
Communications 1841 – Introduction to Public Relations . . . . .	3
Applied Communications 2263 – Stylistics* . . . . .	3
Applied Communications 3343 – Communications and Organizational Dynamics . . . . .	3
Computer Science 3307 – Computing Applications in Small Business and Entrepreneurship . . . . .	3
English 2207 – Advanced Writing* . . . . .	3
Entrepreneurship 1232 – Entrepreneurship Studies <b>or</b> Entrepreneurship 2201 – Introduction to Entrepreneurship . . . . .	3
Human Resources 3274 – Recruitment & Selection . . . . .	3
Human Resources 3275 – Compensation & Benefits . . . . .	3
Human Resources 3277 – Training & Development . . . . .	3
Human Resources 4273 – Labour Relations. . . . .	3
Logistics & Supply Chain 3269 – Project Management . . . . .	3
Marketing 3257 – Business to Business Marketing . . . . .	3
Marketing 3258 – Marketing Research . . . . .	3

\* Credit will be allowed for only one of Applied Communications 2263, English 2207 or Freelance Writing 1301.

For *Restrictions and Interpretations* concerning the program requirements for English, Elective, and Arts and Science courses, refer to the section entitled *General Graduation Requirements*.

## GRADUATION REQUIREMENTS

- Successful completion of the required 120 credits for graduation as specified in the program.
- Minimum overall Grade Point Average of 2.00 on all courses included in the program.
- Successful completion of two (2) semesters of Directed Field Studies.

See *General Graduation Requirements* section.

## DIPLOMA EXIT

The Bachelor of Applied Nonprofit Studies includes a two-year diploma option. Students may exit the degree program and receive a Professional Studies (Nonprofit Studies) diploma after completing their second year of studies. Students completing the diploma program in nonprofit studies at Grant MacEwan College will be eligible for credit in the Bachelor of Applied Nonprofit Studies program at Mount Royal College.

## OPTIONAL COMMUNICATIONS INTERNSHIP

Certificate students who successfully complete all courses may with program approval opt to take, during the summer of the same year in which the student completed the certificate, a Mount Royal organized and supported non-credit internship in the communications industry. In doing so the student agrees to abide by all rules and requirements of the internship process. Details of this option will be discussed fully during the fall semester in COMM 4790 – Workplace Issues and Internship Preparation Seminar. Because internships are professional placements, the program chair can, for a fixed period, deny eligibility to any student who has acted in an inappropriate and unprofessional manner during the preparation phase. Any student cited for professional misconduct during an internship, and/or receives an internship assessment of Unsatisfactory for professional misconduct, may be required to withdraw from the internship and/or the program, subject to terms of the Student Code of Conduct.

## GRADUATION REQUIREMENTS

Successful completion of all courses in the certificate curriculum including the non-credit Workplace Issues seminar, with a minimum final grade of 'C' or a 'pass' in each course.

## TECHNICAL WRITING – INTRODUCTORY CERTIFICATE OF ACHIEVEMENT

### GENERAL INFORMATION

The Technical Writing – Introductory – Certificate of Achievement program can be taken as a part-time program of studies. It provides a solid foundation in theory and applied skills and prepares students for entry-level positions in the expanding field of technical writing in business, industry, technological and scientific communities.

Graduates of both certificates will serve as entry-level technical writers in documentation departments. The courses are transferable to the Bachelor of Communications – Technical Communication degree program. Certificate graduates must meet all the admission requirements for the degree program in order to be considered for admission to the degree.

### GENERAL ADMISSION REQUIREMENTS TECHNICAL WRITING – CERTIFICATE OF ACHIEVEMENT

Applicants to the Technical Writing – Introductory – Certificate of Achievement program must possess the equivalent of an Alberta High School Diploma or have reached 18-years-of-age by September 1 for the Fall Semester or January 1 for the Winter Semester to which they are applying.

### ADDITIONAL ADMISSION REQUIREMENTS TECHNICAL WRITING – CERTIFICATE OF ACHIEVEMENT

In addition to meeting the general admission requirements indicated above, applicants must also satisfy the following criteria:

#### Academic Course Requirements

The following specific courses (or equivalencies) with the specified minimum grades are required for admission into the Technical Writing – Introductory – Certificate of Achievement program:

- English Language Arts 30-1 – 50%

Although Conditional Admission may be granted in advance of receipt of final/official transcripts, confirmation of the achievement of specified minimum grades will take place after all final/official transcripts have been received by the College. Applicants who do not meet these minimum grade requirements will be denied admission.

## CURRICULUM

### Technical Writing – Introductory – Certificate of Achievement

Required Courses	Credits
English 1101 or any other 1100-level (or higher) English. . . . .	3
Applied Communications 203 – <b>Applied Visual Communication I</b> . . . . .	4
Applied Communications 2061 – Technical Writing I** . . . . .	3
Applied Communications 2063 – Stylistics for Technical Writers. . . . .	3
Applied Communications 2067 – Information Architecture . . . . .	3
Total Credits . . . . .	16
** English 2263 – Technical Writing (U of C COMS 363) will be accepted as equivalent to ACOM 2061 or COMM 1661 Technical Writing I will be accepted as equivalent to ACOM 2061	

## GRADUATION REQUIREMENTS

Students are required to complete the five (5) courses included in Technical Writing – Introductory – Certificate to receive the Certificate of Achievement.

## TECHNICAL WRITING – INTERMEDIATE– CERTIFICATE OF ACHIEVEMENT

### GENERAL INFORMATION

Program intake has been suspended for Fall 2009

## CONTINUANCE IN THE PROGRAM

Students enrolled in the Computer Information Systems Diploma program must obtain a minimum grade of "C-" in all required computer courses in the program and maintain a minimum cumulative Grade Point Average of 2.00.

## CURRICULUM

### Diploma – Computer Information Systems

Year 1	Credits
Computer Science 1501 – Programming I: Introduction to Problem Solving and Programming . . . . .	3
Computer Science 1502 – Programming II: Object-Oriented Programming . . . . .	3
Computer Science 1511 – Web I: Client Development . . . . .	3
Computer Science 2531 – Operating Systems and Computer Architecture . . . . .	3
English 1101 – Critical Writing and Reading . . . . .	3
Entrepreneurship 2201 – Introduction to Entrepreneurship . . . . .	3
Mathematics 2505 – Puzzling Adventures in Mathematics . . . . .	3
Management 3210 – Business Communication Theory and Practice . . . . .	3
Arts and Science Requirement . . . . .	3
Arts and Science Requirement . . . . .	3
Total Credits . . . . .	30

Year 2	Credits
Accounting 2121 – Financial Accounting Concepts . . . . .	3
Computer Science 2503 – Programming III: Data Structures . . . . .	3
Computer Science 2521 – Database I - Data Modeling and Query Languages . . . . .	3
Computer Science 2541 – Systems Analysis . . . . .	3
Computer Science 3532 – System Administration and Maintenance . . . . .	3
Computer Science 3533 – Network Infrastructure . . . . .	3
Management 2130 – Management Principles and Practice . . . . .	3
Approved Business Option** . . . . .	3
Arts and Science Requirement . . . . .	3
Arts and Science Requirement . . . . .	3
<u>Computer Science 3533 – Network Infrastructure . . . . .</u>	<u>3</u>
Total Credits . . . . .	30
Total Credits for Graduation . . . . .	60

\*\* The Approved Business Option can be either: Human Resources 2170 – Introduction to Human Resources or Marketing 2150 – Introduction to Marketing

## GRADUATION REQUIREMENTS

To be eligible for graduation a student must

- attain a minimum GPA of 2.00 on all courses required for the program.
- achieve a minimum grade of C- in all required computer courses

See General Graduation Requirements section for further requirements.

## GENERAL INFORMATION – CERTIFICATE PROGRAM

The certificate program is a one-year program for students from a variety of backgrounds with **prior business experience and/or post-secondary educational qualifications**. It is an advanced certificate designed to build on existing business knowledge. It will provide a foundation for mature individuals to change careers into areas requiring knowledge of computing in the area of existing expertise.

The certificate program can be tailored to the student's needs. Students must contact the department prior to applying to discuss acceptability of qualifications and individual circumstances.

## ADMISSION REQUIREMENTS FOR THE COMPUTER SCIENCE – CERTIFICATE

- Enrolment is limited to those with relevant professional, educational or work experience
- Minimum of the equivalent of an Alberta High School Diploma is required
- Preference will be given to applicants with a post-secondary qualification such as a degree or diploma
- Prior completion of a programming course is strongly recommended

**Note:** Entrance to the certificate program is based on consent of the department. Contact the department at 403-440-6149 for recommended courses and further information.

## CURRICULUM

### Certificate – Computer Science

Core Requirements	Credits
Approved Computer Science Option* . . . . .	3-5
Approved Computer Science Option* . . . . .	3-5
Approved Computer Science Option* . . . . .	3-5
Approved Computer Science Option* . . . . .	3-5
Approved Computer Science Option* . . . . .	3-5
Approved Option** . . . . .	3
Approved Option** . . . . .	3
Approved Option** . . . . .	3
Approved Option** . . . . .	3
Elective . . . . .	3
Total Credits for Graduation . . . . .	30-40

\* Approved Computer Science options are normally chosen from one of the two groups below. Others must be approved by the department chair prior to registration.

\*\* An approved option is any course relevant to the student's occupation. These may include any Business Administration, Computer Science or Science course. Others must be approved by the department chair prior to registration.

Group I (End User Pattern)	Credits
Computer Science 1171 – Introduction to Computer Systems and Applications . . . . .	4
Computer Science 1230 – Intermediate Microcomputer Applications . . . . .	3
Computer Science 1233 – Microcomputer Hardware and Operating Systems . . . . .	4
Computer Science 1370 – Introduction to Internet Development . . . . .	3
Computer Science 2215 – Introduction to Programming . . . . .	4
Computer Science 4473 – Internet Development II . . . . .	3

Group II (Technical Pattern)	Credits
Computer Science 1171 – Introduction to Computer Systems and Applications . . . . .	4
Computer Science 1233 – Microcomputer Hardware and Operating Systems . . . . .	4
Computer Science 1270 – Networks I . . . . .	3
Computer Science 1271 – Introduction to Programming I . . . . .	4
Computer Science 1274 – Building Internet Solutions . . . . .	4
Computer Science 4401 – Quality Assurance and Testing . . . . .	3

## BACHELOR OF SCIENCE – COMPUTER SCIENCE

The department offers a two-year Bachelor of Science – Computer Science university transfer program. This program provides the first two years of the University of Calgary's degree program (see *University Transfer* section for further information).



## PROGRAM OFFERED

Certificate – Environmental **Technology**

## FACULTY INFORMATION

Department: 403.440.6615

Dean, Faculty of Science and Technology  
B. Lane: 403.440.6966

Chair, Department of Environmental Science  
R. Saint-Fort: 403.440.6683

Academic Advisor, Environmental Science  
B. Sevick 403.440.6675

## GENERAL INFORMATION

This program provides a good basic training in environmental science. It is aimed at those individuals possessing on-the-job experience of an environmental nature and/or a post-secondary credential in a related field. A timetable may be able to be arranged to accommodate part-time and evening students who are employed full-time and who wish to broaden their background. Some courses may be able to be designed to allow students, in consultation with the instructor and advisor, to select specific topics to be covered during the course. These topics will be selected with the intent of making them relevant to the student's interests and needs.

Upon completion of the program, graduates with appropriate course work may be eligible to apply for certification by the Alberta Institute of Agrologists, the Alberta Society of Engineering Technologists, or the Canadian Environmental Certification Approvals Board.

## ADMISSION REQUIREMENTS FOR THE ENVIRONMENTAL **TECHNOLOGY** CERTIFICATE

- Alberta High School Diploma or 18-years-of-age by September 1 for the Fall Semester to which the applicant is applying.
- Enrolment is restricted to persons with experience in environmental management and/or related fields.
- Students interested in this program should speak with the academic advisor.

**Note:** Entrance to the certificate program is based on consent of the department. Students may progress at their own rate; however, it is recommended that the certificate requirements be completed within three years. Laboratory requirements will depend upon the student's background. Enrolment may be limited in the program.

## NON-CERTIFICATE STUDENTS

Persons wishing to take certain courses in the program but not intending to obtain a certificate may register for those courses with the permission of the academic advisor.

## CURRICULUM

This program is offered on a part-time basis and may take more than one year to complete.

### Certificate – Environmental **Technology**

Environmental Science 3303 – Life Cycle Assessment . . . . .	3
Environmental Science 3323 – Watershed Management . . . . .	3
Environmental Science 4405 – Air Quality . . . . .	3
Environmental Science 4407 – Pollution Prevention: Toward Zero Emissions . . . . .	3
Environmental Science 4431 – Management of Residuals . . . . .	3
Environmental Science 4433 – Quality Assurance/Quality Control . . . . .	3
Approved Option. . . . .	3
Approved Option. . . . .	3
Approved Option. . . . .	3
Approved Option. . . . .	3
Total Credits for Graduation . . . . .	30

Select Approved Options	Credits
Ecology 2219 – Aquatic Ecology . . . . .	3
Environmental Science 2201 – Introduction to Industrial Ecology. . . . .	3
Environmental Science 3307 – Air Pollution Monitoring. . . . .	3
Environmental Science 3315 – Applied Instrumentation. . . . .	3
Environmental Science 3321 – Water Pollution and Surface Water Analysis . . . . .	3
Environmental Science 3333 – Groundwater Contamination . . . . .	3
Environmental Science 3335 – Issues in Environmental Assessment. . . . .	3
Environmental Science 4413 – Principles of Eco-Industrial Development . . . . .	3
Environmental Science 4417 – Design for the Environment . . . . .	3
Environmental Science 4419 – Regulatory Management . . . . .	3
Environmental Science 4423 – Market Based Initiatives. . . . .	3
Environmental Science 4441 – Site System Remediation Design . . . . .	3



# PHYSICAL EDUCATION



## PROGRAMS OFFERED

Advanced Certificate – Athletic Therapy

University Transfer – Bachelor of Physical Education

The Physical Education and Recreation Studies Department also offers a Bachelor of Applied Ecotourism and Outdoor Leadership degree program (consult the program description found elsewhere in this calendar).

## FACULTY INFORMATION

Department: 403.440.6500

Dean, Faculty of Health and Community Studies  
B. Hendrickson: 403.440.6988

Chair, Department of Physical Education and Recreation Studies  
M. Lafave: 403.440.6246

Program Coordinator, Ecotourism and Outdoor Leadership  
A. Derbyshire: 403.440.6502

Program Coordinator, Bachelor of Applied Business and Entrepreneurship  
– Sport and Recreation  
J. Weible: 403.440.6986

Program Coordinator, Athletic Therapy  
K. Westbrook: 403.440.7759

Program Coordinator, Bachelor of Applied Physical Education - University  
Transfer  
D. Sheehan: 403.440.5148

Work Experience Coordinator  
R. Bilben 403.440.8973

Practicum Coordinator  
L. Gray 403.440.6479

Department Academic Advisor  
L. Gray 403.440.6479

Advising Appointments: 403.440.6500

## GENERAL INFORMATION – ADVANCED CERTIFICATE – ATHLETIC THERAPY

This program is designed to provide participants with advanced knowledge, experience and skills in the delivery of athletic therapy services. The department is currently pursuing program accreditation through the Canadian Athletic Therapists Association for the commencement of the program. The program includes theoretical, field and clinical practicum experiences that prepare practitioners for the certification exams (practical and written) for certification as a Certified Athletic Therapist (Canadian). Graduates will have completed a major portion of their clinical and field practicum required for certification. Additional clinical and field practicum may be obtained on an individual basis.

This program is taught at a post-degree level. The program intensity is such that expectations in the classroom and in practical settings are extremely high. The time commitments for this program include classroom activities for most days and late afternoon and/or evening practicum commitments.



### **ASMH 4407 – Mental Health Interventions**

(3 credits) Distance Delivery

This course will explore major concepts and practices of contemporary therapeutic modalities in mental health practice. It provides in-depth study of current interventions that will assist the practitioner to mobilize the client to effect change in his/her life.

### **ASMH 4491 – Clinical Practicum**

(6 credits) minimum 210 hours clinical experience

This course provides an opportunity for synthesis and application of mental health principles, theories and interventions in a practice setting that addresses mental health concerns. Students will identify and complete extensive study in a practice area relevant to their specific interests.

*Pre- or Corequisite: Advanced Studies in Mental Health 4401, 4403, 4405 and 4407 and approval of the department.*

## **AIR FLIGHT TRAINING (AIRF)**

### **AIRF 1101 – Commercial Pilot's License**

(3 credits) 4 hours lecture

This course is designed to give students knowledge of the material outlined in Transport Canada's Study and Reference Guide for Commercial Pilot's License. At the end of the semester all students are required to have passed the written examination for the Commercial Pilot's License.

*Prerequisite: Acceptance into the Aviation program and a Private Pilot's Licence.*

### **AIRF 1109 – Introduction to Aviation Meteorology (Introductory) (formerly GEOG 1109)**

(3 credits) 3 hours lecture, 2 hours lab

This course meets the meteorology requirements for the Department of Transport Commercial Pilot's Licence, basic meteorology as it applies to aviation and the ability to interpret weather information for pilots as supplied by Atmospheric Environment Services.

*Prerequisite: Acceptance into the Aviation program or Instructor's permission.*

### **AIRF 1130 – Aircraft Engines**

(3 credits) 3 hours lecture

This course is designed to give students a theoretical, practical and working knowledge of an aircraft piston engine and its ancillary controls. Students will also be introduced to the turbo prop and turbo jet engine.

### **AIRF 2111 – Introduction to the Aviation Industry (formerly AIRF 1111)**

(3 credits) 3 hours lecture

This course is an introduction for commercial pilots in the following topics: aviation history, aircraft identification, industry networking, professional conduct, pilot decision making, preparing for the first job, present state of the industry.

*Prerequisite: Air Flight Training 1101.*

### **AIRF 2209 – Advanced Aviation Meteorology (Advanced) (formerly AIRF 1209)**

(3 credits) 3 hours lecture, 2 hours lab

This course prepares students for the meteorological portion of the Instrument Flying Test. It deals with practical flight planning problems, both low level and high level. Upon successful completion of the course students should have a good grounding in practical meteorological problems confronting an aircraft captain.

*Prerequisite: Air Flight Training 1109.*

### **AIRF 2240 – Aviation Management (formerly AIRF 1240)**

(3 credits) 3 hours lecture

This course is an introduction to the economics of air transportation in the Canadian airline industry. Topics explored include airline strategy and market barriers, demand and supply of air services, elasticity of air demand, capacity management, scheduling, cost management, government regulation, risk management, and safety management systems. Relevant current issues in the industry are also discussed.

### **AIRF 3202 – Multi-Engine Instrument Rating (formerly AIRF 1202)**

(3 credits) 3 hours lecture

This course is designed to give students a knowledge of the material outlined in the Transport Canada's Study and Reference Guide for Instrument Rating. This will be covered through lectures. At the end of the semester all students must have passed the Transport Canada written examination for the Instrument Rating Endorsement.

*Prerequisite: Air Flight Training 2111.*

### **AIRF 3206 – Advanced Aircraft Operations, GPS, and Crew Coordination (formerly AIRF 1206)**

(3 credits) 3 hours lecture

This course is designed to give students an advanced knowledge of aircraft operations, performance, and navigation. Students will be exposed to the Garmin 430 moving map GPS navigational technology through classroom theory and practical simulator sessions. Students will also be taught the theory and practice of multi-crew operations and Standard Operating Procedures.

*Prerequisite: Air Flight Training 3202.*

### **AIRF 3210 – Aircraft Systems (formerly AIRF 1210)**

(3 credits) 3 hours lecture

This course is designed to give students a theoretical and working knowledge of aircraft hydraulic, pneumatic, electric, pressurization, oxygen, fire and ice protection systems.

*Prerequisite: Air Flight Training 1130.*

### **AIRF 3242 – Human Factors and Aviation Safety (formerly AIRF 1242)**

(3 credits) 3 hours lecture

This course examines current issues related to aviation safety. Of primary interest are human factors as they apply to pilots, air traffic control, managers, and other related parties. The impact of human factors on aviation safety will be investigated. Aviation psychology and physiology will be discussed, and strategies for successful pilot decision-making will be developed. Case studies will involve both Air Transport Category and General Aviation aircraft situations. The transportation of dangerous goods and accident investigation will be introduced.

### **AIRF 1199, 1299 – Directed Readings**

See Directed Readings which are listed alphabetically in this section of the calendar.

## **ANTHROPOLOGY (ANTH)**

### **ANTH 1101 – Introduction to Primatology and Human Evolution (formerly ANTH 2201)**

(3 credits – TG) 3 hours lecture

This course will consider human evolution, the role of biosocial phenomena in the evolution of physical structure and social behaviour, and the origins and development of culture.



### **ANTH 1102 – An Introduction to Physical Anthropology (formerly ARKY 2203)**

(3 credits – TG) 3 hours lecture, 3 hours lab

This course is a survey of major topic areas in Physical Anthropology including human evolution, Mendelian and population genetics, osteology, and human variation. In the laboratory portion of this course, students will engage in applied exercises for each of the given areas.



### **ANTH 1103 – Introduction to Cultural Anthropology (formerly ANTH 2203)**

(3 credits – TG) 3 hours lecture

This course is a cross-cultural exploration of the nature of human culture and society: its elements, variability and perpetuation. Topics will include symbolism and meaning, subsistence strategies, sex and gender, kinship, social organization, and political, economic, and religious institutions.



**ANTH 2225 – Ancient Civilizations (formerly ARKY 3325)**

(3 credits – TG) 3 hours lecture

This course critically examines the theories and facts behind what is meant by “civilization”, the origins of agriculture and its impact on social complexity. The focus is on several of the earliest civilizations in both the Old and New World, including the Sumerians of Mesopotamia, the Harappans of the Indus Valley, Old Kingdom Egypt, China, the Andes, and the Maya of Mesoamerica.

**ANTH 2226 – Early Empires: Assyrians, Babylonians and Persians (formerly ARKY 3326)**

(3 credits – TG) 3 hours lecture

This course examines the rise, fall and characteristics of three of the world’s greatest successive early empires—the Assyrians, the Babylonians and the Persians—from c. 1000 BC to the conquest of Alexander the Great within Iraq and Iran, and how each responded to and incorporated external cultural influences.

Recommended Preparation: Anthropology 1104, 1105 or 2225; or History 1101; or Religious Studies 1101; or consent of the department.

**ANTH 2227 – Early Islam**

(3 credits) 3 hours lecture

This course is a detailed study, both diachronic and synchronic, of the ideals behind and artistic embellishments of monuments and artefacts in the Muslim world, as expressions of Islamic beliefs and traditions. The focus is on the Middle East, from the Arabian Peninsula through North Africa and Spain, in order to address specific regional developments from late pre-Islamic times (1st - 6th centuries AD) into the early Crusades (about 1100 AD).

**Note:** No previous knowledge of Islam or of Arabic is assumed or necessary

**ANTH 2229 – Anthropology of “Race” (formerly ANTH 3329)**

(3 credits – TG) 3 hours lecture

This discussion-based course takes a critical examination of historical and modern anthropological perspectives on the biological term “race.” Historically, race in a Biological Anthropology context examines the classification of modern human physical variation. Today this context has expanded including the impact of genetic variation, biological determinism of race and racial definitions of ancient human ancestors.

**ANTH 2231 – The Anthropology of Gender (formerly ANTH 3331)**

(3 credits – TG) 3 hour lecture

This course is a comparative analysis of gender as a central feature of social identity and social relations of power. Biological, archaeological, feminist and post-modern approaches to the understanding of women’s and men’s experiences in their historical and cultural varieties form the basis of the course. Case studies will be drawn from western and non-western cultures around the world.

*Prerequisite:* Anthropology 1103 or consent of the department.

**ANTH 2235 – Culture and Environment of Selected Circumpolar Peoples (formerly ANTH 3335)**

(3 credits – TG) 3 hours lecture

This course is an ethnographic survey of the Peoples and cultures of the circumpolar area with an emphasis upon environmental adaptation and the effects of culture contact. Selected cultures include the Sámi, Chukchi, Evenks and Tungus, Aleuts, Yupik, Inuit, Athabascans and Algonquians.

*Prerequisite:* Anthropology 1103 or consent of the department.

**ANTH 2241 – Ethnography in Anthropology**

(3 credits) 3 hours lecture

Ethnography (“writing culture”) is central to the discipline of Anthropology. Through the reading of complete ethnographic works and critical treatises on ethnography, students will explore the entirety of the ethnographic enterprise: how ethnography allows unique insights into specific cultures, how ethnographic research is designed and carried out, how ethnographic texts are constructed, and how ethnographic representations have been responded to and interpreted.

*Prerequisite:* Anthropology 1103

**ANTH 2243 – Anthropology Through Film**

(3 credits – TG) 3 hours lecture

This course takes a historical and theoretical perspective of ethnographic film, the visual medium through which anthropologists and filmmakers have “captured” and presented human cultural experience for almost 100 years. Students will engage in a critical analysis of the representations presented in ethnographic film and consider relationships between the development of the ethnographic film genre and the development of Anthropology as a whole.

*Prerequisite:* Anthropology 1103 or consent of the department.

**ANTH 2253 – Introduction to Applied Archaeology (formerly ARKY 3313)**

(3 credits) 3 hours lecture

This course is an introduction to the methods of archaeological reconnaissance and survey. Heritage Resource Impact Assessment Studies required by legislation enacted in Western Canada will be emphasized. Searches of government files, topographic map and aerial photo interpretation will form the core of the course material. The ability to locate archaeological sites using the UTM and legal land description systems will be acquired as well.

Recommended Preparation: Anthropology 1104.

**Note:** Anthropology 2253 cannot be used as partial credit for either Anthropology 2290 or 2291.

**ANTH 2255 – An Ethnographic Survey of Native North America (formerly ANTH 3355)**

(3 credits – TG) 3 hours lecture

This course provides an overview of native cultures of North America, examining relationships among subsistence and settlement patterns, material culture, social and political organization, ideological structures, ceremonial life, mythology and art. Because of the number and diversity of native peoples in North America, “typical” groups from each culture area will form the basis of description and analysis.

*Prerequisite:* Anthropology 1103 or consent of the department.

**ANTH 2258 – Anthropology in the Public Eye (formerly ANTH 3358)**

(3 credits – TG) 3 hours lecture

This discussion-based course focuses on the public’s perception of Anthropology, not the content of Anthropology itself. Students will, in essence, take an anthropological perspective by critically examining and evaluating the objectivity, relevance, and substance of various current anthropological topics such as the role of the media, impact of cultural and heritage policy, anthropological representation in museums and education, and ethics and the antiquities trade.

**ANTH 2270 – Archaeology of the Nile Valley (formerly ARKY 3331)**

(3 credits – TG) 3 hours lecture

This course provides an overview of the development of civilizations along the Nile. Beginning with hunter-gatherers, archaeological evidence will be reviewed detailing the transition to civilizations. Emphasis will be placed upon archaeological evidence, history and epigraphy in understanding the two major civilizations of the Nile Valley: Egypt and Kush



## **ANTH 3368 – An Anthropology of Art – Art in Small-Scale Societies**

(3 credits – TG) 3 hours lecture

This course focuses upon art as a dynamic process involving not only the human creation of objects, but the circulation of these objects within the various social, cultural and historical contexts that give them meaning. Students will be provided with a foundation in the anthropological study of art, aesthetics and material culture. Special attention will be given to the arts of the “small-scale” societies, the indigenous or aboriginal peoples of North America, Africa, Australia and Oceania.

Recommended Preparation: At least one 1000-level course in Anthropology, Psychology or Sociology.

## **ANTH 3379 – Urban Anthropology**

(3 credits – TG) 3 hours lecture

This course is a study of tribalism, ethnicity, sub-cultures, social networks and related phenomena in urban societies. Attention will be paid to planning and applied urban Anthropology.



*Prerequisite: Anthropology 1103 or consent of the department.*

## **ANTH 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **APPLIED COMMUNICATIONS (ACOM)**

### **ACOM 2003 – Applied Visual Communication I (formerly ACOM 2203)**

(4 credits) 4 hours lecture

Principles of graphic communication, design, and layout will be applied to the production of a variety of print-based media including newspapers, newsletters, reports, manuals and brochures using current computer-based page-layout and graphics programs. Typography, the uses of colour, the selection of photographs and art-work, and the sizes, weights and quality of paper as they affect the options for printing processes will be examined and applied.



*Prerequisite: Computer Science 1205 or consent of the department.*

### **ACOM 2011 – Directed Field Studies I – Journalism**

(15 credits) 16 weeks, work-term project

Students in the Journalism stream of the Bachelor of Communications Degree program will complete a Directed Field Study in a workplace setting, and work in a print, broadcast or other journalism milieu.

*Prerequisite: Completion of a minimum 45 credits (or consent of the department) with a minimum grade of “C” in all required courses and a minimum overall Grade Point Average of 2.00; and have successfully completed Applied Communications 3345 Journalist’s Workplace I Directed Field Study preparation, and have consent of the department.*

### **ACOM 2013 – Directed Field Studies I – Public Relations**

(15 credits) 16 weeks, work-term project

Students in the Public Relations stream of the Bachelor of Communications Degree program will complete a directed field studies in an organizational setting – either corporate, non-profit or government.

*Prerequisite: Successful completion of the following courses or their equivalents:*

*Applied Communications 2041, 2245, 2003 or 2061, 2249, 3341, 3349, 3351, 3355, and 3500, Applied Communications 2281 or Freelance Writing 1305, Computer Science 1205, Management 2130; 150 hours of paid or volunteer public relations experience, and departmental approval.*

### **ACOM 2015 – Directed Field Studies I – Technical Communication**

(15 credits) 16 weeks, work-term project

Students in the Bachelor of Communications – Technical Communication degree program will complete directed field studies in an organizational setting. Students will usually be placed with large firms and assist with documenting products and systems. Students will be graded on a letter grade system.

*Prerequisite: Students will have completed a minimum of 45 credits (or consent of the department) with a minimum grade of “C” in all required courses and a minimum overall Grade Point Average of 2.00, and have successfully completed the Introduction to Work Experience (or approved equivalent) workshop through Career Services.*

## **ACOM 2017 – Directed Field Studies I – Electronic Publishing**

(15 credits) 450 hours work-term

Students in the Bachelor of Communications – Electronic Publishing degree program will complete Directed Field Studies lasting a minimum of 450 hours, in an appropriate corporate setting. Within this production environment, students will apply techniques and concepts acquired in the core curriculum, and document theoretical and practical findings.

*Prerequisite: Completion of a minimum of 60 credits (or permission of chair) with a minimum grade of “C” in all required courses and a minimum overall Grade Point Average of 2.00. Completion of the Introduction to Work Experience (or approved equivalent) workshop through Career Services.*

### **ACOM 2041 – Introduction to Public Relations for Technical Writers (formerly ACOM 2241)**

(3 credits – TG) 2 hours lecture, 1 hour tutorial

This course will provide students with an overview of the field of public relations and environments in which technical writers work. Public relations will be considered from the perspective of human communication theories. Students will also learn the history and role of public relations in organizational settings applicable to technical writers.



Possible substitution: Communications 1841.

### **ACOM 2061 – Applied Technical Writing I (formerly ACOM 2261)**

(3 credits – TG) 2 hours lecture, 2 hours tutorial

Introduction to the varieties of technical writing. Forms and styles of technical description, procedures, reports, proposals, business plans and policies. Introduction to the integration of text and graphics.



*Note: Technical Writing Certificate students only.*

Possible substitutions: Communications 1661 Technical Writing I or ENGL 2263 Technical Writing (Formerly ENGL 3363) (U of C COMS 363)

### **ACOM 2063 – Stylistics for Technical Writers (formerly ACOM 2263)**

(3 credits) 3 hours lecture

In this course, students refine their writing skills by applying the principles of rhetoric and stylistics. We will observe the effectiveness of diverse texts-essays, stories, advertising, magazine and newspaper writing – and consider precisely how and whether these forms of communication work. The rhetorical analysis of texts will also apply to our own writing, as we look at the relationship between authorial intention and audience reception.



*Note: Technical Writing Certificate students only.*

### **ACOM 2067 – Information Architecture (formerly ACOM 2267)**

(3 credits) 3 hours lecture

This course examines how documents are structured and how you can categorize or chunk information. Navigational principles and retrieval strategies are researched and concepts first introduced in Applied Communications 2261 will be extended. Students will examine how information needs to be managed in the workplace and the importance of search and retrieval in design. Projects will require students to develop materials for print and web. A number of research-based information development practices will be explored and skills in these methods will be developed through assignments. An introduction to some usability testing strategies will be covered.



*Note: Technical Writing Certificate students only.*

### **ACOM 2205 – Principles of Graphics I**

(3 credits) 3 hours lecture

This course introduces students to the principles of effective graphic design. Students explore the ways in which humans communicate effectively through spatial arrangements, visual cues, signs and conventions. The history of the major communications vehicles will be explored. Design and use of photographs and other pictorial materials will be developed, and current approaches to typography examined.

**ACOM 2245 – Interpersonal Communications**

(3 credits – TG) 3 hours lecture

This course introduces the fundamentals of interpersonal communications with a focus on “influencing with integrity”. Students will practice communicating one-on-one and in small groups; learn effective listening and conflict resolution skills; appreciate differences in others; and examine personal values, intentions and behaviours.

**ACOM 2247 – Public Relations Management**

(4 credits) 2 hours lecture, 2 hours tutorial

Building on the introduction to public relations course, students will formulate plans for communications activities. They will research a problem or opportunity, analyse target groups and messages to be delivered, undertake budgeting and scheduling activities, and evaluate the results. Students will manage a special event as part of the course.

*Prerequisite: Applied Communications 2041.*

**ACOM 2249 – Applied Writing I for Public Relations**

(4 credits) 2 hours lecture, 2 hours tutorial

This course will introduce students to intermediate-level elements of writing for specific communications disciplines. Considerations of audience, purpose and technique in media will be examined for a variety of writing assignments in public relations.

*Prerequisite: Applied Communications 2041.*

**ACOM 2251 – Introduction to Fund Development**

(3 credits) 3 hours lecture

This course is designed for programmers and managers working in the non-profit sector who will need basic understanding and skills in fund development to support their organization and/or community. Through in-class discussion, small group work, and assignments, students will learn the planning and implementation of fund development and understand it as an integral part of an organization's business plan.

**ACOM 2255 – Writing for Publication**

(3 credits) 3 hours lecture

This course involves writing for general and trade periodicals; the freelance writer's marketplace and marketing; techniques of writing non-fiction.

**ACOM 2271 – Publishing – Origins to Today**

(3 credits) 3 hours lecture

This course is designed to provide publishing specialists with an historic context for the forms, markets, and media they are working in. The course surveys how information has been circulated and published in human societies. It examines the earliest recorded information, historic techniques of reproduction and distribution, how the book emerged and how new electronic forms of publishing are both a continuance of tradition and a challenge to it.

**ACOM 2273 – Introduction to Digital Layout**

(3 credits) 2 hours lecture, 2 hours lab

This course reviews major computerized layout programs and develops competency in one of them. Students will compare a cross-section of programs and become proficient in one platform. Students will explore all key areas of layout technique, from the building of templates, to the mastering of typography and style to control of large-document projects.

*Prerequisite: Applied Communications 2205 and Computer Science 1209.*

**ACOM 2279 – Standard and Digital Photography**

(4 credits) 3 hours lecture, 2 hours lab

This course introduces students to traditional photography while it lays the groundwork for digital photographic techniques. Students will gain an understanding of film, camera, exposure and digital processes. Students will gain experience in the use of traditional and digital cameras and with the application of colour theories.

*Prerequisite: Applied Communications 2205 and Computer Science 1209.*

**ACOM 2281 – Event Management**

(3 credits) 2 hours lecture, 1 hour tutorial

This course builds on students' basic understanding of special events to develop a deeper understanding of the role events play in strategic communication and in helping organizations achieve their goals. From brainstorming ideas and concepts to project management, budgeting, targeting audiences, volunteer management and proposal writing, the students will be prepared to participate fully in the planning and implementation of successful events for a variety of purposes. As well, students will be assigned to work on an event as part of their course experience.

*Prerequisite: Applied Communications 2041 and 2247.*

**ACOM 3005 – Research Methods for Technical Writers (formerly ACOM 3305)**

(4 credits) 4 hours lecture

This course develops competence in major forms of research relating to technical writing including the use of surveys, focus groups, content analysis, and the use of existing information accessed through libraries, online databases, and other computer-based search tools. Elements of descriptive statistics as they apply to the analysis of survey design will be reviewed. The course will provide instruction and practice in accessing available information as it is used in technical communication.

Possible substitutions: Communications 3605 Research in Information Design or may also substitute the following: Athabasca University SOSI 366 Research Methods in the Social Sciences

*Note: Bachelor of Applied Communications Degree students only.*

**ACOM 3011 – Directed Field Studies II – Journalism**

(15 credits) 16 weeks

Students in the Bachelor of Communications – Journalism degree program will complete a second Directed Field Study in a print, broadcast, or other journalism milieu.

**ACOM 3013 – Directed Field Studies II – Public Relations**

(15 credits) 16 weeks

Students in the Bachelor of Communications – Public Relations degree program will complete a second Directed Field Studies in an organizational setting. Students in Public Relations will work with industry professionals in the corporate, public and non-profit sectors of industry.

*Prerequisite: Completion of Applied Communications 2013 and a minimum of 45 credits or consent of the department with a minimum grade of “C” in all required courses and a minimum overall G.P.A. of 2.00.*

**ACOM 3015 – Directed Field Studies II – Technical Communication**

(15 credits) 16 weeks

Students in the Bachelor of Communications – Technical Communication degree program will complete a second Directed Field Studies in an organizational setting. Students will usually be placed with large firms and will continue to develop documentation expertise at a more advanced level.

*Prerequisite: Completion of a minimum of 60 credits or consent of the department with a minimum grade of “C” in all required courses and a minimum overall G.P.A. of 2.00. Applied Communications 2015.*

**ACOM 3017 – Directed Field Studies II – Electronic Publishing**

(15 credits)

Students in the Bachelor of Communications – Electronic Publishing degree program will complete their second Directed Field Studies for a minimum of 450 hours, in an appropriate corporate setting. Within this production environment, students will apply techniques and concepts acquired in the core curriculum and document theoretical and practical findings.

*Prerequisite: Applied Communications 2017.*

**ACOM 3065 – Technical Writing II (formerly ACOM 3365)**

(3 credits) 4 hours lecture

This course will introduce students to intermediate-level elements of technical writing. Considerations of audience, purpose and technique in print and electronic media will be examined for a variety of writing needs.

*Prerequisite: Applied Communications 2003, 2061 and 2067.*





### **ACOM 3341 – Media Relations**

(3 credits) 1 hour lecture, 2 hours tutorial

This course will examine the relationship between public relations and the media. Through work on a client project, students will learn about the importance of strategic media planning, write public service announcements (PSAs), news releases, feature articles, as well as put together media kits, participate in a mock news conference and receive media training.

*Prerequisite:* Applied Communications 2249.

### **ACOM 3343 – Communications and Organizational Dynamics**

(3 credits) 3 hours lecture

This course is designed to help students think critically about communication in the organizational context. Through theory-based lectures and experiential exercises, students will better understand the nature, strengths and limits of organizational design, the nature of metaphor and its usefulness in describing organizational management, and how to apply theory learned in the classroom to the practice of public relations.

*Prerequisite:* Applied Communications 2041 or consent of the department.

### **ACOM 3349 – Applied Writing II for Public Relations**

(4 credits) 2 hours lecture, 2 hours tutorial

This course moves beyond the basics of public relations writing to focus on writing specialized subject matter for specific media such as Internet, advertising, film and television scripts, proposals and corporate profiles.

*Prerequisite:* Applied Communications 2249.

### **ACOM 3351 – Computer Mediated Communication**

(3 credits) 1 hour lecture, 2 hours tutorial

This course introduces public relations students to computer mediated communication in the classroom and the computer lab. Participants will be able to use the technologies and understand them sufficiently to advise others on their applications, strengths and weaknesses. Students will become familiar with multimedia/CD-ROM, the Internet and Intranet.

*Prerequisite:* Computer Science 1205 and Applied Communications 2003 or consent of the department.

### **ACOM 3355 – Research Methods for Public Relations**

(3 credits) 4 hours lecture

This course develops competence in major forms of research including the use of surveys, focus groups, content analysis, and the use of existing information accessed through libraries, online databases, and other computer-based search tools. Elements of descriptive statistics as they apply to the analysis of survey design will be reviewed. The course will provide instruction and hands-on practice in conducting communications research in the public relations profession.

*Prerequisite:* Applied Communications 2041 or consent of the department.

Note: Bachelor of Communications Degree students only.

### **ACOM 3363 – Software and System Documentation**

(3 credits) 2 hours lecture, 2 hours tutorial

This course will introduce students to advanced elements of technical writing. Documenting software programs and computer operating systems will be emphasized, as well as writing for other scientific or technical purposes and media. Single-sourcing software will be explored and large document control practised.

*Prerequisite:* Applied Communications 3065.

### **ACOM 3373 – Digital Illustration**

(3 credits) 2 hours lecture, 2 hours lab

This course introduces student to the principle tools, theories, and methods of computer-based illustration. Both text-based and object-based illustrations are explored. Students work with industry-standard computer programs to produce a variety of products, such as templates and letterheads, logos, wordmarks, designed heads, backgrounds and finished layouts.

*Prerequisite:* Applied Communications 2205, 2273, 2279 and Computer Science 1209.

### **ACOM 3375 – Principles of Graphics II**

(3 credits) 2 hours lecture, 1 hour tutorial

This course builds on the insights developed in Applied Communications 2205. Students will explore the technical and aesthetic aspects of designing for the web. They will learn to use web authoring tools and apply the principles of usability and accessibility to authentic web design projects.

*Prerequisite:* Applied Communications 2205.

### **ACOM 3377 – Pre-Press Technique**

(3 credits) 3 hours lecture

This course focuses on the process of putting together a document for output. It teaches the integration and interaction of layout, image manipulation, illustration and press-ready PDF generating software programs. File formats, color management, font management, printing processes and new digital pre-press technologies are also dealt with.

*Prerequisite:* Applied Communications 2273.

### **ACOM 3379 – Advanced Digital Photography**

(3 credits) 2 hours lecture, 2 hours lab

This course extends and develops skills developed in Applied Communications 2279. Students gain an in-depth understanding of digital photography including concepts such as image file formats, resolution, colour depth and dynamic range. Students will photograph and manipulate digital images for use in publications. This course also explores the legal and ethical implications of using digital images.

*Prerequisite:* Applied Communications 2279.

### **ACOM 3381 – Document Production I**

(3 credits) 2 hours lecture, 2 hours lab

This course introduces students to document production. Students develop foundation skills for the production of traditional and online publications.

*Prerequisite:* Completion of at least six core courses or their equivalents in the Bachelor of Communications – Technical Communication and Bachelor of Communications – Electronic Publishing degree program.

### **ACOM 3383 – Research Design and Methodology**

(3 credits) 1 hour lecture, 2 hours tutorial

Journalists are presented daily with the results of polls, surveys, clinical trials and other research projects by individuals and organizations seeking to have this information published or broadcast. Students in this course will consider both the structural and ethical aspects of how such projects are organized with a particular focus on issues such as reliability and generalization.

Note: Enrolment restricted to students in the journalism degree program.

### **ACOM 3389 – International Journalism Projects**

(3 credits) 1 hour lecture, 2 hours tutorial

The Journalism Program participates from time-to-time in joint courses with partner institutions. The content of this course will vary according to the needs and goals of the specific student group involved, but will offer lecture material appropriate to the journalism discipline being studied and result in the production of print, television, web or photojournalism.

### **ACOM 3500 – Media, Culture, and Communication Theory**

(3 credits) 3 hours lecture

This senior level course examines the role of communications in creating and explaining everyday cultural practices, and the larger systems that structure them. Students will consider multiple theories of communication, derived from various disciplines and perspectives, to address the concept of subjectivity, and how the communication of information and ideas impacts on our understanding of our social and personal environments. Students will apply communication theories to specific artifacts and/or issues that they have defined and researched.

*Prerequisite:* Communications 2500.

Note: Applied Communications Degree or Journalism Certificate students only.





### **ACOM 4009 – Issues in Communications, Law and Ethics for Technical Writers (formerly ACOM 4409)**

(3 credits – TG) 3 hours lecture

This course focuses on key issues facing the technical writing profession. The course examines the role ethics plays in society and explores different models for defining issues, interests and values relating to the ethical issues confronting technical writers.

Possible substitutions: Communications 4679 or may also substitute the following: Athabasca University PHIL 333 Professional Ethics

*Prerequisite: Applied Communications 3500.*

### **ACOM 4065 – Instructional Multimedia (formerly ACOM 4465)**

(3 credits) 3 hours lecture

This project-based course provides students with an opportunity to explore applications in instructional multimedia and E-learning. Concepts covered include learning theories, curriculum and instructional design concepts, and script-writing for multimedia. Procedures for systematic design of instructional and training materials using multimedia are also covered. Students will apply these concepts to produce a camera-ready script.



Possible substitution: Athabasca University EDPY 479 Intro to Computer Based Education

### **ACOM 4407 – Media, Technology and the Internet**

(3 credits) 2 hour lecture, 1 hour online tutorial (blended delivery)

Students in this senior course will examine the impact of technological change on the media by exploring relevant elements of communications theory and current issues in the evolution of the Internet and web journalism. Students will also produce Internet based content for the Journalism Program's online news site.

### **ACOM 4419 – Senior Journalism Projects**

(3 credits) 1 hour lecture, 2 hours tutorial

In this senior journalism course students will use the skills they have acquired to complete a major journalism project – in print, broadcast, photo, web journalism, or across media lines. This project will be based on a detailed project proposal submitted for faculty consideration by the student, during the semester prior to the semester in which the student intends to complete this course.

*Prerequisite: Consent of the department.*

### **ACOM 4425 – Journalism Theory and Practice**

(3 credits) 1 hour lecture, 2 hours tutorial

This course provides for a critical review of interrelationships between education and the practice of journalism through a review of workplace vocabulary, and analysis of employer-employee relationships, generational and gender issues, opportunities present and future in journalism, and other communications disciplines, and conflicts in the practice of journalism, among other issues. Each student in this course will also complete a professional level employment e-portfolio that highlights their skills and prepares them for their second Directed Field Study and/or fulltime work.

*Prerequisite: Applied Communications 2011.*

### **ACOM 4437 – Senior Journal Projects**

(3 credits) 1 hour lecture, 2 hours tutorial

In this senior journalism course – with a focus on production of the program newspaper The Calgary Journal – students will use the skills they have acquired to complete a major journalism project, based on a detailed project proposal submitted for faculty consideration by the student, during the semester prior to the semester in which the student intends to complete this course.

*Prerequisite: Consent of the department.*

### **ACOM 4439 – Advanced Journalism Studies**

(3 credits) 1 hour lecture, 2 hours tutorial

This senior journalism option will focus on research of a journalism related issue, creation of a substantial journalism project, or projects that contain both research elements and journalism production elements. The project will be based on a detailed project proposal submitted for faculty consideration by the student, during the semester prior to the semester in which the student intends to complete this course.

*Prerequisite: Consent of the department.*

### **ACOM 4441 – Strategic Communication Planning**

(4 credits) 2 hours lecture, 2 hours tutorial

This course is designed to build on material covered in Applied Communications 2247. Students will increase their understanding of strategic and operational planning concepts in the public relations context by offering consulting services to clients. Working in groups, students will review business plans, perform a communications audit and write a comprehensive communication plan to assist their client organizations in achieving their goals.

*Prerequisite: Applied Communications 2013 and 2247 or consent of the department.*

### **ACOM 4445 – Investor Relations**

(3 credits) 3 hours lecture

This senior-level course for public relations students represents one of the key growth areas for the profession. This course examines the role of investor relations, its purpose within specific organizations, the appropriate financial regulations, brokerage and security considerations, ethical considerations, etc. Students write, design and produce annual reports, do an 'investor relations' communications plan for a real client, produce a quarterly report, learn how to successfully plan and manage an annual shareholder meeting, including responding to questions from the financial press.

*Prerequisite: Management 2130 or 2131 and consent of the department.*

### **ACOM 4447 – International Public Relations**

(3 credits) 3 hours lecture

This is a senior-level course for public relations students. Students will look at international marketing, advertising, cultural diversity issues, relevant legislation, government regulations, NAFTA, GATT, new communication technologies, financial markets, ethics, international labour and workplace issues.

*Prerequisite: Consent of the department.*

### **ACOM 4449 – Fund Development and Corporate Philanthropy**

(3 credits) 3 hours lecture

This is a senior-level course for public relations students, covering two aspects of social public relations – raising funds and creating programs that give funds/resources away. This course covers such areas as: understanding government regulations, corporate giving guidelines, accessing funding agencies, understanding the financial options for fund maintenance, market and audience research, ethical considerations, publicity/promotion and building partnerships with key stakeholders.

*Prerequisite: Consent of the department.*

### **ACOM 4451 – Issues in Public Relations**

(3 credits) 2 hours lecture, 1 hour tutorial

This is the capstone course for students in their final semester of the Public Relations stream of the Bachelor of Communications degree. The course, structured as a combination of senior seminar and directed reading, provides students the opportunity to reflect on the learning they have gained; examine the profession they are about to enter; contemplate and consider Directed Field Studies experiences; and to integrate these perspectives in a thesis of relevance to the profession and their future endeavours.

*Prerequisite: Consent of the department.*

### **ACOM 4463 – The Editorial Function**

(3 credits) 3 hours lecture

Students practice substantive editing, copy editing, and proofreading. They examine issues in reliability and correctness of fact, relation of text to graphics and layout, ethics, copyright and project management. This course draws together subjects and issues from all previous writing courses.



*Prerequisite: At least four (4) Applied Communications courses from the curriculum of the Electronic Publishing or Technical Communication programs.*

**Note:** Second or third year Applied Communications Degree students only.

### **ACOM 4467 – Advanced Technical Documentation**

(3 credits) 3 hours lecture

This course allows students to practice lessons learned in earlier technical writing courses on scientific research documents. Technical writing enters the chain of science leading to consumer products at the point where scientific research becomes technology. Scholarly scientific publications, language research, and other sources of special terminology are examined. User testing methods are studied and applied.

*Prerequisite: Applied Communications 3005.*

### **ACOM 4469 – Portfolio**

(2 credits) 1 hour lecture, 2 hours lab

The student portfolio demonstrates the ways in which students have acquired and achieved the learning outcomes of the Bachelor of Communications – Technical Communication and Bachelor of Communications – Electronic Publishing programs. Portfolio items are products created in all core courses in the program. In this course, students analyze and consolidate their collection and organize a public presentation of their work.

*Prerequisite: Completion of at least 90 credits towards the Bachelor of Communications – Electronic Publishing or Technical Communication Degree programs, and both Directed Field Studies.*

### **ACOM 4473 – Publication Markets and Distribution**

(4 credits) 4 hours lecture

This course surveys the major issues in the marketing and costing of publications, both print-based and electronic. Major markets are examined in light of the promotional, distribution, estimation, and production models that ensue. A comparison is drawn between traditional and electronic forms, their interdependencies studied and solutions proposed for issues specific to each kind of product.

### **ACOM 4481 – Document Production II**

(3 credits) 2 hours lecture, 2 hours lab

This course continues the work done in Applied Communications 3381. Students solicit and evaluate articles, design and commence layout, and source printers and other suppliers. Organizational tasks such as promotion and finance continue; preparation for adaptation to the web commences. Students finish laying out, proofing and correcting documents commenced in the previous production course.

*Prerequisite: Applied Communications 3381.*

### **ACOM 4483 – Magazine Production III**

(2 credits) 1 hour lecture, 2 hours lab

Students finish laying out, proofing, and correcting the magazine commenced in the two previous production courses. Students will transmit artwork to the printer, organize the magazine launch, and distribute the magazine. In addition to the printed version, students will produce an electronic version of the magazine and place it online.

*Prerequisite: Applied Communications 3381 and 4481.*

## **APPLIED JUSTICE (AJUS)**

### **AJUS 2010 – Directed Field Studies I**

(15 credits)

Applied degree work semesters are designed to provide an extension of the learning process into a relevant work environment. Each Directed Field Studies must be a minimum of 450 hours of paid work in an approved agency. Work-terms provide students with an opportunity to integrate theoretical concepts with practical applications; familiarize students with the justice system and its place within the community; familiarize students with current programs, agencies, policies and procedures; provide students with an opportunity to develop and demonstrate their skills and abilities; and foster in students an attitude of professionalism and ethical practice.

Students will be required to participate in an orientation to the work-term and to familiarize themselves with the work-term manual and its policies. During the work-term, students will also be required to participate in a methods integration seminar. This seminar will provide an opportunity to engage in reflection and discussion of significant learning experiences within the work setting with a member of the faculty.

*Prerequisite: Students must have satisfactorily completed the course requirements for the first four (4) semesters of the program.*

### **AJUS 2201/CRJS 1001 – Introduction to Criminology**

(3 credits - TG) 3 hours lecture

In this course, students are introduced to the major theoretical concepts presently available as an explanation of crime, criminals and criminality in the field of criminology.

### **AJUS 2203/CRJS 1003 – Introduction to the Justice System**

(3 credits - TG) 3 hours lecture

In this course, students will examine the functional patterns and roles of the major components in the Canadian Justice System. This process includes (but is not limited to) familiarizing the students with the evolving nature of law enforcement, courts and correctional services.



### **AJUS 2209/CRJS 2009 – Selected Issues in Human Justice**

(3 credits) 3 hours lecture

In this course, students will critically examine topical issues within Human Justice. Each semester's offering will focus on current issues within the major fields of corrections, law enforcement and the judiciary.

*Prerequisite: Applied Justice 2201 and 2203.*

### **AJUS 2211/CRJS 1011 – Introduction to Human Relations**

(3 credits) 3 hours lecture

This course will provide students with an understanding of the development of interpersonal relationships. Students will explore cross-cultural, interdisciplinary and evolving perceptions of normal human relationships, as well as the significance of relationship skills in the justice system.

### **AJUS 2213/CRJS 1013 – Diversity Issues and the Criminal Justice System**

(3 credits) 3 hours lecture

This course will explore issues of diversity and justice within Canadian society. Emphasis will be placed on issues, such as ethnicity, gender, sexual preference, age, and social class, and access to justice throughout Canadian history. Situated in an exploration of competing theoretical paradigms, students will be challenged to consider the complexity of diversity issues in context of the history and practices of the Canadian Criminal Justice System.



### **AJUS 2215/CRJS 2015 – Introduction to Research Methods in Justice Studies**

(3 credits) 3 hours lecture

Students in this course will develop a foundational understanding of social science research methods as practiced within Criminology and Criminal Justice. Specifically, this course will focus on the theory of inquiry, scientific method, inductive versus deductive reasoning, overview of qualitative and quantitative approaches to research design and data collection, criminological data sources, common errors in research and research ethics.

*Prerequisite: Applied Justice 2201 and 2203*

### **AJUS 3010 – Directed Field Studies II**

(15 credits)

Applied degree work semesters are designed to provide an extension of the learning process into a relevant work environment. Work-terms provide students with an opportunity to integrate theoretical concepts with practical applications; familiarize students with the justice system and its place within the community; familiarize students with current programs, agencies, policies and procedures; provide students with an opportunity to develop and demonstrate their skills and abilities; and foster in students an attitude of professionalism and ethical practice. Students will be required to participate in an orientation to the work-term and to familiarize themselves with the work-term manual and its policies. During the work-term, students will also be required to participate in a methods integration seminar. This seminar will provide an opportunity to engage in reflection and discussion of significant learning experiences within the work setting with a member of the faculty.

*Prerequisite: Students must have satisfactorily completed Work Term I and all of the course requirements for the first six (6) semesters of the program.*

### **BIOL 3103 – Introduction to Biophysics**

(3 credits) 3 hours lecture; 1.5 hour tutorial

The aim of this course is to apply concepts and laws of physics to the study and understanding of living systems. As shown in the course outline, the topics that will be covered are: biomechanics of bone and muscle, hemodynamics, diffusion and osmosis, physics of respiration and cough, heat regulation mechanisms, electroreception and conduction of impulses along the nervous system, magnetic sense, and the physics of vision and hearing.

*Prerequisite:* Mathematics 1200, Physics 1202 or 1212 and Biology 1202

### **BIOL 3104 – Introduction to Human Physiology I (formerly ZOOL 3361)**

(3 credits – TG) 3 hours lecture, 3 hours lab every second week alternating with 1 hour tutorial

This course deals with the normal functions of organs and organ systems in the human body. The emphasis will be on how these functions are controlled in the normal state and how they are integrated in the whole organism. The major topics studied in this course include: homeostasis, properties of excitable cells, the nervous system, the muscular system, the endocrine system and the reproductive system.

*Prerequisite:* Biology 1202 and Chemistry 1202 with grades of "C-" or higher.

*Recommended Preparation:* Biology 1203.

### **BIOL 3203 – Genomes**

(3 credits) 3 hours lecture, 1 hour computer lab

This course deals with the genomes of prokaryotes and eukaryotes: chromosomes, transposable elements, plasmids, bacterial genetic exchange mechanisms, mutation, recombination, repair mechanisms, genome sequencing strategies, and methods for analysis of sequence data. The computer lab provides time to explore bioinformatics resources.

*Prerequisite:* Microbiology 2201 and Biology 2202 with grades of "C-" or higher.

*Coresquisite:* Biology 3101

### **BIOL 3205 – Human Physiology II (formerly ZOOL 3363)**

(3 credits – TG) 3 hours lecture, 3 hours lab every second week alternating with 1 hour tutorial

This course is a continuation of Biology 3104-Human Physiology I. The major topics studied in this course include the immune system, the cardiovascular system, the respiratory system, the urinary system, the digestive system, metabolism, fluid and acid-base balance, thermoregulation, and the body's response to exercise and stress.

*Prerequisite:* Biology 3104 with a grade of "C-" or higher

### **BIOL 3206 – Embryology (formerly ZOOL 3373)**

(3 credits – TG) 3 hours lecture, 3 hours lab

Modern embryology involves a rapprochement between classical morphology and molecular mechanisms; this course uses both types of information to describe the development of vertebrate and invertebrate organisms. Topics include: gametogenesis, fertilization, cleavage, gastrulation, organogenesis and growth. Laboratory exercises will emphasize vertebrate model systems.

*Prerequisite:* Biology 1202 with a grade of "C-" or higher.

### **BIOL 3216 – Human Adaptation to Environmental Stress**

(3 Credits) 3 hours lecture

This course will address human physiological adaptations in response to extreme and diverse environmental conditions. Specifically, the problems of high altitude (hypoxia), high pressure (diving and submarines), high gravitational forces (fighter pilots), zero gravity (space flight) as well as excessive heat, cold and humidity will be examined. Students will play an active role in their applied understanding of environmental physiology through an independent research project and presentation of a specific area of interest.

*Prerequisite:* Biology 1216, 1221 or 3205 with a minimum of C- or higher or with the consent of the instructor.

### **BIOL 3309 – Plants and People**

(3 credits – TG) 3 hours lecture

A review of the structure and function of plants. A survey of the nature of people's basic food plants and an overview of agricultural and forestry practices. Plant improvement by traditional and modern methods, and plant propagation.

*Prerequisite:* Biology 2205 or 1202 or consent of the department.

**Note:** Not open for credit to majors and minors in the Department of Biological Sciences at the University of Calgary.

### **BIOL 4206 – Viruses**

(2 credits) 2 hours lecture

This course provides an overview of the major categories of viruses, with emphasis on host-specificity and genetic mechanisms. It also deals with the use of viruses as vectors for genetic manipulations, and the effects of viral infections on our society.

*Prerequisite:* Biology 3101 or equivalent, with a grade of "C-" or higher.

### **BIOL 4215 – Parasitology (formerly BIOL 4102)**

(3 credits) 3 hours lecture, 1 hour tutorial

This course provides an introduction to the biology of human parasites including protozoa, helminthes, and arthropods. Emphasis is placed on the cell biology, morphology, life cycle, epidemiology, pathogenesis and clinical manifestations of parasites of medical importance. In addition, the fundamental mechanisms in the parasite-host relation and defense mechanisms are studied.

*Prerequisite:* Biology 2202 with a grade of "C-" or higher.

### **BIOL 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **BLACKFOOT (BKFT)**

### **BKFT 0130 – Introductory Blackfoot Language**

(0 credits)

This is a credit free upgrading course; special fees apply.

This is a basic introduction in both the written (using the Roman alphabet) and oral aspects of the Blackfoot language. The course will focus on grammar, vocabulary and oral skills.

## **CANADIAN STUDIES (CNST)**

### **CNST 1131 – Introduction to Canadian Studies (formerly CNST 2231)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course introduces students to the diversity and complexity of Canadian society. Popular culture, art, music, politics, the economy, regionalism, and ethnic relations are some of the topics that may be examined. This course also addresses issues such as identity, difference, nationhood and patriotism.

**Note:** Canadian Studies 1131 = Athabasca University HIST 326. Students who take both Canadian Studies 1131 and History 2232 can obtain credit for Athabasca University HIST 329. Students may not, however, count Canadian Studies 1131 more than once.

### **CNST 2233 – Canada in Comparative and International Perspective (formerly CNST 3333)**

(3 credits – TG) 3 hours lecture

Canada will be compared, from a variety of perspectives, to the United States, Japan, Switzerland and other countries. Canada's role in world affairs; its defence, trade and diplomatic policies will be examined.

### **CNST 2237 – Introduction to Folklore: The Canadian Context (formerly CNST 3337)**

(3 credits – TG) 3 hours lecture

Introduction to the academic study of folklore: basic terminology, folk groups, performance and applications with examples taken from the Canadian and Albertan context. Introduction to traditional genres of folkloristic expression and analysis of current folk groups and their folklore.

### **CNST 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **CHEMISTRY (CHEM)**

### **CHEM 0115 – Basic Chemistry I**

(0 credits)

This is a credit-free upgrading course; special fees apply.

This course is designed for students who have no previous course in Chemistry. It is the first course in the Chemistry 0115, 0130 sequence. Topics include: matter and energy, measurement in Chemistry, atomic structure, periodic table, chemical formulae and nomenclature, chemical reactions and chemical equations, mole concept and stoichiometric calculations, chemical bonding and states of matter.

*Prerequisite:* Pure Mathematics 10 or equivalent.



## **CHEM 0130 – Basic Chemistry II**

(0 credits)

This is a credit-free upgrading course; special fees apply.

Chemistry 0130 completes the Chemistry 0115, 0130 sequence and in doing so, adequately prepares students for first-year university requirements. It is not recommended for students with credit in Chemistry 30. Topics include: solutions; acids and bases; oxidation-reduction; energy changes; reaction rates; chemical equilibria and electrochemistry. Learning is assisted by means of lectures, tutorials and labs, with individual tutoring available.

*Prerequisite:* Chemistry 20 or 0115.

*Pre- or Corequisite:* Pure Mathematics 20 or equivalent.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed "mature" under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

## **CHEM 1201 – General Chemistry (formerly CHEM 2201)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course builds on basic concepts learned previously. Topics include: gas laws, basic quantum mechanics, the periodic table and the chemistry of selected elements, atomic and molecular structure, various theories of chemical bonding, the major classes of organic compounds, and the properties of solutions. Laboratory exercises will reinforce lecture topics and develop laboratory skills and other competencies.

*Prerequisite:* Chemistry 30 and Pure Mathematics 30.

*Recommended Preparation:* Mathematics 31 and Mathematics 1201.

## **CHEM 1202 – General Chemistry II (formerly CHEM 2203)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course builds on basic concepts learned previously. Topics include: the states of matter and phase changes, acid/base concepts, chemical kinetics, various equilibria including acid/base, ionic and solubility equilibria, elementary thermochemistry and thermodynamics, and electrochemistry. Laboratory exercises will reinforce lecture topics and develop laboratory skills and other competencies.

*Prerequisite:* Chemistry 1201 with a grade of "C-" or higher.

*Recommended Preparation:* Mathematics 1201 and Mathematics 1202.

## **CHEM 1203 – An Introduction to Organic Chemistry**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is designed for students with a general interest in organic chemistry or for students requiring a one semester course in the above. Topics include nomenclature, structures, properties, and reactions of the major classes of organic and biologically important compounds. The principles of stereochemistry, reaction mechanisms and synthesis are presented.

*Prerequisite:* Chemistry 30 or equivalent.

## **CHEM 2101 – Organic Chemistry I (formerly CHEM 3351)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This is a first course in a sequence of introductory organic chemistry. Topics to be covered include structure and its effects on reactivity, nomenclature, stereochemistry, spectroscopy, reaction types such as substitution, elimination and addition from a mechanistic perspective, and an introduction to synthesis. The laboratory component of the course is designed to reinforce lecture topics and to further develop skills and competencies necessary in modern chemistry laboratories.

*Prerequisite:* Chemistry 1202 with a grade of "C-" or higher.

## **CHEM 2102 – Organic Chemistry II (formerly CHEM 3353)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course continues the mechanistic exploration of organic chemistry introduced in the previous course. Lecture topics will include conjugated systems, carbonyl chemistry, aromaticity, substitution and addition reactions in aromatic, conjugated and carbonyl systems, radical reactions, enolate chemistry, pericyclic reactions and a more intensive look at synthesis of organic compounds. The laboratory component allows a more complete look the preparation of compounds and qualitative and quantitative organic analysis.

*Prerequisite:* Chemistry 2101 with a grade of "C-" or higher.

## **CHEM 2205 – Computers in Chemistry**

(3 credits) 1 hours lecture, 2 hours lab

This course will provide the student with a basic knowledge of a number of computer programs that can be used to communicate or visualize chemical concepts. Programs used may include Microsoft Excel, Maple, ChemSketch (or other chemical drawing program), and Virtual ChemLab. The laboratory component will support the lecture by allowing students to use the programs to develop projects of their choosing.

*Prerequisite:* Chemistry 1202 (or the previous 2203) and Mathematics 1200 (or the previous 2249/2251) with a grade of "C-" or higher.

## **CHEM 2209 – General Chemistry for Engineers**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3/2 hours lab

(3 hours lab every 2 weeks)

This course covers basic chemical concepts and introduces atomic and molecular structure with a view to problems encountered in engineering. Topics of discussion include oxidation-reduction reactions, chemical kinetics and equilibria, the chemistry of water, the chemistry of energy sources and quantum theory in chemistry.

*Prerequisite:* Chemistry 30 or equivalent.

Note: Credit for both Chemistry 1202 and 2209 will not be allowed.

## **CHEM 2210 – Behaviour of Liquids, Gases, Solids**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3/2 hours lab (3 hours of lab every 2 weeks)

Students will be introduced to the behaviour of fluids and solids; phase transformations, the phase rule and phase diagrams. Students will undertake an examination of ideal and real gases; equations of state and their applications to engineering; simple kinetic theory and the properties of fluids. In examining liquids emphasis will be placed on vapour pressure, shear behaviour, and fluid flow in pipelines. In addressing the behaviours of solids students will examine crystalline and non-crystalline structure, non-equilibrium solid phases, electrical and thermal conductivity, dislocations, stress and strain, creep and fracture in solids.

*Prerequisite:* Chemistry 30 or equivalent.

## **CHEM 2211 – The Chemistry Between Us**

(3 Credits) 3 hours lecture

Chemistry 2211 is a study of the Chemistry each of us experiences on a daily basis. Topics include: the nature of chemical species; food chemistry and metabolism; medications, cosmetics, and cleaning agents; explosives and propellants; energy and fuel sources; and environmental chemistry. Students will gain an understanding of chemical safety and the risks and benefits of living in a chemical world.

*Recommended Preparation:* Cluster 1 Foundation Level course.

## **CHEM 2301 – Analytical Chemistry I: Quantitative Analysis (formerly CHEM 3101)**

(3 credits – TG) 3 hours lecture, 4 hours lab

This course stresses the importance of precision measurement in the practice of chemistry; the analytical methods employed in data manipulation and complexometric analysis. The laboratory component will focus on the development of analytical laboratory skills in organic and inorganic analysis.

*Prerequisite:* Chemistry 1202 and Mathematics 1202 with a grade of "C-" or higher.

*Pre- or Corequisite:* Chemistry 2101 or 2202.





### **CHEM 0130 – Basic Chemistry II**

(0 credits)

This is a credit-free upgrading course; special fees apply. Chemistry 0130 completes the Chemistry 0115, 0130 sequence and in doing so, adequately prepares students for first-year university requirements. It is not recommended for students with credit in Chemistry 30. Topics include: solutions; acids and bases; oxidation-reduction; energy changes; reaction rates; chemical equilibria and electrochemistry. Learning is assisted by means of lectures, tutorials and labs, with individual tutoring available.

*Prerequisite:* Chemistry 20 or 0115.

*Pre- or Corequisite:* Pure Mathematics 20 or equivalent.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed "mature" under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

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This course builds on basic concepts learned previously. Topics include: gas laws, basic quantum mechanics, the periodic table and the chemistry of selected elements, atomic and molecular structure, various theories of chemical bonding, the major classes of organic compounds, and the properties of solutions. Laboratory exercises will reinforce lecture topics and develop laboratory skills and other competencies.

*Prerequisite:* Chemistry 30 and Pure Mathematics 30.

Recommended Preparation: Mathematics 31 and Mathematics 1201.

### **CHEM 1202 – General Chemistry II (formerly CHEM 2203)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course builds on basic concepts learned previously. Topics include: the states of matter and phase changes, acid/base concepts, chemical kinetics, various equilibria including acid/base, ionic and solubility equilibria, elementary thermochemistry and thermodynamics, and electrochemistry. Laboratory exercises will reinforce lecture topics and develop laboratory skills and other competencies.

*Prerequisite:* Chemistry 1201 with a grade of "C-" or higher.

Recommended Preparation: Mathematics 1201 and Mathematics 1202.

### **CHEM 1203 – An Introduction to Organic Chemistry**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is designed for students with a general interest in organic chemistry or for students requiring a one semester course in the above. Topics include nomenclature, structures, properties, and reactions of the major classes of organic and biologically important compounds. The principles of stereochemistry, reaction mechanisms and synthesis are presented.

*Prerequisite:* Chemistry 30 or equivalent.

### **CHEM 2101 – Organic Chemistry I (formerly CHEM 3351)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This is a first course in a sequence of introductory organic chemistry. Topics to be covered include structure and its effects on reactivity, nomenclature, stereochemistry, spectroscopy, reaction types such as substitution, elimination and addition from a mechanistic perspective, and an introduction to synthesis. The laboratory component of the course is designed to reinforce lecture topics and to further develop skills and competencies necessary in modern chemistry laboratories.

*Prerequisite:* Chemistry 1202 with a grade of "C-" or higher.

### **CHEM 2102 – Organic Chemistry II (formerly CHEM 3353)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course continues the mechanistic exploration of organic chemistry introduced in the previous course. Lecture topics will include conjugated systems, carbonyl chemistry, aromaticity, substitution and addition reactions in aromatic, conjugated and carbonyl systems, radical reactions, enolate chemistry, pericyclic reactions and a more intensive look at synthesis of organic compounds. The laboratory component allows a more complete look the preparation of compounds and qualitative and quantitative organic analysis.

*Prerequisite:* Chemistry 2101 with a grade of "C-" or higher.

### **CHEM 2205 – Computers in Chemistry**

(3 credits) 1 hours lecture, 2 hours lab

This course will provide the student with a basic knowledge of a number of computer programs that can be used to communicate or visualize chemical concepts. Programs used may include Microsoft Excel, Maple, ChemSketch (or other chemical drawing program), and Virtual ChemLab. The laboratory component will support the lecture by allowing students to use the programs to develop projects of their choosing.

*Prerequisite:* Chemistry 1202 (or the previous 2203) and Mathematics 1200 (or the previous 2249/2251) with a grade of "C-" or higher.

### **CHEM 2209 – General Chemistry for Engineers**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3/2 hours lab (3 hours lab every 2 weeks)

This course covers basic chemical concepts and introduces atomic and molecular structure with a view to problems encountered in engineering. Topics of discussion include oxidation-reduction reactions, chemical kinetics and equilibria, the chemistry of water, the chemistry of energy sources and quantum theory in chemistry.

*Prerequisite:* Chemistry 30 or equivalent.

Note: Credit for both Chemistry 1202 and 2209 will not be allowed.

### **CHEM 2210 – Behaviour of Liquids, Gases, Solids**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3/2 hours lab (3 hours of lab every 2 weeks)

Students will be introduced to the behaviour of fluids and solids; phase transformations, the phase rule and phase diagrams. Students will undertake an examination of ideal and real gases; equations of state and their applications to engineering; simple kinetic theory and the properties of fluids. In examining liquids emphasis will be placed on vapour pressure, shear behaviour, and fluid flow in pipelines. In addressing the behaviours of solids students will examine crystalline and non-crystalline structure, non-equilibrium solid phases, electrical and thermal conductivity, dislocations, stress and strain, creep and fracture in solids.

*Prerequisite:* Chemistry 30 or equivalent.

### **CHEM 2211 – The Chemistry Between Us**

(3 Credits) 3 hours lecture

Chemistry 2211 is a study of the Chemistry each of us experiences on a daily basis. Topics include: the nature of chemical species; food chemistry and metabolism; medications, cosmetics, and cleaning agents; explosives and propellants; energy and fuel sources; and environmental chemistry. Students will gain an understanding of chemical safety and the risks and benefits of living in a chemical world.

Recommended Preparation: Cluster 1 Foundation Level course.

### **CHEM 2301 – Analytical Chemistry I: Quantitative Analysis (formerly CHEM 3101)**

(3 credits – TG) 3 hours lecture, 4 hours lab

This course stresses the importance of precision measurement in the practice of chemistry; the analytical methods employed in data manipulation and complexometric analysis. The laboratory component will focus on the development of analytical laboratory skills in organic and inorganic analysis.

*Prerequisite:* Chemistry 1202 and Mathematics 1202 with a grade of "C-" or higher.

*Pre- or Corequisite:* Chemistry 2101 or 2202.





### **COMM 2500 – Introduction to Communication Studies (formerly ACOM 2500)**

(3 Credits – TG) 3 hours lecture and tutorial combined

When we consume information or communicate with others we are sharing and assessing facts, ideas, opinions, and biases. In doing so we are developing a sense of who we are as individuals, and we're also making decisions about how our world functions. This course will introduce students to the discipline of Communication Studies, and permit examination of a range of communication theories, which describe these dynamic social and personal processes.



### **COMM 2501 – Media History and Contemporary Issues**

(3 credits) 3 hours lecture and tutorial combined

From the printing press to the Internet, this course examines the development of the communications media, including the 19th-century beginnings of modern journalism, the development of public relations, and the evolution of corporate media and specialized document design and production. Media issues of importance when the course is presented will be considered and addressed by student teams.



### **COMM 2663 – Rhetoric**

(3 credits) 3 hours lecture

This course gives students the opportunity to refine their writing skills by applying the principles of rhetoric and stylistics. To this end, analysis of such realms of discourse as advertising, magazine articles, fiction, political speech and debate will be emphasized to understand how these forms of communication achieve their effects. The rhetorical analysis of texts will, moreover, apply to students' own writing. Rhetorical theory and application will, in other words, be closely linked to ensure that students understand, through practice, the stylistics resources available in language that make ideas clear, cogent and compelling.

*Prerequisite: Communications 1661*

### **COMM 2666 – Typography**

(3 credits) 2 hours lecture, 2 hours lab

Introduction to the topic of typography and examination of the role of type in visual communication and information design through normative and conceptual relationships. Topics will include principles of typography and layout, concept development, and the historical foundations of typography. Students will use typographical principles and methods of visual organization to solve assigned communication problems.

*Prerequisite: Communications 1600, 1610 and 1620*

### **COMM 2667 – Information Architecture**

(3 credits) 3 hours lecture

Introduction to the principles and best practices of effective information design for both print and electronic media. The course includes such topics as information types, information categorization and hierarchies, types of organizational patterns, message and document genres, structural markup languages, structured information design and technologies, content management, and single sourcing.

*Prerequisite: Communications 1661 and 1600*

### **COMM 2670 – Programming for Information Designers**

(3 credits) 2 hours lecture, 1 hour tutorial

Discussion of, and practice with, programming techniques with emphasis on web-based applications. Elements of good style and usability are introduced.

*Prerequisite: Communications 1610*

### **COMM 2673 – Introduction to Digital Layout**

(3 credits) 2 hours lecture, 2 hours lab

An introduction to digital layout and presentation graphics. Students will learn how to develop and organize information to be used for a variety of print media. A series of problems based on the relationship between typography and imagery will be assigned.

*Prerequisite: Communications 1620, 1610 and 2666*

### **COMM 2680 – Intercultural Communication in Information Design**

(3 credits)

This course serves as an introduction to the field of intercultural communication and the cultural aspects and effects of information design. This course considers the field of social semiotics and the theoretical and practical study of these cultural aspects in areas including, but not limited to, discourse in place, social semiotics and the grammar of visual design.

*Prerequisite: Communications 2666 and 2667*

### **COMM 2881 – Event Management**

(3 credits) 2 hours lecture, 1 hour tutorial

This course builds on students' basic understanding of special events to develop a deeper understanding of the role events play in strategic communication. From brainstorming ideas and concepts to project management, budgeting, targeting audiences, volunteer management, and proposal writing, the students are prepared to participate fully in the planning and implementation of successful events for a variety of purposes. As well, students are assigned to work on an event as part of their course experience.

*Prerequisite: Communications 1841*

### **COMM 3500 – Media, Culture and Communication Theory**

(3 credits) 3 hours lecture and tutorial combined

This senior level course examines the role of communications in creating and explaining everyday cultural practices, and the larger systems that structure them. Students will consider multiple theories of communication, derived from various perspectives, to address the concept of subjectivity, and how the communication of information and ideas shapes our understanding of, and response to, our social and personal environments. Students will apply theories to specific artifacts and/or issues that they have defined and researched.

*Prerequisite: Communications 2500*

### **COMM 3501 – Intercultural Communication**

(3 credits) 3 hours lecture and tutorial combined

Intercultural Communication examines communication among individuals of different cultural backgrounds, including the study of similarities and differences across cultures. The course will introduce students to key intercultural communication topics: communication and culture, linguistic differences, ecological influences on culture, the dimensions of cultural difference, stereotyping, and intercultural encounters, culture shock and adaptation.

*Prerequisite: Communications 2500*

### **COMM 3503 – Communication in Organizations**

(3 credits) 3 hours lecture

This course is designed to help students think critically about communication in the context of organizations and the cultural components that affect communication effectiveness. Through theory-based lectures and experiential exercises, students will better understand the nature, goals, strengths and limits of organizational design.

*Prerequisite: Communications 2500*

### **COMM 3600 – Usability**

(3 credits) 2 hours lecture, 2 hours lab

Study of the relevant research and practical application of usability testing as part of product development. Students will address complex information design issues and problems including legal documents, business forms, diagrams, transportation maps, statistical information, charts, graphs and tables, instructional materials, way finding systems, and computerized information systems. The course includes strategies for planning, conducting, and analyzing a test. Teams will conduct an expert (heuristic) evaluation and report results from an actual test in a usability lab using industry standard format.

*Prerequisite: Communications 1661 and 1610*



**COMM 3605 – Research in Information Design**

(3 credits) 3 hours lecture

Introduction to research methods used by practitioners and scholars in information design. Students explore the relationship between theory and research and learn how to design and carry out empirical studies using both quantitative and qualitative methods. Emphasis is placed on the research methods used in workplace settings to design user-centered information products and to test their usefulness and usability.

*Prerequisite:* Communications 1600

**COMM 3610 – Visual Communication for Information Designers I**

(3 credits) 3 hours lecture

Introduction to the principles of visual communication in the context of information design. The theoretical and historical issues of organizing and visualizing statistics, number, and/or complex relationships will be explored. Emphasis on conceptualization, visual diagramming, and analysis of subtle visual relationships including design and use of photographs and other pictorial materials will be developed, and current approaches to typography are examined.

*Prerequisite:* Communications 1620, 1610 and 2666

**COMM 3611 – Visual Communication for Information Designers II**

(3 credits) 3 hours lecture

This course builds upon the foundation established in Visual Communications I. Students explore advanced topics in effective graphic design in the context of information design.

*Prerequisite:* Communications 3610

**COMM 3620 – Document Production I**

(3 credits) 2 hours lecture, 2 hours lab

This course focuses on the basic principles of document production relating to the principles of publishing. Publishing principles and practices, marketing problems, distribution methods and informational systems and techniques are examined. Students will be expected to produce a variety of documents and publications.

*Prerequisite:* Communications 3600 and 3670

*Co requisite:* Communications 3611

**COMM 3670 – Project and Content Management**

(3 credits) 3 hours lecture

Introduction to project and content management. Content includes concepts, principles, and the inputs, outputs, tools and techniques necessary to take a project from inception to completion. Projects will be developed that are specific to the communication professions.

*Prerequisite:* Communications 1600, 1841 or 1707

**COMM 3707 – News Reporting**

(3 credits) 3 hours tutorial

In their role as staff reporters for the journalism program community newspaper, students will practice reporting and writing news stories for print publication, and writing about the community, arts, business, and sports among a range of other news beats. CP Style, pitching stories, updating stories, and editorial responsibility will also be discussed and practiced.

*Prerequisite:* Communications 1709

**COMM 3709 – News Editing and Reporting**

(3 credits) 3 hours tutorial

Student journalists in this course, in context of their work with the journalism program community newspaper, will consider more formally the role of editors, while continuing to develop their own reporting skills. Copyediting, section editing, and content planning will be discussed and practiced.

*Prerequisite:* Communications 3707

**COMM 3717 – Specialized Writing**

(3 credits) 3 hours tutorial

Journalists need to present information to a variety of audiences and in a variety of ways. Students in this course will consider and practice such forms as long-form writing, in-depth profiles, editorial writing, and personal column writing.

*Prerequisite:* Communications 3707

**COMM 3720 – Newspaper Production and Design**

(3 credits) 3 hours production lab

Working with appropriate production software student journalists will consider design principles and production management of a newspaper, while practicing technical and content-based production processes, page design and layout as members of the journalism program newspaper production team.

*Prerequisite:* Communications 1709 and 1720

**COMM 3727 – Visual Journalism**

(3 credits) 3 hours tutorial

Photography and graphics are essential elements of successful publications. In this course students will build on their understanding of the use of photo tools, software and graphics, through the production of news photography, news graphics, multimedia and journalism focused special photo projects; all in context of their work on the journalism program newspaper.

*Prerequisite:* Communications 1709

**COMM 3729 – Online Writing, Editing and Production**

(3 credits) 3 hours tutorial and production lab combined

Building on work completed in as a member of the journalism program newspaper's editorial team, student journalists in this course will plan, produce and edit a range of original online journalism for presentation on an online news site, while also considering such issues as the design, nature and goals of online journalism.

*Prerequisite:* Communications 3709, 3720 and 3727

**COMM 3735 – Ethics, Law and Media**

(3 credits) 3 hours lecture and tutorial combined

The course considers ethics and law in relation to the media, and their link to democracy and our political institutions, through consideration of how the justice system functions, and of ethical and legal issues that routinely confront journalists and media organizations.

*Prerequisite:* Communications 2501

**COMM 3737 – Research Design and Methodology**

(3 credits) 3 hours lecture and tutorial combined

Journalists are presented daily with the results of polls, surveys, clinical trials and other research projects by individuals and organizations seeking to have this information published or broadcast. Students in this course will consider structural and ethical aspects of how such projects are organized, including issues of reliability and generalization, and an array of theoretical and epistemological approaches used to conduct research in the social sciences.

*Prerequisite:* Communications 2500

**COMM 3740 – Broadcast Reporting**

(3 credits) 3 hours tutorial

Student journalists in this course will undertake the production of high-quality broadcast news stories, including practice in shooting and editing video in a digital context. Discussion of the goals of broadcast news reporting in contemporary practice, and detailed analysis of the process of producing television news stories, provide the basis for work done in tutorials.

*Prerequisite:* Communications 1709 and 1720

**COMM 3747 – Broadcast News Production**

(3 credits) 3 hours tutorial and studio lab combined

Student journalists in this course will prepare broadcast news reports, features and other elements of a news program. The course will feature the production of an online broadcast news magazine for which students will fill all editorial roles including work on air as presenters, and behind the scenes as members of a production team.

*Prerequisite:* Communications 3740

**COMM 3797 – Special Topics in Journalism**

(3 credits) 3 hours lecture and tutorial combined

The content of this course will vary according to the needs and goals of the specific student group involved, but will offer material appropriate to the consideration of new forms of media and their impacts.

*Prerequisite:* Consent of the program.

### **COMM 3799 – International Journalism Projects**

(3 credits) 3 hours tutorial and production lab

The content of this course will be based on journalism project work completed in an international context, and result in the production of journalism products appropriate to the needs and goals of the specific student group involved.

*Prerequisite: Consent of the program.*

### **COMM 3841 – Media Relations**

(3 credits) 1 hour lecture, 2 hours tutorial

This course examines the relationship between public relations and the media. Through work on a client project, students learn about the importance of strategic media planning and practice writing public service announcements (PSAs), news releases, feature articles and creating media kits. Students participate in a mock news conference and receive media training.

*Prerequisite: Communications 1841, 1849 and 3849.*

### **COMM 3843 – Communication and Organizational Culture**

(3 credits) 3 hours lecture

This course is designed to help students think critically about communication in the organizational context. Through theory-based lectures and experiential exercises, students will better understand the nature, strengths and limits of organizational design, the nature of metaphor and its usefulness in describing organizational management, and how to apply theory learned in the classroom in the practice of public relations.

*Prerequisite: Communications 1841 or consent of the department*

### **COMM 3847 – Public Relations Management**

(3 credits) 2 hours lecture, 1 hour tutorial

Building on the introduction to public relations course, students learn the fundamentals of public relations program planning. The course begins with theory and case study analysis and discussion, and ends with teams formulating plans for communications activities. They research a problem or opportunity for a client, analyse target audiences and messages to be delivered, undertake budgeting and scheduling activities, and evaluate the results.

*Prerequisite: Communications 1841*

### **COMM 3849 – Applied Writing II for Public Relations**

(3 credits) 2 hour lecture, 2 hours tutorial

In this course, students move beyond the basics in public relations writing to focusing on specific genres including employee communication, briefs, advertising copy, speeches and corporate profiles. As well students will learn to write/deliver persuasive speeches, develop usable web content, and will hone their newswriting and interviewing skills. Students also learn the basics of writing for publication.

*Prerequisite: Communications 1849*

### **COMM 3851 – Computer Mediated Communication**

(3 credits) 1 hour lecture, 2 hours tutorial

This course introduces public relations students to on-line/digital communication in both the classroom and the computer lab. Participants learn to use the technologies and understand them sufficiently to advise others on their applications, strengths and weaknesses. Students become familiar with multimedia/CD-ROM, and the public relations uses for Internet and Intranet applications.

*Prerequisite: Computer Science 1205 and Communications 2203 or consent of the department.*

### **COMM 3855 – Research Methods for Public Relations**

(3 credits) 3 hours lecture

This course develops competence in major forms of research including the use of surveys, focus groups, content analysis, and the use of existing information accessed through libraries, online databases, and other computer-based search tools. Elements of descriptive statistics as they apply to the analysis of survey design are reviewed. The course provides instruction and hands-on practice in conducting communications research and communicating the findings as a fundamental part of the public relations profession.

*Prerequisite: Communications 1841 and 3849*

### **COMM 4501 – Roles and Practices in Contemporary Communications**

(3 credits) 3 hours lecture and tutorial combined

Contemporary work environments in communication are evolving. Changes in technologies, workforce demographics, business models, audience relationships, regulatory regimes, social norms and other factors affect how communicators work, and precisely the work they do. This senior course focuses on problem-based learning. Working together, students from all Bachelor of Communication degree streams will examine and reflect on the origins, character and implications of changes in the contemporary communicator's work. Students' investigations will result in major, team-based, public presentations.

*Prerequisite: Communications 2501*

### **COMM 4620 – Document Production II**

(3 credits) 2 hours lecture, 2 hours lab

This course covers the production function, the purchasing of paper, printing and distribution—typically half the total costs of operating a magazine. Topics include minimizing paper waste, the advantages of offset and rotogravure printing, the effect of makeup on readership and costs, and setting distribution strategies. Students will be expected to produce a magazine in print and e-zine formats.

*Prerequisite: Communications 3620*

### **COMM 4665 – Instructional Design**

(3 credits) 3 hours lecture

Course introduces and applies systematic instructional design and instructor-led training. Students will study a major model of instructional design and apply it to develop and refine a unit of instruction. Students will prepare and deliver a training lesson, participate in team instructional design activities, and evaluate the training developed and presented by other students.

*Prerequisite: Communications 3600*

### **COMM 4679 – Issues in Communications: Ethics and Law**

(3 credits – TG) 3 hours lecture

Building on work done in previous courses, and students' work experience, this course focuses on key ethical issues and the law facing information designers. The course examines the historical foundation of ethics and explores different models for defining issues, interests and values relating to the ethical issues confronting information designers.

*Prerequisite: Communications 4501 and satisfactory completion of Work Term I*

### **COMM 4680 – Portfolio**

(3 credits) 2 hours lecture, 2 hours lab

The portfolio as a professional tool for information designers. The course includes portfolio and writing theory along with a collaborative workshop environment. Students develop a professional portfolio based on course project, internship experiences, and/or work history. In addition, students write a reflective paper examining their growth and maturity as information designers. Interviewing techniques, resume writing, and the job search process are included in the course. The student portfolio demonstrates the ways in which students have acquired and achieved the learning outcomes of the Bachelor of Communication degree program. Portfolio items are products created in all core courses in the program. In this course, students analyze and consolidate their collection, and organize a public presentation of their work.

*Prerequisite: Senior Standing and Approval of the Department*

### **COMM 4691 – BCMM Information Design Internship I**

To expand both their skills and understanding of the communication industry, Information Design students are encouraged to complete two non-credit semester-long internships (with a 12 fulltime work week minimum) in the communications field during their program, but are required for graduation purposes to complete one such internship. The student must receive a grade of Satisfactory. Internships in print, photo, online and communications may be taken at any point following semester four. Note: Students may complete this non-credit internship up to three times. Formal assignments will include a detailed report and analysis of the internship. Internships fulfill degree requirements and are assigned "pass/fail" grades. Internship terms integrate academic studies and work experience with participating employers.

*Prerequisite: Successful completion of all core courses in years one and two of the degree. and 30 Credits*

**COMM 4692 – Information Design Internship II (optional)**

To expand both their skills and understanding of the communication industry, Information Design students are encouraged to complete a second non-credit semester-long internships (with a 12 fulltime work week minimum) in the communications field during their program. The student must receive a grade of Pass.

*Prerequisite: Communications 4691 and departmental approval*

**COMM 4707 – Editorial Board**

(3 credits) 3 hours lecture and tutorial combined

Senior student journalists will serve on the editorial board of the journalism program's community newspaper, and play a central role in its ongoing development by participating in the editorial design of the publication, while also considering and practicing leadership and team-building skills required in professional journalism environments.

**Note:** While offered in more than one semester this course may be taken only once for credit.

*Prerequisites: Communications 3709, 3720 and 3729.*

**COMM 4709 – Public Affairs Reporting**

(3 credits) 3 hours lecture and tutorial combined

Student journalists will investigate and report on public policy issues or contemporary social concerns, using advanced research techniques, and with an eye toward completing a comprehensive journalism project on a topic to be determined.

**Note:** Enrolment is limited to up to ten students per semester who submit to the program chair a detailed proposal at least one semester in advance.

*Prerequisites: Communications 3709, 3717 and 3737.*

**COMM 4711 – Public Affairs Reporting II**

(3 credits) 3 hours lecture and tutorial combined

Student journalists will investigate and report on public policy issues or contemporary social concerns, using advanced research techniques, and with an eye toward completing a comprehensive journalism project on a topic to be determined.

**Note:** Enrolment is limited to up to ten students per semester who submit to the program chair a detailed proposal at least one semester in advance. With chair permission, a student may take both ACOM 4709 and 4411 to accommodate a preplanned yearlong project.

*Prerequisites: Communications 3709, 3717 and 3737*

**COMM 4717 - Magazine Writing, Editing and Production**

(3 credits) 3 hours lecture and tutorial combined

Student journalists will consider the goals and requirements of designing, writing and editing mainstream and trade publications, with consideration of issues in feature writing, researching and fact-checking. Students will also produce a print magazine as a focus of their coursework.

*Prerequisites: Communications 3709, 3720 and 3717*

**COMM 4727 – Photojournalism Projects**

(3 credits) 3 hours lecture and tutorial combined

Senior student journalists, with specific and previously demonstrated interests in photojournalism, will discuss the processes and requirements of producing a major photojournalism effort. Each will then design and complete a major project to advance their skills and portfolios.

*Prerequisites: Communications 3727 and 3729*

**COMM 4729 – Multimedia Projects**

(3 credits) 3 hours lecture and tutorial combined

Multimedia implies the use of more than one type or form of media in the design of a journalistic, corporate or educational project. Students in this course will consider the appropriate use of multimedia, beginning with audience needs, by undertaking a project of their own design from conception to completion.

*Prerequisites: Communications 3727, 3729 and 3747*

**COMM 4737 – Research Projects**

(3 credits) 3 hours lecture and tutorial combined

Working in teams, students will design and complete significant research projects that focus on media issues, using a range of research methodologies appropriate to their goals, such as content analysis, surveys and focus groups. These projects will be published through an online journal established by the journalism program.

*Prerequisite: Communications 3737*

**COMM 4747 – Broadcast Projects**

(3 credits) 3 hours lecture and tutorial combined

Senior student journalists with a specific and previously demonstrated interest in broadcast journalism will develop, produce and present a number of programs for broadcast on significant and timely community issues through online programming. Treatment possibilities include feature reports, documentaries, talk shows and public forums.

*Prerequisite: Communications 3747*

**COMM 4757 – Corporate Communications**

(3 credits) 3 hours lecture and tutorial combined

Major companies invest substantial resources in communicating internally and externally to ensure employees/clients/customers receive timely information. Students will examine the structure and context of corporate communications, **while also practicing the use of some specific corporate communication tools.**

**COMM 4759 – The Business of Media**

(3 credits) 3 hours lecture and tutorial combined

Revenue generation is essential to financial health of media organizations. Student journalists in this course will consider the goals and structure of advertising sales departments, issues in budgeting, and the value and design of promotional and audience development campaigns.

*Prerequisites: Communications 3720 and 3747*

**COMM 4767 – Media and Technology**

(3 credits) 3 hours lecture and tutorial combined

Technological change routinely alters the way we understand and use communication tools. Students in this course will consider the history, general nature and impact of technological change on information and the media, with consideration of the issues, trends and communication devices current during the semester in which the course is offered. Participants will also write for the program's online magazine on the development and use of technology.

*Prerequisites: Communications 3729 and 3500*

**COMM 4790 – Workplace Issues and Internship Preparation Seminar**

This mandatory non-credit preparation seminar for the student's internship will examine conditions and issues, which may arise in the workplace, and the responsibilities and rights of employers and employees. Potential employers and working journalists will be invited to present their perspectives and expectations as students develop resumes, portfolios and prepare to apply for work opportunities in a subsequent semester. The student must receive a grade of Pass.

*Must be completed as preparation for and in advance of required internship.*

**COMM 4791 – Journalism Internship I**

To expand both their skills and understanding of the communication industry, journalism students are encouraged to complete two non-credit semester-long internships (with a 12 fulltime work week minimum) in the communications field during their program, but are required for graduation purposes to complete one such internship. The student must receive a grade of Pass. Internships in print, photo, online and communications may be taken at any point following semester four. Broadcast and Internet-based internships may be taken at any point following semester six.

*Prerequisite: Successful completion of all core courses in years one and two of the degree. Students considering a broadcast internship need first complete Applied Communications 3740, 3747 and departmental approval*



### **COMM 4792 – Journalism Internship II (optional)**

To expand both their skills and understanding of the communication industry, journalism students are encouraged to complete a second non-credit semester-long internship (with a 12 fulltime work week minimum) in the communications field during their program. The student must receive a grade of Pass. Internships in print, photo, online and communications may be taken at any point following semester four. Broadcast internships may be taken at any point following semester six.

*Prerequisite: Communications 4791 and departmental approval*

### **COMM 4891 – Public Relations Internship I**

The internship experiences required for the public relations major in communication studies offers students the opportunity to integrate the theory and practice of public relations learned in the classroom to supervised work experience in a public relations/communications management setting. Students need complete two such internships for graduation purposes, and must receive a grade of Pass.

*Prerequisite: Successful completion of the following courses or their equivalents: Computer Science 1205; Communications 2241, 2203, 1849, 3849, 2881, 3841, 3855, 3851, 2847; Management 2131; 150 hours of paid or volunteer public relations experience; departmental approval.*

### **COMM 4892 – Public Relations Internship II**

The internship experiences required for the public relations major in communication studies offers students the opportunity to integrate the theory and practice of public relations learned in the classroom to supervised work experience in a public relations/communications management setting. Students need complete two such internships for graduation purposes. The student must receive a grade of Pass.

*Prerequisite: Communications 4891 and departmental approval.*

### **COMM 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **COMPUTER SCIENCE (COMP)**

### **COMP 0110 – Computer Information Processing**

(0 credits)

This is a credit free upgrading course; special fees apply.

This is an introductory computer course directed at novice students. It introduces the basic computer terminology and concepts to students while at the same time giving students a very clear and conceptual understanding of how the computer functions. Students will learn how to work in the Window 95 environment, concepts of Windows, Word Processing using Microsoft Word, Electronic Spreadsheet applications using Microsoft Excel. Some of the basic functions of the Internet in relation to sending and receiving e-mail, as well as some basic information searches.

**Note:** Students with credit in high school computer 10, 20, or 30 courses should not register in this course.

### **COMP 1001 – Introduction to Computer-Based Problem Solving for the Sciences**

(3 credits) 3 hours lecture, 2 hours tutorial

Computers are an essential tool in contemporary scientific practice. This course provides the students with a foundation in algorithmic thinking as well as exposure to a graphical programming environment. Students also receive significant practice in scientific problem-solving and modeling using common desktop productivity tools.

### **COMP 1171 – Introduction to Computer Systems and Applications**

(3 credits) 3 hours lecture, 2 hours lab

This course is intended for Computer Information Systems students, and covers introductory concepts in more depth than a course for non-majors. It introduces how Information Technology is typically used in organizations and how this technology can be applied to solve business problems. Students create non-trivial spreadsheet applications and design and develop a realistic business database application. They develop practical and conceptual skills in this software and gain an understanding of how it is used in a business environment.

### **COMP 1202 – Database Design and Development**

(3 credits) 2 hours lecture, 2 hours lab

This course is an introduction to data management for non-major students. It covers database design and development techniques for building reliable, effective and maintainable data management applications with microcomputer spreadsheet and database packages.

*Prerequisite: Computer Science 2203 or pre- or corequisite Computer Science 1205 or consent of the department.*

### **COMP 1205 – Introduction to Computing for Public Relations**

(3 credits) 2 hours lecture, 1 hour tutorial, 1 hour lab

This course is designed to develop the knowledge and skills required to be a proficient user of applications relevant to the communications field. It focuses on configuring a windows desktop environment, file management, effective use of the Internet and the word processing skills required by professional writers. Spreadsheets and presentation software are also introduced.

**Note:** Credit will be allowed for only one of Computer Science 1205, 1207, 1209, 1213 and 2203.

### **COMP 1207 – Introduction to Computing for Small Business and Entrepreneurship**

(3 credits – TG) 2 hours lecture, 2 hours lab

This course is an introduction to computers and to the use of presentation software, word processors and spreadsheets in small business applications. Students will be introduced to social and organizational issues arising from the use of information technology and to the use of the Internet and public databases for marketing research.

**Note:** Credit will be allowed for only one of Computer Science 1205, 1207, 1209, 1213 and 2203.

### **COMP 1209 – Introduction to Computing for Applied Degrees**

(3 credits – TG) 2 hours lecture, 2 hours lab

This course develops the knowledge and skills required to be a proficient user of fundamental computer applications. Students will learn how to effectively use some of the following computer applications: word processors, spreadsheets, databases, presentation programs and the Internet.

**Note:** Credit will be allowed for only one of Computer Science 1205, 1207, 1209, 1213 and 2203.

### **COMP 1213 – Computer Applications and Issues for Journalists I**

(3 credits) 2 hours lecture, 2 hours lab

This course will enable students to achieve the computer competency and literacy needed in the ever changing world of information technology and electronic media. The impacts of computer technology will be examined, from historical, technical and social perspectives. Students will have the opportunity to become effective users of computer applications important in the production of journalism: word processors, document manipulation software and digital imaging software.

**Note:** Credit will be allowed for only one of Computer Science 1205, 1207, 1209, 1213 and 2203

### **COMP 1215 – Computer Applications and Issues for Journalists II**

(3 credits) 2 hours lecture, 3 hours lab

Building on competencies and knowledge attained in prior courses, this course will provide the opportunity to study advanced concepts and issues relevant for journalists. The course will cover design principles and techniques for web publishing. The implications of technology on society will be examined, including issues such as privacy and ethics. Students will advance their skills in using desktop publishing software and applications for web site development, culminating in the production of the student's initial e-resume/portfolio with work samples produced in journalism courses.

*Prerequisite: Computer Science 1213 or consent of the Department.*

### **COMP 2541 – Systems Analysis**

(3 credits) 3 hours lecture, 1 hour tutorial

This course provides an introduction to systems analysis in the development of computer-based information systems. The theory and models of software evolution are studied. The course covers system development methodologies and key systems analysis tools and techniques, with a focus on object-oriented strategies.

*Prerequisite: Management 3210 and either Computer Science 1502 or 1511 with a minimum grade of C-*

### **COMP 3011 – Directed Field Studies II for Computer Information Systems (formerly ENTR 3011)**

(15 credits)

The Directed Field Studies provides Computer Information Systems students with an opportunity to extend what they have learned in the classroom into a relevant work environment. It is also an opportunity to acquire new knowledge (both technical and business) through observation, practice and self-assessment. Students will be expected to achieve higher levels of competencies than they did in the first Directed Field Studies course. They must demonstrate their entrepreneurial abilities by generating a suitable work experience, which must be approved prior to the start of the course. It must allow an appropriate and effective learning opportunity. A significant amount of time is required from the student during the semester(s) prior to the Directed Field Studies (e.g. attending work shops, self marketing, developing suitable learning objectives).

*Prerequisite: Computer Science 2011 plus 22 courses of the Computer Information Systems and Business program, including 11 Computer Science courses and 6 Business courses.*

### **COMP 3307 – Computing Applications in Small Business and Entrepreneurship**

(3 credits) 2 hours lecture, 2 hours tutorial

This course covers the design and implementation of databases to manage distribution and inventory for a business. It also includes the design and development of print and electronic promotional pieces using desktop publishing and web authoring software, and the exchange of data between applications. The goal of the course is to enable students to use computing resources to gain a competitive edge.

### **COMP 3309 – Information Technology and Society**

(3 credits – TG) 3 hours lecture

A study of the implications of information technology for society. Historical perspectives, social context of computing, legal and ethical problems, economic issues, and philosophical frameworks for analysis will be covered.



### **COMP 3313 – Introduction to Computability**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

This course provides students with an opportunity to gain insight into the theoretical foundations of computing science. Topics include abstract machines (finite automata; push down automata and Turing machines), the hierarchy of formal languages (regular, context-free, and recursive) recognized by these machines, and applications of these languages.

*Prerequisite: Mathematics 1271 and Computer Science 2233 or 2005 with minimum grades of "C-" or higher.*

### **COMP 3321 – Introduction to Logic Circuit Design**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 1 hour lab

Boolean Algebra. Design of combinational circuits and their implementation using primitive logic gates. Design and implementation of synchronous and asynchronous sequential circuits.

*Prerequisite: Computer Science 2233 and Mathematics 1271 with minimum grades of "C-". or higher*

### **COMP 3325 – The Hardware/Software Interface**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 1 hour lab

This course will cover hardware and system software topics, including Boolean algebra, combinational circuits, sequential logic, computer organization, data exchange, interrupts and asynchronous programming, real time programming, DMA, I/O ports, and software implementation of protocols.

*Prerequisite: Philosophy 1179 and Computer Science 2265 or 3355 with minimum grades of "C-" or higher.*

### **COMP 3331 – Information Structures I**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

Data structures important to computer science will be studied, including trees, graphs and hash tables. Searching and sorting techniques will be emphasized. Associated algorithms and their time and space efficiency will also be studied.

*Prerequisite: Computer Science 2233 with a minimum grade of "C-" or higher.*

*Pre- or Corequisite: Mathematics 1271 with a minimum grade of "C-" or higher.*

### **COMP 3333 – Foundations of Software Engineering**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

Introduction to software development problems and to the processes and methods used to address them. Software life cycles models. Software process improvement. 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 wide spread use.

*Prerequisite: Computer Science 3331 with a minimum grade of "C-" or higher.*

### **COMP 3335 – Information Structures II**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

This course is a continuation of Computer Science 3331. Advanced data structure topics, including collision resolution in hash tables, search algorithms, tree structures, and strings will be covered. Advanced algorithmic tools for storing and manipulating information will be studied.

*Prerequisite: Computer Science 3331 with a minimum grade of "C-" or higher.*

### **COMP 3349 – Programming Paradigms**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

This course will examine the basic principles of several major programming paradigms, with emphasis on declarative paradigms such as functional and logic programming. Data types, control expressions, loops, types of references, lazy evaluation, different interpretation principles and information hiding will be studied.

*Prerequisite: Computer Science 3331 and Philosophy 1179 with minimum grades of "C-" or higher.*

### **COMP 3355 – Computer Architecture and Low Level Programming**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

The organization and operation of the functional units of a stored program computer, internal data representation, programming at the architectural level, and the relationship between high-level languages and machine operation.

*Prerequisite: Computer Science 2233 with a minimum grade of "C-" or higher.*

*Pre- or Corequisite: Mathematics 1271 with a minimum grade of "C-" or higher.*

### **COMP 3357 – The Software/Hardware Interface**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 1 hour lab

Low and intermediate level support software necessary to access I/O devices and interfaces, to manage information and to provide a software interface between a single-user microcomputer environment and its hardware will be studied. Emphasis will be placed on I/O, interrupt handling, file systems and systems programming concepts. Process interaction will be introduced.

*Prerequisite: Computer Science 3331 and 3355 with minimum grades of "C-" or higher.*

### **CRJS 5025 – Criminal Justice Capstone Practicum (formerly AJUS 3325, AJUS 4425 or AJUS 4427)**

(6 credits) 2.5 days per week placement + 3 hours tutorial biweekly

This course involves supervised study and practice. Students spend three and one half days a week in a justice-related agency. After an initial orientation period, students are expected to assume responsibility for assigned agency duties in order to enhance their knowledge and skill in social work methods. During agency work, attention is given to developing students' specific skills and competencies in relation to the Department's experiential learning outcomes. Seminars will focus on integrating relevant Justice Studies' program outcomes with students' work in the field.

*Prerequisite: Criminal Justice 2013, 3007 and 3009, or permission of department.*

### **CRJS 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar

## **DIRECTED READINGS**

(1 to 4 credits)

Subject to the approval of the department chair.

In order to establish a more flexible approach by which students may pursue and receive credit in areas of study, which are of particular interest to them, a category of courses entitled *Directed Readings* has been established. The credit value may vary between 1 and 4 credits. The actual value will be determined by the instructor and the chair of the department concerned. However, no more than one course, not to exceed 4 credits, of directed readings can be used for graduation purposes. The objectives agreed upon will be filed in the Office of the Registrar and will be made available to any institution requesting them for evaluation purposes. Arrangements for directed readings must be completed within three weeks of the first day of classes.

## **DISABILITY STUDIES (DAST)**

### **DAST 1102 – Disabling Conditions I**

(3 credits) 3 hours lecture

This course is the first of two that focus on the etiology of a wide range of disabling conditions. A number of genetic processes (i.e., cytogenetic, Mendelian, and polygenic inheritance) will be outlined. Multifactorial conditions will also be described. In addition, diagnostic processes, accommodations and intervention approaches associated with each of the disabling conditions will be discussed in broad terms.

### **DAST 1104 – Disabling Conditions II**

(3 credits) 3 hours lecture

This is the second of two courses focusing on the etiology of the range of disabling conditions. Students will gain an understanding of environmental causes whether prenatal, peri-natal or postnatal. In addition, the anatomy and physiology associated with various disabilities will be described and related disabling conditions will be discussed. Diagnostic processes, accommodations and intervention approaches will be outlined in broad terms.

### **DAST 1111 – Overview of Disability Studies**

(3 credits) 3 hours lecture

This course is an overview of the social, cultural, historical and philosophical perspectives of disability. Historical and current views are examined.

### **DAST 1123 – Positive Behavioural Supports**

(3 credits) 3 hours lecture

This course will introduce students to approaches and techniques that may be applied in response to difficult and challenging behaviours demonstrated by persons with disabilities. Students will learn to select respectful approaches appropriate to the age of the client and nature of his or her disability. Case studies will be utilized throughout the course.

### **DAST 1124 – Field Experience I**

(3 credits) 1 hour lecture and 50 hours fieldwork

This is an introductory field experience course where students will obtain beginning, hands-on practical knowledge in supporting individuals with disabilities on a one-to-one basis. Under the supervision of agency personnel in a disability-related setting, students will learn basic skills in engagement and assist staff in helping people with disabilities meet their individual goals. Students are required to attend weekly classroom sessions where individual field experiences will be discussed.

*Prerequisites: Disability Studies 1102 and 1111*

### **DAST 1126 – Field Experience II**

(3 credits) 1.5 hours lecture and 75 hours fieldwork

This is an intermediate field experience course where students obtain hands-on practical knowledge in working with individuals with disabilities, their families and their support networks. Under the supervision of a skilled community-based practitioner, students will engage with key support people in the life of a person and develop skills in the areas of assessment, person-centered planning and beginning intervention. Students are required to attend weekly classroom sessions where individual field experiences will be discussed.

*Prerequisites: Disability Studies 1124*

### **DAST 1205 – Disability Work Management**

(3 credits) 3 hours lecture

This course is an introduction to vocational rehabilitation and supported employment/ career development for people with disabilities.

### **DAST 1206 – Organizations and Leadership**

(3 credits) 3 hours lecture

This is an introductory course which focuses on providing students with theoretical and practical information about principles of effective leadership and the functioning of human service organizations. Students will explore the theory and practice of leadership and organizational development in the context of disability-related organizations.

### **DAST 1208 – Advocacy for Canadians with a Disability**

**(formerly DAST 3341)**

(3 credits) Internet Delivery

Students will learn about historical social change movements in society led by marginalized groups. This course will review critical issues and specific examples relevant to the practice of social justice and advocacy for change. The course incorporates planning exercises, ethical discussions, and outcome analysis.

### **DAST 1209 – Disability Social Policy**

(3 credits) 3 hours lecture

In this course students will review and analyze social problems, policies, and issues as they relate to the delivery and development of services for persons with disabilities. It will explore the process by which social policy is developed in Canada and how human service workers can influence policy.

### **DAST 1211 – Group Facilitation**

(3 credits) 3 hours lecture

This course is designed to develop skills for working with groups through a combination of lectures, observation, and experiential learning. The stages of group development, group roles and norms, theoretical frameworks, intervention, group design, implementation and evaluation will be addressed.

*Prerequisites: Social Work 1111*

### **DAST 1224 – Field Experience III**

(3 credits) 1.5 hours lecture and 100 hours fieldwork

This is a senior-level field experience course where students obtain hands-on practical knowledge in implementing Positive Behavioral Support strategies to address challenging behaviors. Under the supervision of a skilled community-based practitioner, students will learn strategies for responding to challenging behaviors in ways that are respectful of the rights and dignity of all individuals involved. Students are required to attend weekly classroom sessions where individual field experiences will be discussed.

*Prerequisites: Disability Studies 1123 and 1126*

**EDUC 2271 – The Teacher: Introduction to Methods and Materials in Teaching English as a Second Language (TESL)**

(3 credits) 3 hours lecture

This course introduces students to recognized methods useful for working with beginner level ESL learners and the concomitant demands for materials and learning resources. Students will become familiar with the theoretical underpinnings of Total Physical Response (TPR), audio-lingual, Language Experience Approach (LEA) and the selection/design/ preparation of learning resources required to support these methods.

*Prerequisite:* Linguistics 1111 and 1113 or Education 2371

**EDUC 2307 – The Learner: Elementary Art Education II (formerly EDUC 3307)**

(3 credits – TG) 3 hours lecture, 2 hours lab

This course provides an opportunity for prospective teachers to continue to develop their visual communication abilities through participation in advanced studio projects that assist them in producing age-appropriate art materials for use in the classroom. All students are required to participate in relevant field experiences.

*Prerequisite:* Education 1209

**EDUC 2312 – The Learner: Elementary Music Education I (formerly EDUC 3312)**

(3 credits – TG) 3 hours lecture

This course provides an opportunity for prospective teachers to develop musical skills, concepts and instructional methodologies that are considered to be important for teaching music in the elementary school setting. Students are required to participate in relevant field experiences.

**EDUC 2321 – The Learner: Education and Individual Development (formerly EDUC 3321)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course examines human behaviour, focusing on physical, emotional, cognitive, moral and social development. Emphasis is placed on understanding classroom implications of motivation, memory, learning styles, student diversity, principles of reinforcement, and the universal aspects of learning. Students are required to participate in relevant field experiences.

*Prerequisite:* Education 1231 and 1233

**EDUC 2325 – The Community: Understanding Current and Emerging Pedagogical Technologies (formerly EDUC 3325)**

(3 credits – TG) 3 hours lecture, 2 hours lab

This course provides an overview of technological influences in education. It is designed to assist prospective teachers in critically examining current and evolving applications of technology relevant to the teaching and learning process.

*Prerequisite:* Education 1231 and 1233

**EDUC 2341 – The Community: Diversity and Education (formerly EDUC 3341)**

(3 credits – TG) 3 hours lecture

This course explores key processes, perspectives and practices underlying effective learning in diverse settings. Topics include the construction of the concept of difference, stereotyping, prejudice, discrimination, racism, classism and sexism, all of which are examined with reference to their impact on learning.

*Prerequisite:* Education 1231 and 1233

**EDUC 2351 – The Learner: Aboriginal Cultural Dimensions and Classroom Applications (formerly EDUC 3351)**

(3 credits – TG) 3 hours lecture

This course is designed to prepare and sensitize prospective teachers to aboriginal perspectives, values, and methods as they relate to the learning context. The course will include an in-depth examination of traditional aboriginal education and associated values.

*Prerequisite:* Education 1231 and 1233.

**EDUC 2371 – The Learner: Language Development and Literacy (formerly EDUC 3371)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course focuses upon language development and the importance of literacy. Students will examine certain principles of learning in order to gain understanding as to how language development occurs as well as to determine best practice in teaching language and literacy. Students are required to participate in relevant field experience.

*Prerequisite:* Education 1231 and 1233.

**EDUC 3323 – The Learner: Effective Assessment - Measurement and Evaluation**

(3 credits) 3 hours lecture

This course is designed to assist students in developing an understanding of concepts and issues related to the differentiated assessment of learning. Participants will be required to develop competence in the construction of various instruments and processes used to measure and evaluate individual learner performance.

*Prerequisite:* Education 1231 and 1233

**EDUC 3361 – The Learner: Exceptional Students, Special Needs, and Inclusive Schooling**

(3 credits) 3 hour lecture

This course examines characteristics of students exhibiting a range of mild, moderate, and severe disabilities and students exhibiting exceptional gifts and talents. Diverse educational, cultural, and linguistic backgrounds will be discussed. The course also examines methods that can be used in adapting classroom instruction and management to the diverse needs.

*Prerequisite:* Education 2321

**EDUC 3372 – The Learner: Early Literacy Teaching English as a Second Language (TESL)**

(3 credits) 3 hours lecture

This course will introduce the student to ways of working with pre-literate ESL children as they begin to acquire early literacy concepts and skills, develop oral language and breadth, and depth of vocabulary knowledge. The course will comprise a balanced approach to an early literacy program that is necessary for later literacy success in reading comprehension.

*Prerequisite:* Linguistics 1111, and 1113 or Education 2371

**EDUC 4321 – The Teacher: Developing a Philosophy of Education**

(3 credits – TG) 3 hours lecture

This course examines basic beliefs concerning what is “sensible”, “right”, and “good” in promoting learning. Participants will critically reflect upon significant issues and experiences and will develop their philosophy of teaching and learning.

*Prerequisite:* Education 1231 and 1233.

**EDUC 4325 – The Community: The Impact of Social Issues in Education and Schooling**

(3 credits – TG) 3 hours lecture

This course examines factors such as the economy, the state, social class, gender, ethnicity, sub-cultural membership, ideology, religion, and the home environment, and their relationship to and impact on learning in general and schooling in particular.

*Prerequisite:* Education 1231 and 1233

**EDUC 4471 – The Community: ESL in Mainstream: Language through Content Teaching English as a Second Language (TESL)**

(3 credits) 3 hours lecture

This course will introduce students to the principles of language through content (LTC) teaching and would enable them to respond to the needs of ESL learners as they attempt to learn language AND content together in the context of the mainstream classroom.

*Prerequisite:* Linguistics 1111, & 1113 or Education 2371



**EDUC 4491 – The Community: Community Involvement in the Fine Arts (formerly EDUC 3491)**

(3 credits – TG) 3 hours lecture, 2 hours lab

This course uses a seminar approach to explore facets of planning and the implementation of meaningful fine arts experiences in the community setting.

*Prerequisite: Education 1209 or 2307.*

**EDUC 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

**ENGINEERING (ENGR)****ENGR 1205 – Mechanics I**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

Presents the basic principles of Statics and Particle Dynamics. Emphasizes the concept of equilibrium (two and three dimensional) in application to particles, rigid bodies and simple structures. Introduces the dynamics (kinematics and kinetics) of particles.

*Pre- or Corequisite: Mathematics 1203.*

**ENGR 1215 – Electricity and Magnetism**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial, 1.5 hours lab

This course provides students with an introduction to electrostatics; electric charges and fields; potential and capacitance; magnetic fields; energy considerations; electromotive force, inductance; time-varying electric and magnetic fields. Elements of atomic structure; electric current flow; Ohm's law. Kirchoff's laws and the electromagnetic properties of materials are also studied. A vector approach will be employed throughout.

*Prerequisite: Engineering 1205 or equivalent with "C-" or higher.*

*Pre or Corequisite: Mathematics 1219 or equivalent.*

**ENGR 1233 – Computing for Engineers I**

(3 credits – TG) 3 hours lecture, 2 hours lab

Topics covered in this course include: overview of computer systems; basic software systems, assemblers, compilers, high level languages; structured analysis and design, including data flow diagrams, structure charts; top down design, bottom up implementation; testing strategy; documentation; introduction to object-based programming; use of class libraries and construction of simple classes using C++ language; computer networks; computer system utilization.

**ENGR 1261 – Orientation to the Engineering Profession I**

(1 credit – TG) 1 hour lecture.

This course is an introduction to the engineering profession. Study skills, cooperative education, and work opportunities will be discussed, as will elements of engineering ethics, equity, concepts of sustainable development and environmental stewardship. Public worker and safety and health considerations will also be examined. This course is intended for students who wish to transfer to the University of Alberta engineering programme. This course is graded as pass/fail.

**ENGR 1263 – Orientation to the Engineering Profession II**

(1 credit – TG) 1 hour lecture.

This course is a continuation of ENGR 1261. In addition to the goals of ENGR 1261, written communication skills will be enhanced through assignments and quizzes. This course is intended for students who wish to transfer to the University of Alberta engineering programme. This course is graded as pass/fail.

**ENGR 1271 – Engineering Design and Communication I**

(2 credits – TG) 1.5 hours tutorial, 3 hours lab.

This first-year engineering course is the first of two courses which introduce the principles of engineering design, visual communication and written communication. The student will achieve basic competency in the three areas primarily through hands-on, team-based, open-ended design projects. In this course several small projects will be undertaken in order to develop the design and communication skills that the students will require for success as engineers.

*Pre- or corequisite: Engineering 1261.*

**ENGR 1273 – Engineering Design and Communication II**

(2 credits – TG) 1.5 hours tutorial, 3 hours lab.

This course is a continuation of Engineering 1271. Students will improve on their basic competency in engineering design, visual and written communication primarily through hands-on, team-based, open-ended design projects. In this course, one large project will be undertaken in order to develop the design and communication skills that the students will require for success as engineers.

*Prerequisite: Engineering 1271 with a grade of C- or higher.*

*Pre or corequisite: Engineering 1263*

**ENGR 1303 – Electric Circuits and Machines**

(3 credits) 3 hours lecture, 1 hour tutorial, 3 hours lab

Elements of linear networks and their characteristics, network theorems, analysis of RLC circuits, phasor representation and ac steady state analysis. Power in electrical circuits; three-phase circuits. Principles of electromechanical energy conversion, electromagnetic circuits, induction. Basic principles of transformers and rotating dc and ac machines.

*Prerequisite: Engineering 1215.*

**ENGR 1313 – Engineering Drawing and Computer Graphics**

(3 credits – TG) 2 hours lecture, 3 hours lab

Engineering drawing; theory of projection and multiview representation, auxiliary and sectional views, dimensioning, technical sketching, descriptive geometry, pictorial sketching, information for manufacturing. Computer graphics in 2D and 3D using AUTOCAD on personal computers will be introduced.

**ENGR 3309 – Heat and Mass Transport**

(3 credits) 3 hours lecture, 3 hours lab

Energy flows and material flows are crucial to the study of industrial systems. This course introduces concepts necessary to the study of conservation and transport of energy, momentum, and mass. Topics will include: aspects of fluid-flow, thermodynamics, conduction/diffusion transport, convective transport, and radiative transport. Applications of interest to industrial ecology which involve fluid-flow, heat transfer, and mass transfer will be studied.

*Prerequisite: Chemistry 2209 and 2210 and Mathematics 3307 with a "C-" or higher.*

*Pre- or Corequisite: Mathematics 3101.*

**ENGR 3319 – Statistics for Engineering**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course involves: the presentation and description of data; introduction to probability theory; Bayes Theorem; discrete and continuous probability distributions; estimation; sampling distributions; tests of hypotheses on means; variances and proportions and simple linear regression and correlation. Applications are chosen from engineering practice.

*Prerequisite: Mathematics 1219 with a "C-" or higher.*

**ENGR 3335 – Computing for Engineers II**

(3 credits – TG) 3 hours lecture, 2 hours lab

Provides the students with the skills necessary to solve more complex problems on the computer using C++ language. Further knowledge of the C++ syntax includes dynamic memory allocation, linked lists, pointers, references, recursion techniques and other advanced procedures. Specific design topics include: abstract data types and object-oriented design methodologies, the study of object and class design, information hiding, inheritance and polymorphism.

*Prerequisite: Engineering 1233 with a "C-" or higher.*

**ENGR 3349 – Mechanics II (formerly ENGR 1214)**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

Extends the study of Statics to distributed forces and composite bodies. Principles of Dynamics are studied. Topics include: kinematics and kinetics of rigid bodies, rectilinear and curvilinear translation, general plane motion, rotation, relative motion, force, mass, acceleration, friction, impulse, momentum and conservation of linear and angular momenta.

*Prerequisite: Engineering 1205 and Mathematics 1217 with a "C-" or higher.*

*Corequisite: Mathematics 1219.*

**ENGR 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## ENGLISH (ENGL)

The following restrictions on junior English course sequences and limits apply to University of Calgary transfer students:

Mount Royal College English 2210 and 2211 transfer to the University of Calgary as English 240. The University of Calgary degree requirements stipulate that no other junior English courses will be allowed for credit once these courses have been started. However, a maximum of two other junior English courses (ENGL 1131, 1135, and/or 1137) may be completed prior to registration in English 2210 or 2211.

Please note the above restrictions do not apply to MRC English 1101, 1143, and 1144. In order to receive credit for English 240, students must present both English 2210 and 2211. Students who take only one of English 2210 or 2211 will receive unspecified credit at U of C.

### ENGL 0115 – Writing and Communication Skills

(0 credits)

This is a credit free upgrading course; special fees apply.

This course provides students with opportunities to improve their English language communication skills. Students will be prepared for the next level writing courses including English 0130 and/or English 0212. Instruction will emphasize development of grammar, spelling, vocabulary and punctuation. Literature will provide the basis for writing, speaking, listening and reading improvement.

### ENGL 0130 – Literature and Composition

(0 credits)

This is a credit-free upgrading course; special fees apply.

This course prepares students to meet the University of Calgary entrance requirements in the area of English language and literature. Students write paragraphs and essays of various lengths based upon ideas derived from the study of literary works and from other sources.

Recommended Preparation: English Language Arts 20-1 or English Language Arts 30-2 or equivalents.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed mature under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

### ENGL 0212 – Introductory Composition (formerly ENGL 1112)

(3 credits – TG) 4 hours lecture

This course is designed for students whose understanding of the elements of English grammar and the mechanics of good writing needs reinforcing. Introductory Composition will provide a review of grammar and the mechanics; as well, it will focus on the structures of sentences, paragraphs and essays. Along with written assignments offering practice in composition, the course will emphasize discussion and analysis of readings. Instruction in research methods will also be provided as preparation for a research paper.

**Note:** Students must have passed English Language Arts 30-1, English Language Arts 30-2 or English 0115 to qualify for this course.

### ENGL 1101/GNED 1401 – Critical Writing and Reading

(3 credits – TG) 4 hours lecture

This foundational composition course offered by the department of English focuses on effective writing styles for academic and wider social contexts. Students will respond to texts pertaining to a variety of disciplines and develop critical reading and thinking skills. Students will also refine their understanding and practice of the structures of writing.

*Prerequisite:* English Language Arts 30-1 or equivalent with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.



### ENGL 1117 – Introduction to Writing Poetry (formerly ENGL 2217)

(3 credits – TG) 3 hours lecture

Through writing practice and workshops, students will learn how to evaluate and critique their own and other's poetry. Students will also receive instruction in poetic tropes, techniques, and forms.

*Prerequisite:* English Language Arts 30-1 or equivalent.

Recommended Preparation: English 0212 or 1101



### ENGL 1118 – Introduction to Writing Fiction (formerly ENGL 2218)

(3 credits – TG) 3 hours lecture

Through writing practice and workshops, students will learn how to evaluate and critique their own and other's fiction. Students will also receive instruction in narrative techniques, creation of character and dialogue, description, and fictional forms.

*Prerequisite:* English Language Arts 30-1 or equivalent.

Recommended Preparation: English 0212 or 1101.



### ENGL 1129 – Special Topics in Language and Literature (formerly ENGL 2229)

(3 credits – TG) 3 hours lecture

This course provides an examination of a different literary topic each semester. Written assignments will provide opportunities for the student to develop critical writing skills.

*Prerequisite:* English Language Arts 30-1 or equivalent.

### ENGL 1131 – Introduction to Fiction (formerly ENGL 2231)

(3 credits – TG) 3 hours lecture

In this course selected novels and short stories are studied, with instruction in the writing of critical essays.

*Prerequisite:* English Language Arts 30-1 or equivalent.



### ENGL 1135 – Introduction to Poetry (formerly ENGL 2235)

(3 credits – TG) 3 hours lecture

A study of selected poetry written in English, with instruction in the writing of critical essays.

*Prerequisite:* English Language Arts 30-1 or equivalent.



### ENGL 1137 – Introduction to Dramatic Literature (formerly ENGL 2237)

(3 credits – TG) 3 hours lecture

A study of six to eight plays, with instruction in the writing of critical essays.

*Prerequisite:* English Language Arts 30-1 or equivalent.



### ENGL 1141 – Literature for Young Children (formerly ENGL 2241)

(3 credits – TG) 3 hours lecture

This course offers a critical study of literature for young children (ages two-eight). By providing a survey of the various genres of children's literature, this course introduces students to the range of work available for preschool and primary school children. Students will also be given opportunities to develop their skills for oral presentation and written composition.

*Prerequisite:* English Language Arts 30-1 or 30-2 or equivalent.

Note: Students cannot receive credit for both English 1241 and 1141.



### ENGL 1143 – Introduction to the Study of Film (formerly ENGL 2243)

(3 credits – TG) 3 hours lecture, 2 hours lab

This course surveys the history of narrative film from its beginnings to the present. Students will view and discuss, historically and aesthetically, approximately 10 major films, paying particular attention to their "film language". The influence of technology, film theories and criticism will, where appropriate, be considered. Written assignments will offer students practice in film analysis.

*Prerequisite:* English Language Arts 30-1 or equivalent.

Recommended Preparation: English 0212 or 1101.



### ENGL 1144 – Film II: Contemporary Film and Theory (formerly ENGL 2244)

(3 credits – TG) 3 hours lecture, 2 hours lab

This course continues the survey of film, developing further the influence of technology, film theories and criticism on contemporary cinematic works. Film selections will reflect the global scope of cinema and assignments will offer students practice in comparative film criticism and appreciation.

*Prerequisite:* English 0130 or English Language Arts 30-1 or equivalent.

Recommended Preparation: English 1143, and one of English 0212 or 1101.



### ENGL 2202 – Introduction to Contemporary Theoretical Practices (formerly ENGL 3302)

(3 credits – TG) 3 hours lecture

An introduction to various ways that contemporary readers approach literary texts, including but not restricted to the following: formalism and new criticism, reader theory, feminism, psychoanalytic criticism, and Marxism. Students will gain practice in applying these theories (orally and in writing) to short fiction and poems.

*Prerequisite:* any two of English 2210, 2211, 1131, 1135 or 1137 or equivalent.



### ENGL 2203 – Advanced Contemporary Theoretical Practices (formerly ENGL 3303)

(3 credits – TG) 3 hours lecture

This course continues the work of English 2202. It addresses a range of theories loosely defined as “post-structuralist”, including but not restricted to the following: semiotics, deconstruction, psycho-linguistics, gender theory, queer theory, new historicism, race theory, and post-colonialism. Students will learn how to apply complex theories in a sophisticated, trans-disciplinary practice as demonstrated in the recent challenge to English Studies posed by the introduction of Cultural Studies.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



**Note:** English 2203 = Athabasca University ENGL 423. Credit will be allowed for only one of English 2203 and ENGL A423.

### ENGL 2205 – Literary Research and Methods

(3 credits) 3 hours lecture

This course focuses on effective literary scholarship and criticism, channeling research and writing skills developed in junior English courses into coherent focus. The course highlights key elements in the discipline of English, including (but not restricted to) in-depth research skills, understanding the contexts for literary criticism, and various analytical methods.

*Prerequisite:* English 1101/General Education 1401 or 1402 and one of English 1131, 1135, 1137, or 1141.



### ENGL 2207 – Advanced Writing (formerly ENGL 3307)

(3 credits – TG) 4 hours lecture

A course in which students study rhetorical theory and apply it to the examination of their own writing and that of selected texts.

*Prerequisite:* English 1101/General Education 1401 or 1402.



**Note:** Credit will be allowed for only one of Applied Communications 2263, English 2207 or Freeland Writing 1301. English 2207 = Athabasca University ENGL 353. Credit will be allowed for only one of English 2207 and ENGL A353.

### ENGL 2210 – English Literature to the Eighteenth Century (formerly ENGL 1113)

(3 credits – TG) 3 hours lecture

This course surveys English literature from its earliest beginnings to the Restoration (1660), but with an emphasis on Chaucer, Shakespeare, and Milton. Students will learn how to read a variety of texts closely and critically, and will examine the ways in which these texts relate to their socio-political, religious and cultural environments (the Dark Ages, the Middle Ages, and the Renaissance).

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141



### ENGL 2211 – English Literature from the Eighteenth Century to the Present (formerly ENGL 1114)

(3 credits – TG) 3 hours lecture

This course surveys English literature from the Restoration (1660) through the Enlightenment, Romanticism, and Victorianism, up to and including the Twentieth Century. Like English 2010, this course focuses on both close reading and socio-political issues. Studying literature within the context of on-going revolution – aesthetic, scientific, religious, political, and industrial – will challenge students to think critically about the forces that have contributed to literary expression in England.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



### ENGL 2216 – Women’s Literary Tradition I (formerly ENGL 3318)

(3 credits – TG) 3 hours lecture

As we examine a variety of literary texts – past and present – we will explore a women’s literary tradition which until recently, has been overshadowed by the ‘master’ pieces of a male literary tradition. Readings from both literary and critical works will assist us, as we examine the question of “tradition” itself and women’s place within and outside that tradition. At the same time, we will ask some difficult and challenging questions about gender, the self, and society.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



**Note:** English 2216/2219 = U of C ENGL 318. English 2216 = Athabasca University ENGL 307. Credit will be allowed for only one of English 2216 and ENGL A307.

### ENGL 2219 – Women’s Literary Tradition II (formerly ENGL 3319)

(3 credits – TG) 3 hours lecture

A continuation of English 2216, this course will examine the ways in which contemporary women authors transform their private experience of the world into a public expression of female culture.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



**Note:** English 2216/2219 = U of C ENGL 318.

### ENGL 2228 – Intermediate Special Topics (formerly ENGL 3329)

(3 credits – TG) 3 hours lecture

This course provides an examination of selected literary topics. The offerings vary depending on student and faculty interests. As this is a variable content course, the specific topic will be announced and advertised each time the course is offered. Students may not receive credit for this course more than once.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### ENGL 2245 – Film Theory

(3 Credit) 3 hours lecture, 2 hours tutorial

This course examines diverse analytical and theoretical models of film critique. The survey ranges from classical film theories such as formalism, realism, and semiology to contemporary perspectives including poststructuralist, postcolonial, feminist, queer, and cultural studies approaches.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.



### ENGL 2246 – Film Genres

(3 Credit) 3 hours lecture, 2 hours tutorial

This intermediate course surveys a number of film genres, ranging from westerns, noir, romance, comedy, gangster, adventure, horror, sci-fi/fantasy, and epics to zombie/slasher, and various cult forms. Experimental, non-genre, and cross-genre films will also be considered as the course overall moves to questions of genre history, precedents, and development.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.



### **ENGR 3335 – Computing for Engineers II**

(3 credits – TG) 3 hours lecture, 2 hours lab

Provides the students with the skills necessary to solve more complex problems on the computer using C++ language. Further knowledge of the C++ syntax includes dynamic memory allocation, linked lists, pointers, references, recursion techniques and other advanced procedures. Specific design topics include: abstract data types and object-oriented design methodologies, the study of object and class design, information hiding, inheritance and polymorphism.

*Prerequisite: Engineering 1233 with a "C-" or higher.*

### **ENGR 3349 – Mechanics II (formerly ENGR 1214)**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

Extends the study of Statics to distributed forces and composite bodies. Principles of Dynamics are studied. Topics include: kinematics and kinetics of rigid bodies, rectilinear and curvilinear translation, general plane motion, rotation, relative motion, force, mass, acceleration, friction, impulse, momentum and conservation of linear and angular momenta.

*Prerequisite: Engineering 1205 and Mathematics 1217 with a "C-" or higher.*

*Corequisite: Mathematics 1219.*

### **ENGR 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **ENGLISH (ENGL)**

The following restrictions on junior English course sequences and limits apply to University of Calgary transfer students:

Mount Royal College English 2210 and 2211 transfer to the University of Calgary as English 240. The University of Calgary degree requirements stipulate that no other junior English courses will be allowed for credit once these courses have been started. However, a maximum of two other junior English courses (ENGL 1131, 1135, and/or 1137) may be completed prior to registration in English 2210 or 2211.

Please note the above restrictions do not apply to MRC English 1101, 1143, and 1144. In order to receive credit for English 240, students must present both English 2210 and 2211. Students who take only one of English 2210 or 2211 will receive unspecified credit at U of C.

### **ENGL 0115 – Writing and Communication Skills**

(0 credits)

This is a credit free upgrading course; special fees apply.

This course provides students with opportunities to improve their English language communication skills. Students will be prepared for the next level writing courses including English 0130 and/or English 0212. Instruction will emphasize development of grammar, spelling, vocabulary and punctuation. Literature will provide the basis for writing, speaking, listening and reading improvement.

### **ENGL 0130 – Literature and Composition**

(0 credits)

This is a credit-free upgrading course; special fees apply.

This course prepares students to meet the University of Calgary entrance requirements in the area of English language and literature. Students write paragraphs and essays of various lengths based upon ideas derived from the study of literary works and from other sources.

Recommended Preparation: English Language Arts 20-1 or English Language Arts 30-2 or equivalents.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed mature under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

### **ENGL 0212 – Introductory Composition (formerly ENGL 1112)**

(3 credits – TG) 4 hours lecture

This course is designed for students whose understanding of the elements of English grammar and the mechanics of good writing needs reinforcing. Introductory Composition will provide a review of grammar and the mechanics; as well, it will focus on the structures of sentences, paragraphs and essays. Along with written assignments offering practice in composition, the course will emphasize discussion and analysis of readings. Instruction in research methods will also be provided as preparation for a research paper.

**Note:** Students must have passed English Language Arts 30-1, English Language Arts 30-2 or English 0115 to qualify for this course.

### **ENGL 1101/GNED 1401 – Critical Writing and Reading**

(3 credits – TG) 4 hours lecture

This foundational composition course offered by the department of English focuses on effective writing styles for academic and wider social contexts. Students will respond to texts pertaining to a variety of disciplines and develop critical reading and thinking skills. Students will also refine their understanding and practice of the structures of writing.

*Prerequisite: English Language Arts 30-1 or equivalent with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.*



### **ENGL 1117 – Introduction to Writing Poetry (formerly ENGL 2217)**

(3 credits – TG) 3 hours lecture

Through writing practice and workshops, students will learn how to evaluate and critique their own and other's poetry. Students will also receive instruction in poetic tropes, techniques, and forms.

*Prerequisite: English Language Arts 30-1 or equivalent.*

Recommended Preparation: English 0212 or 1101



### **ENGL 1118 – Introduction to Writing Fiction (formerly ENGL 2218)**

(3 credits – TG) 3 hours lecture

Through writing practice and workshops, students will learn how to evaluate and critique their own and other's fiction. Students will also receive instruction in narrative techniques, creation of character and dialogue, description, and fictional forms.

*Prerequisite: English Language Arts 30-1 or equivalent.*

Recommended Preparation: English 0212 or 1101.



### **ENGL 1129 – Special Topics in Language and Literature (formerly ENGL 2229)**

(3 credits – TG) 3 hours lecture

This course provides an examination of a different literary topic each semester. Written assignments will provide opportunities for the student to develop critical writing skills.

*Prerequisite: English Language Arts 30-1 or equivalent.*

### **ENGL 1131 – Introduction to Fiction (formerly ENGL 2231)**

(3 credits – TG) 3 hours lecture

In this course selected novels and short stories are studied, with instruction in the writing of critical essays.

*Prerequisite: English Language Arts 30-1 or equivalent.*



### **ENGL 1135 – Introduction to Poetry (formerly ENGL 2235)**

(3 credits – TG) 3 hours lecture

A study of selected poetry written in English, with instruction in the writing of critical essays.

*Prerequisite: English Language Arts 30-1 or equivalent.*





### ENGL 2248 – American Literature I (formerly ENGL 3348)

(3 credits – TG) 3 hours lecture

This course surveys American literary developments of the later nineteenth and early twentieth century, including the Harlem Renaissance and the rise of modernism. A culturally diverse selection of authors will be studied both in and outside the realist and naturalist traditions.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2248 = English A348. For all other students, English 2248 = AU English 3xx.

### ENGL 2249 – American Literature II (formerly ENGL 3349)

(3 credits – TG) 3 hours lecture

This course continues the survey of modern American literature from World War II to the present, with emphasis on the prose and poetry of a culturally diverse array of writers, the advent of postmodernism, and 'America' as a geographical and cultural category.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2249 = English A349. For all other students, English 2249 = AU English 3xx.

### ENGL 2254 – Poetry: Reading and Analysis I (formerly ENGL 3354)

(3 credits – TG) 3 hours lecture

This course develops the skills students need to read poetry closely and analytically. It introduces students to the major forms, modes, and techniques of poetry written in English, paying detailed attention to tropes and figures, form, tone, diction, implication, and point of view.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

Recommended Preparation: English 2210 and 2211

**Note:** English 2254/2255 = U of C ENGL 354. English 2254 = Athabasca University ENGL 362. Credit will be allowed for only one of English 2254 and ENGL A362.

### ENGL 2255 – Poetry: Reading and Analysis II (formerly ENGL 3355)

(3 credits – TG) 3 hours lecture

A continuation of English 2254. English 2255 concentrates on developing skills of close reading and textual analysis. The poem as part of an extended sequence or book-length collection will be of special interest.



*Prerequisite:* English 2254.

Recommended Preparation: English 2210 and 2211.

**Note:** English 2254/2255 = U of C ENGL 354.

### ENGL 2256 – Drama I (formerly ENGL 3356)

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms through Medieval, Renaissance and Restoration theatre. There will be an emphasis on the textual, contextual and performative questions raised by dramatic literature.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### ENGL 2257 – Drama II (formerly ENGL 3357)

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms from the beginnings of realism in the nineteenth century, through the evolving forms of twentieth century theatre, and up to the present. There will be emphasis on the textual, contextual and performative questions raised by dramatic literature.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### ENGL 2258 – Fiction I (formerly ENGL 3358)

(3 credits – TG) 3 hours lecture

This course will focus on the development of prose fictional forms, including the novel and short story, from the eighteenth century to the present and will be organized with a view to making evident the relationships—historical, artistic, political—between selected literary texts. Students taking English 2258 can expect to acquire skills in reading prose fiction of all kinds and from all periods, skills which will provide a solid foundation for the study of other areas of literature.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2258/2259 = U of C ENGL 358. English 2258/2259 = Athabasca University ENGL 395. Credit will be allowed for only one of English 2258/2259 and ENGL A395.

### ENGL 2259 – Fiction II (formerly ENGL 3359)

(3 credits – TG) 3 hours lecture

This course furthers the study of developments in prose fictional forms from the eighteenth century to the present and is designed to explore the kinds of exchanges being fashioned between traditional narrative forms and their contemporary versions. To this end, texts may be read in pairs, and not only as aesthetic works but as political documents.



*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2258/2259 = U of C ENGL 358. English 2258/2259 = Athabasca University ENGL 395. Credit will be allowed for only one of English 2258/2259 and ENGL A395.

### ENGL 2263 – Technical Writing (formerly ENGL 3363)

(3 credits – TG) 3 hours lecture

Principles and techniques of technical writing. Through analysis of selected technical prose and directed writing practice, students will develop competence in the presentation of technical information for a variety of audiences.



Recommended Preparation: English 0212 or 1101.

**Note:** English 2263 may not be used to satisfy the senior-level arts and science graduation requirements for applied degree programs. Credit will be allowed for only one of Applied Communications 2061, English 2263 and Freelance Writing 1311.

### ENGL 2264 – Intermediate Creative Writing, Poetry 1: Contemporary Practice (formerly ENGL 3364)

(3 credits – TG) 4 hours lecture

This course blends creative writing with writerly readings and analysis of published contemporary poetry. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples found in literature. Students will also take part in online workshops using course-specific software.



*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 12 poems) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1117.

### ENGL 2265 – Intermediate Creative Writing, Poetry 2: Poetic Precedents (formerly ENGL 3365)

(3 credits – TG) 4 hours lecture

Building on English 2264, this course blends creative writing with writerly readings and analysis of a selection of poetic precedents chosen for their historical or literary value. Student will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and implicit examples found in literature. Students will also take part in online workshops using course-specific software.



*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 12 poems) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.

### **ENGL 2219 – Women’s Literary Tradition II (formerly ENGL 3319)**

(3 credits – TG) 3 hours lecture

A continuation of English 2216, this course will examine the ways in which contemporary women authors transform their private experience of the world into a public expression of female culture.  
*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2216/2219 = U of C ENGL 318.

### **ENGL 2228 – Intermediate Special Topics (formerly ENGL 3329)**

(3 credits – TG) 3 hours lecture

This course provides an examination of selected literary topics. The offerings vary depending on student and faculty interests. As this is a variable content course, the specific topic will be announced and advertised each time the course is offered. Students may not receive credit for this course more than once.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### **ENGL 2245 – Film Theory**

(3 Credit) 3 hours lecture, 2 hours tutorial

This course examines diverse analytical and theoretical models of film critique. The survey ranges from classical film theories such as formalism, realism, and semiology to contemporary perspectives including poststructuralist, postcolonial, feminist, queer, and cultural studies approaches.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.

### **ENGL 2246 – Film Genres**

(3 Credit) 3 hours lecture, 2 hours tutorial

This intermediate course surveys a number of film genres, ranging from westerns, noir, romance, comedy, gangster, adventure, horror, sci-fi/fantasy, and epics to zombie/slasher, and various cult forms. Experimental, non-genre, and cross-genre films will also be considered as the course overall moves to questions of genre history, precedents, and development.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.

### **ENGL 2248 – American Literature I (formerly ENGL 3348)**

(3 credits – TG) 3 hours lecture

This course surveys American literary developments of the later nineteenth and early twentieth century, including the Harlem Renaissance and the rise of modernism. A culturally diverse selection of authors will be studied both in and outside the realist and naturalist traditions.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2248 = English A348. For all other students, English 2248 = AU English 3xx.

### **ENGL 2249 – American Literature II (formerly ENGL 3349)**

(3 credits – TG) 3 hours lecture

This course continues the survey of modern American literature from World War II to the present, with emphasis on the prose and poetry of a culturally diverse array of writers, the advent of postmodernism, and ‘America’ as a geographical and cultural category.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2249 = English A349. For all other students, English 2249 = AU English 3xx.

### **ENGL 2254 – Poetry: Reading and Analysis I (formerly ENGL 3354)**

(3 credits – TG) 3 hours lecture

This course develops the skills students need to read poetry closely and analytically. It introduces students to the major forms, modes, and techniques of poetry written in English, paying detailed attention to tropes and figures, form, tone, diction, implication, and point of view.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

Recommended Preparation: English 2210 and 2211

**Note:** English 2254/2255 = U of C ENGL 354. English 2254 = Athabasca University ENGL 362. Credit will be allowed for only one of English 2254 and ENGL A362.

### **ENGL 2255 – Poetry: Reading and Analysis II (formerly ENGL 3355)**

(3 credits – TG) 3 hours lecture

A continuation of English 2254. English 2255 concentrates on developing skills of close reading and textual analysis. The poem as part of an extended sequence or book-length collection will be of special interest.

*Prerequisite:* English 2254.

Recommended Preparation: English 2210 and 2211.

**Note:** English 2254/2255 = U of C ENGL 354.

### **ENGL 2256 – Drama I (formerly ENGL 3356)**

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms through Medieval, Renaissance and Restoration theatre. There will be an emphasis on the textual, contextual and performative questions raised by dramatic literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### **ENGL 2257 – Drama II (formerly ENGL 3357)**

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms from the beginnings of realism in the nineteenth century, through the evolving forms of twentieth century theatre, and up to the present. There will be emphasis on the textual, contextual and performative questions raised by dramatic literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### **ENGL 2258 – Fiction I (formerly ENGL 3358)**

(3 credits – TG) 3 hours lecture

This course will focus on the development of prose fictional forms, including the novel and short story, from the eighteenth century to the present and will be organized with a view to making evident the relationships—historical, artistic, political—between selected literary texts. Students taking English 2258 can expect to acquire skills in reading prose fiction of all kinds and from all periods, skills which will provide a solid foundation for the study of other areas of literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2258/2259 = U of C ENGL 358. English 2258/2259 = Athabasca University ENGL 395. Credit will be allowed for only one of English 2258/2259 and ENGL A395.

## ENGL 2266 – Intermediate Creative Writing, Fiction 1: Contemporary Practice (formerly ENGL 3366)

(3 credits – TG) 4 hours lecture

This course blends creative writing with writerly readings and analysis of contemporary prose fiction. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples of literature. Students will also take part in online lab work using course-specific software.



*Prerequisite: Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 20 typed, double-spaced pages of prose) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.*

*Note: English 2266 = Athabasca University ENGL 381. Credit will be allowed for only one of English 2266 and ENGL A381.*

## ENGL 2267 – Intermediate Creative Writing, Fiction 2: Precedents (formerly ENGL 3367)

(3 credits – TG) 4 hours lecture

Building on English 2266, this course blends creative writing with writerly readings and analysis of a selection of precedents in fiction chosen for their historical or literary value. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples of literature. Students will also take part in online workshops using course-specific software.



*Prerequisite: Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 20 typed, double-spaced pages of prose) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.*

## ENGL 2270 – Canadian Literature I (formerly ENGL 3370)

(3 credits – TG) 3 hours lecture

This course surveys Canadian literature in English from its beginnings to the early twentieth century, and explores topics such as the development of a colonial literature; the literary articulation of Canadian subjects and themes; the adaptation of literary forms to Canadian experience; and the role of the literary institution in the development of Canadian nationalism. Students will examine the literature of exploration, travel and settlement; narrative, dramatic, and lyric poetry; and prose fiction.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.*

*Note: English 2270/2271 = U of C ENGL 370. English 2270/2271 = Athabasca University ENGL 302. Credit will be allowed for only one of English 2270/2271 and ENGL A302.*

## ENGL 2271 – Canadian Literature II (formerly ENGL 3371)

(3 credits – TG) 3 hours lecture

A continuation of English 2270, this course focuses on the development of modernism and post-modernism in twentieth century Canadian writing.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.*

*Note: English 2270/2271 = U of C ENGL 370. English 2270/2271 = Athabasca University ENGL 302. Credit will be allowed for only one of English 2270/2271 and ENGL A302.*

## ENGL 2273 – Reading the Popular (formerly ENGL 3373)

(3 credits – TG) 3 hours lecture

This course examines the historical development of popular literary forms, including but not limited to persistent characters, themes, and narrative structures. These forms will be studied especially in genre fiction constructed for a trans-Atlantic mass readership in the twentieth century such as mystery, romance, horror, etc. and in related non-print media as well.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.*

## ENGL 2291 – Postcolonial Literature I (formerly ENGL 3391)

(3 credits – TG) 3 hours lecture

This course aims to introduce students to postcolonial issues through a variety of literary, filmic and theoretical texts from a variety of regions.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.*

*Note: English 2291/2292 = U of C ENGL 392. English 2291/2292 = Athabasca University ENGL 433. Credit will be allowed for only one of English 2291/2292 and ENGL A433.*

## ENGL 2292 – Postcolonial Literature II (formerly ENGL 3392)

(3 credits – TG) 3 hours lecture

This course furthers the exploration of postcolonial issues through a variety of literary, filmic and theoretical texts from a variety of regions.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141. English 2291, Postcolonial Literature I, is NOT a prerequisite for English 2292.*

*Note: This course will not duplicate texts assigned in Postcolonial Literature I. English 2291/2292 = U of C ENGL 392. English 2291/2292 = Athabasca University ENGL 433. Credit will be allowed for only one of English 2291/2292 and ENGL A433.*

## ENGL 2293 – Speculative Fiction I: Science Fiction (formerly ENGL 3393)

(3 credits – TG) 3 hours lecture

An examination of representative works of science fiction with attention to the tradition, its leading themes and modern developments.



*Recommended Preparation: English 1101/General Education 1401 or 1402.*

## ENGL 2295 – Speculative Fiction II: Fantasy (formerly ENGL 3395)

(3 credits – TG) 3 hours lecture

A study of the historical roots, literary applications and theoretical context of fantastic elements in fiction. Texts may include representative examples of dream vision, allegory, romance, surrealism, and magic realism, with a particular emphasis on modern fantasy fiction.



*Recommended Preparation: English 1101/General Education 1401 or 1402.*

## ENGL 2298 – Children's Literature to 1900 (formerly ENGL 3398)

(3 credits – TG) 3 hours lecture

Offering opportunities for advanced critical study, this course chronicles the history of children's literature from its origins in folklore to the achievements of the Golden Age at the end of the nineteenth century. Through an examination of texts within their cultural context, this course explores various attitudes toward childhood that inform works written in times past. Written assignments will provide students with opportunities to develop their awareness of the critical issues and theoretical perspectives that dominate the field.



*Prerequisite: English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141*

*Note: English 2298/2299 = U of C 398.*

### ENGL 2219 – Women’s Literary Tradition II (formerly ENGL 3319)

(3 credits – TG) 3 hours lecture

A continuation of English 2216, this course will examine the ways in which contemporary women authors transform their private experience of the world into a public expression of female culture.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2216/2219 = U of C ENGL 318.



### ENGL 2228 – Intermediate Special Topics (formerly ENGL 3329)

(3 credits – TG) 3 hours lecture

This course provides an examination of selected literary topics. The offerings vary depending on student and faculty interests. As this is a variable content course, the specific topic will be announced and advertised each time the course is offered. Students may not receive credit for this course more than once.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

### ENGL 2245 – Film Theory

(3 Credit) 3 hours lecture, 2 hours tutorial

This course examines diverse analytical and theoretical models of film critique. The survey ranges from classical film theories such as formalism, realism, and semiology to contemporary perspectives including poststructuralist, postcolonial, feminist, queer, and cultural studies approaches.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.



### ENGL 2246 – Film Genres

(3 Credit) 3 hours lecture, 2 hours tutorial

This intermediate course surveys a number of film genres, ranging from westerns, noir, romance, comedy, gangster, adventure, horror, sci-fi/fantasy, and epics to zombie/slasher, and various cult forms. Experimental, non-genre, and cross-genre films will also be considered as the course overall moves to questions of genre history, precedents, and development.

*Prerequisite:* English 1143 or 1144 and English 1101/General Education 1401 or 1402.



### ENGL 2248 – American Literature I (formerly ENGL 3348)

(3 credits – TG) 3 hours lecture

This course surveys American literary developments of the later nineteenth and early twentieth century, including the Harlem Renaissance and the rise of modernism. A culturally diverse selection of authors will be studied both in and outside the realist and naturalist traditions.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2248 = English A348. For all other students, English 2248 = AU English 3xx.



### ENGL 2249 – American Literature II (formerly ENGL 3349)

(3 credits – TG) 3 hours lecture

This course continues the survey of modern American literature from World War II to the present, with emphasis on the prose and poetry of a culturally diverse array of writers, the advent of postmodernism, and ‘America’ as a geographical and cultural category.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** For students enrolled in the AU@MRC collaborative B.A. degree, English 2249 = English A349. For all other students, English 2249 = AU English 3xx.



### ENGL 2254 – Poetry: Reading and Analysis I (formerly ENGL 3354)

(3 credits – TG) 3 hours lecture

This course develops the skills students need to read poetry closely and analytically. It introduces students to the major forms, modes, and techniques of poetry written in English, paying detailed attention to tropes and figures, form, tone, diction, implication, and point of view.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

Recommended Preparation: English 2210 and 2211

**Note:** English 2254/2255 = U of C ENGL 354. English 2254 = Athabasca University ENGL 362. Credit will be allowed for only one of English 2254 and ENGL A362.



### ENGL 2255 – Poetry: Reading and Analysis II (formerly ENGL 3355)

(3 credits – TG) 3 hours lecture

A continuation of English 2254. English 2255 concentrates on developing skills of close reading and textual analysis. The poem as part of an extended sequence or book-length collection will be of special interest.

*Prerequisite:* English 2254.

Recommended Preparation: English 2210 and 2211.

**Note:** English 2254/2255 = U of C ENGL 354.



### ENGL 2256 – Drama I (formerly ENGL 3356)

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms through Medieval, Renaissance and Restoration theatre. There will be an emphasis on the textual, contextual and performative questions raised by dramatic literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



### ENGL 2257 – Drama II (formerly ENGL 3357)

(3 credits – TG) 3 hours lecture

This course will focus on the development of dramatic forms from the beginnings of realism in the nineteenth century, through the evolving forms of twentieth century theatre, and up to the present. There will be emphasis on the textual, contextual and performative questions raised by dramatic literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.



### ENGL 2258 – Fiction I (formerly ENGL 3358)

(3 credits – TG) 3 hours lecture

This course will focus on the development of prose fictional forms, including the novel and short story, from the eighteenth century to the present and will be organized with a view to making evident the relationships—historical, artistic, political—between selected literary texts. Students taking English 2258 can expect to acquire skills in reading prose fiction of all kinds and from all periods, skills which will provide a solid foundation for the study of other areas of literature.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2258/2259 = U of C ENGL 358. English 2258/2259 = Athabasca University ENGL 395. Credit will be allowed for only one of English 2258/2259 and ENGL A395.





**ENGL 2259 – Fiction II (formerly ENGL 3359)**

(3 credits – TG) 3 hours lecture

This course furthers the study of developments in prose fictional forms from the eighteenth century to the present and is designed to explore the kinds of exchanges being fashioned between traditional narrative forms and their contemporary versions. To this end, texts may be read in pairs, and not only as aesthetic works but as political documents.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2258/2259 = U of C ENGL 358. English 2258/2259 = Athabasca University ENGL 395. Credit will be allowed for only one of English 2258/2259 and ENGL A395.

**ENGL 2263 – Technical Writing (formerly ENGL 3363)**

(3 credits – TG) 3 hours lecture

Principles and techniques of technical writing. Through analysis of selected technical prose and directed writing practice, students will develop competence in the presentation of technical information for a variety of audiences.

*Recommended Preparation:* English 0212 or 1101.

**Note:** English 2263 may not be used to satisfy the senior-level arts and science graduation requirements for applied degree programs. Credit will be allowed for only one of Applied Communications 2061, English 2263 and Freelance Writing 1311.

**ENGL 2264 – Intermediate Creative Writing, Poetry 1: Contemporary Practice (formerly ENGL 3364)**

(3 credits – TG) 4 hours lecture

This course blends creative writing with writerly readings and analysis of published contemporary poetry. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples found in literature. Students will also take part in online workshops using course-specific software.

*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 12 poems) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1117.

**ENGL 2265 – Intermediate Creative Writing, Poetry 2: Poetic Precedents (formerly ENGL 3365)**

(3 credits – TG) 4 hours lecture

Building on English 2264, this course blends creative writing with writerly readings and analysis of a selection of poetic precedents chosen for their historical or literary value. Student will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and implicit examples found in literature. Students will also take part in online workshops using course-specific software.

*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 12 poems) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.

**ENGL 2266 – Intermediate Creative Writing, Fiction 1: Contemporary Practice (formerly ENGL 3366)**

(3 credits – TG) 4 hours lecture

This course blends creative writing with writerly readings and analysis of contemporary prose fiction. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples of literature. Students will also take part in online lab work using course-specific software.

*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 20 typed, double-spaced pages of prose) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.

**Note:** English 2266 = Athabasca University ENGL 381. Credit will be allowed for only one of English 2266 and ENGL A381.

**ENGL 2267 – Intermediate Creative Writing, Fiction 2: Precedents (formerly ENGL 3367)**

(3 credits – TG) 4 hours lecture

Building on English 2266, this course blends creative writing with writerly readings and analysis of a selection of precedents in fiction chosen for their historical or literary value. Students will be encouraged to explore a range of styles, as well as experiment, play with, write and re-write their own work in light of critiques by fellow students, the instructor and the implicit examples of literature. Students will also take part in online workshops using course-specific software.

*Prerequisite:* Admission to the course is by consent of the department based on an evaluation of a portfolio (no more than 20 typed, double-spaced pages of prose) of the student's original creative writing. Portfolios will be submitted to the English Department the semester before the course is to begin. Students with little or no workshop experience may be advised to take English 1118.

**ENGL 2270 – Canadian Literature I (formerly ENGL 3370)**

(3 credits – TG) 3 hours lecture

This course surveys Canadian literature in English from its beginnings to the early twentieth century, and explores topics such as the development of a colonial literature; the literary articulation of Canadian subjects and themes; the adaptation of literary forms to Canadian experience; and the role of the literary institution in the development of Canadian nationalism. Students will examine the literature of exploration, travel and settlement; narrative, dramatic, and lyric poetry; and prose fiction.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2270/2271 = U of C ENGL 370. English 2270/2271 = Athabasca University ENGL 302. Credit will be allowed for only one of English 2270/2271 and ENGL A302.

**ENGL 2271 – Canadian Literature II (formerly ENGL 3371)**

(3 credits – TG) 3 hours lecture

A continuation of English 2270, this course focuses on the development of modernism and post-modernism in twentieth century Canadian writing.

*Prerequisite:* English 1101/General Education 1401 or 1402 and English 1131, 1135, 1137 or 1141.

**Note:** English 2270/2271 = U of C ENGL 370. English 2270/2271 = Athabasca University ENGL 302. Credit will be allowed for only one of English 2270/2271 and ENGL A302.

### ENGL 3305 – Script Writing

(3 credits) 3 hours lecture

This course explores the theory and practice of writing for stage, screen, and live performance. Workshop exercises will focus on developing dramaturgical skills needed for writing dialogue, plotting action, using generic conventions, and developing characters. Students will have the opportunity to create their own plays, screenplays, or performance pieces.

*Prerequisite:* One of English 2245, 2246, 2256, 2257, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses.

### ENGL 3306 – History of the English Language

(3 credits) 3 hours lecture

This course covers the development of English from Anglo-Saxon (or Old English) to Early Modern English in the seventeenth century. It includes a basic component of linguistics and an examination of manuscript culture and textual transmission.

*Prerequisite:* English 2210 and one of 2202, 2203, 2207, 2263, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses.

### ENGL 3312 – Shakespeare I (formerly ENGL 2212)

(3 credits – TG) 3 hours lecture

A consideration of the development and variety of Shakespeare's dramatic art.

*Prerequisite:* English 1101/General Education 1401 or 1402 and one of English 1131, 1135, 1137 or 1141.

**Note:** English 3312/3313 = U of C ENGL 312. English 3312 = Athabasca University ENGL 324. Credit will be allowed for only one of English 3312 and ENGL A324.

### ENGL 3313 – Shakespeare II (formerly ENGL 2213)

(3 credits – TG) 3 hours lecture

A continuation of English 3312. Further consideration of the development and variety of Shakespeare's dramatic art.

*Prerequisite:* English 1101/General Education 1401 or 1402 and one of English 1131, 1135, 1137 or 1141.

**Note:** English 3312/3313 = U of C ENGL 312. English 3313 = Athabasca University ENGL 325. Credit will be allowed for only one of English 3313 and ENGL A325.

### ENGL 3323 – Medieval Literature I: Early Medieval Literature

(3 credits) 3 hours lecture

This course is a study of representative texts from the early medieval literary age, offering a range of popular genres from the Old and Middle English periods. Texts will be read in the original language, and instruction in the grammar, orthography and pronunciation of early medieval English will be provided.

*Prerequisite:* English 2210 and one of 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses.

### ENGL 3324 – Medieval Literature II: Literature in the Age of Chaucer

(3 credits) 3 hours lecture

This course examines a selection of representative texts produced during the Age of Chaucer (mid-fourteenth century to c. 1500), offering a variety of literary genres and diverse contexts. The texts will be read in the original language, with instruction in the grammar, orthography and pronunciation of Middle English provided.

*Prerequisite:* English 2210 and one of 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses.



### ENGL 3330 – Restoration and Eighteenth Century Literature I (formerly ENGL 4430)

(3 credits – TG) 3 hours lecture

Examining the first half of the Long Eighteenth Century, this course involves a study of the works of such writers as Pepys, Cavendish, Dryden, Montagu, Swift, Pope, Addison, Steele, Gay, Thomson, Gray, and the social and literary backgrounds that forged a new and lively literature of the Enlightenment.

*Prerequisite:* English 2210 or 2211 and one of English 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266 or 2267.

### ENGL 3331 – Restoration and Eighteenth Century Literature II (formerly ENGL 4431)

(3 credits – TG) 3 hours lecture

A continuation of English 3330, this course examines the literature from around 1750 to the end of the Long Eighteenth Century. Writers studied may include Boswell, Johnson, Cowper, Radcliffe, Edgeworth, Crabbe, Burney and Burns.

*Prerequisite:* English 2210 or 2211 and one of English 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266 or 2267.

*Recommended Preparation:* English 3330.

### ENGL 3340 – Romantic Literature I (formerly ENGL 4440)

(3 credits – TG) 3 hours lecture

This course examines British literature in the context of the various political and socio-economic changes from 1760 to 1815 and will familiarize students with key aspects of British Romanticism. Writers may include, among others, Wollstonecraft, Blake, Dorothy and William Wordsworth, Coleridge, and Austen.

*Prerequisite:* English 2210 or 2211 and one of English 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266 or 2267.

### ENGL 3341 – Romantic Literature II (formerly ENGL 4441)

(3 credits – TG) 3 hours lecture

A continuation of English 3340, this course examines British Romantic writers from 1815 to mid-century. Among others, writers studied may include Byron, Mary Shelley, Percy Shelley, Hemans, and Keats.

*Prerequisite:* English 2210 or 2211 and one of English 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266 or 2267.

### ENGL 3342 – Seventeenth-Century Literature I

(3 credits) 3 hours lecture

This course studies literature in the historical and social contexts of the late Elizabethan and Stuart periods until the Restoration. Readings may include texts by Donne, Herbert, Jonson, Lanyer, Wroth, and Herrick.

*Prerequisite:* English 2210 and one of 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses

### ENGL 3343 – Seventeenth-Century Literature II

(3 credits) 3 hours lecture

This course offers further study of literature in the historical and social contexts of the late Elizabethan and Stuart periods until the Restoration. Readings may include texts by Vaughan, Crashaw, Bradstreet, Philips, Marvell, and Milton.

*Prerequisite:* English 2210 and one of 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266, or 2267.

*Recommended Preparation:* Three 2000-level English courses.

### ENGL 3344 – Victorian Literature I: Studies in Social Realism and Social Reform (formerly ENGL 4444)

(3 credits – TG) 3 hours lecture

This advanced course examines British literature of the Victorian period (approximately 1830-1900) within a context of social critique exemplified primarily in narrative (fiction and poetry), but also non-fictional prose and drama. Writers studied include, among others, Carlyle, Tennyson, Mill, Dickens, Barrett-Browning, Eliot, and Hardy.

*Prerequisite:* English 2210 or 2211 and one of English 2202, 2203, 2207, 2245, 2263, 2264, 2265, 2266 or 2267.

**ENVS 4415 – Industrial Ecology Project**

(2 credits) 1 hour tutorial, 3 hours lab

Students will undertake an applied project in an area of industrial ecology under the supervision of a faculty member. Each student will be required to present the results of their project as a seminar.

*Prerequisite: Successful completion of Semesters 1, 2, 3, 4 and 5 of the Biogeochemical Stream courses or the Physical Processes Stream courses or equivalents or consent of the department.*

**ENVS 4417 – Design for the Environment**

(3 credits) 2 hours lecture, 3 hours lab

This course develops concepts and procedures to integrate and implement the vision of industrial ecology into business decisions. It will examine how leading-edge industrial ecology precepts can be implemented in the real world. The course will explore a systematic approach to support business decisions within the industrial ecology framework. Students will develop skills in incorporating environmental objectives and constraints into process and product design, materials and technology choices. Case studies will highlight DFE success stories. Project work will provide hands-on experience in the DFE field. The course will examine local, regional and global issues related to the design and redesign of industrial systems in order to make them more sustainable.

*Prerequisite: Successful completion of Semesters 1, 2, 3, 4, 5, 6 and 7 of the Biogeochemical Stream courses or Physical Processes Stream courses or equivalents or consent of the department.*

**ENVS 4419 – Regulatory Management**

(1 credit) 3 hours lab

Students will be introduced to the processes associated with Regulatory Management through case studies of relevant local, regional, national, and international laws, regulations, and treaties governing the environment. The understanding of the origins, current status, and future impacts of these studies will provide insight into the effects of environmental initiatives on the region, the province, Canada and in the international arena.

**ENVS 4423 – Market Based Initiatives**

(3 credits) 3 hours lecture

This course will examine the initiatives being taken by local, regional, and national governments, and the United Nations to encourage organizations to improve their environmental outcomes for economic reasons. Emission trading, the evolution of environmental law and its role in regulatory management, and the elements of ISO-14000 will be reviewed.

*Prerequisite: Mathematics 1200 and Industrial Ecology 2205 or equivalents or consent of the department.*

**ENVS 4431 – Management of Residuals**

(3 credits) 3 hours lecture

This course is designed to provide the students an understanding of the principles and concepts of waste management. Topics include: environmental chemistry of hazardous wastes, principles of industrial metabolism, waste disposal, health risks, regulatory aspects of residuals management, principles of industrial metabolism, optimization of materials.

*Prerequisite: Successful completion of Semester 1, 2, 3, 4 and 5 of the Biogeochemical Stream courses or equivalents or consent of the department.*

**ENVS 4433 – Quality Assurance/Quality Control**

(3 credits) 3 hours lecture, 3 hours lab

This course will examine the use of QA/QC procedures to the management of the quality aspects of data collection, generation and use. It will provide an overview of the legal framework within which the data collection, generation and use must operate. It will examine the relationship between QA/QC and legal concepts such as due diligence and strict liability.

*Prerequisite: Computer Science 1209 and Environmental Science 2205 or equivalents or consent of the department.*

**ENVS 4441 – Site System Remediation Design**

(3 credits) 3 hours lecture, 3 hours lab

This course will provide an in-depth technical and practical evaluation of remediation systems for contaminated sites.

*Prerequisite: Successful completion of Semesters 1, 2, 3, 4 and 5 of the Biogeochemical Stream courses or equivalents or consent of the department.*

**ENVS 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

**FINANCE (FNCE)****FNCE 2010 – Directed Field Studies I**

(15 credits)

This Directed Field Studies course requires students to work for an employer in a financial services position. The employer and placement must be approved by the work experience coordinator. The work placement will normally be completed over a four month period. Any deviation from this pattern must be approved by the work experience coordinator and the Faculty Advisor. Under no circumstances will a work-term consist of less than 450 hours of work. Students are typically employed by banks or financial service firms. Students must complete a series of research projects to relate their practical experience with their academic studies.

*Prerequisite: Finance 3201, 3203, 3205, 3207, 3301 and 3303. Successful completion of work experience PD sessions.*

**FNCE 2130 – Personal Finance**

(3 credits) 3 hours lecture

This course explores the importance of financial planning within the Canadian political and economic environment, enabling students to understand the principles and practices of managing personal finances. Students will develop an appreciation for financial planning, both in the short and long-term, including making informed decisions about personal budgeting, use of credit, insurance, taxation, investment alternatives, and other important considerations.

**FNCE 2132 – Introduction to the Stock Market**

(3 credits) 3 hours lecture

This course focuses on key principles of fundamental and technical analysis necessary to make successful investment decisions. Examined are key factors which influence various financial markets such as stocks, bonds and gold. Students will participate in a group stock market game by applying stock selection principles to construct a portfolio.

**FNCE 3010 – Directed Field Studies II**

(15 credits)

This Directed Field Studies course requires students to work for an employer in a financial services position. The employer and placement must be approved by the work experience coordinator. The work placement will normally be completed over a four month period. Any deviation from this pattern must be approved by the work experience coordinator and the Faculty Advisor. Under no circumstances will a work-term consist of less than 450 hours of work. Students are typically employed by banks or financial service firms. Students must complete a series of research projects to relate their practical experience with their academic studies.

*Prerequisite: Finance 2010 and successful completion of work experience PD sessions.*

**FNCE 3201 – Retirement Planning**

(3 credits) 4 hours lecture

This course provides a detailed look at how individuals plan for, and make financial decisions related to, retirement. It is designed to prepare the financial planner to provide guidance to clients on the retirement planning process, the various private and government pension plans, investment products for retirement, income tax implications, and the numerous strategies available to them. The course begins with an overview of retirement planning through case studies, followed by a detailed look at pensions. The characteristics of registered retirement plans will be examined to illustrate how they are used in accumulating funds for retirement. The taxation of retirement income will be examined, along with the tax planning opportunities that are available.

## GENERAL EDUCATION (GNED)

### **GNED 1101 – Scientific and Mathematical Literacy for the Modern World**

(3 credits ) 3 hours lecture

Students will expand their understanding of the intersections of mathematics, science and technology with daily life. The course will develop and apply critical thinking and scientific reasoning skills through the examination of issues drawn from the real world and current events.



### **GNED 1102 – Controversies in Science**

(3 credits ) 3 hours lecture

This course provides an introduction to scientific knowledge, its role in society, and the relationship between scientific inquiry and mathematics. Students will learn about the scientific method, the role of mathematics and statistics as reasoning tools, and how to research, evaluate, and write about science. Science controversies will be used as case studies.



### **GNED 1201 – Performing Arts in Popular Culture**

(3 credits) 3 hours lecture

This course explores and analyses the expression of human experience through the performing arts. Students will examine society through the window of the performing arts, and in doing so come to appreciate/understand the role of the performing arts as a mirror to society reflecting social values, a sense of personal identity and cultural diversity. Through the study of the performed arts students will develop an appreciation of their significance as expressions of human experience throughout history and across cultures.



### **GNED 1202 – Ideas that Matter; Special Topic: The Good Life**

(3 credits) 3 hours lecture

"Ideas that Matter" is a course that explores how specific ideas shape attitudes, belief systems, and values through the perspectives of various disciplines. Students will learn about the nature, origins and relevance of one or more complex concepts, such as beauty, mind, identity, modernity, or the good life.



### **GNED 1301 – Globalization**

(3 credits) 3 hours lecture

Students will gain an understanding of the impact and opportunities of globalization, as well as the barriers. A thorough discussion of the pros and cons of globalization will be included. The international environment will be introduced through a holistic analysis of political, economic, and cultural differences. International institutions and trading blocs will be discussed, and the factors contributing to cross-cultural effectiveness will be introduced.



### **GNED 1304 – Communities and Societies**

(3 credits) 3 hours lecture

Students will be guided to develop a richer awareness of the various communities and societies in which they live and participate. This interdisciplinary course will progressively examine family, communities of belonging, post-secondary education, the city, the province, the state, and global economic, political and cultural concentric systems.



### **GNED 1401/ENGL 1101 – Critical Writing and Reading**

(3 credits – TG) 4 hours lecture

This foundational composition course offered by the department of English focuses on effective writing styles for academic and wider social contexts. Students will respond to texts pertaining to a variety of disciplines and develop critical reading and thinking skills. Students will also refine their understanding and practice of the structures of writing.



*Prerequisite: English Language Arts 30-1 or equivalent with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.*

### **GNED 1402 – Writing for the Professions**

(3 credits – TG) 3 hours lecture

This course presents the principles and techniques of writing for the professions. The course provides students with an opportunity to develop skills in written and oral communication and to critically analyse documents and genres commonly used in various professions. Practice in a variety of writing situations encountered by professionals such as correspondence, proposals, documented research reports, abstracts, definitions, product and process descriptions is provided.



*Prerequisite: English 30 or the equivalent*

**Note:** Writing for the Professions is open to students with credit in English 30 or its equivalent, with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.

### **GNED 2301 – Wellness and the Student: From Personal Health to Community Action**

(3 credits) 3 hours lecture

This course provides an introduction and overview to aspects of holistic health and wellness and highlights strategies for promoting well-being. Utilizing a mix of theory and application, students will gain an understanding of individual well-being and the interconnectivity between individual well-being and the well-being of families and communities. Students will also explore community actions that impact health and well-being.



### **GNED 3104 – How Things Work: The Physics of Everyday Technology**

(3 credits) 3 hours lecture, 1 hour tutorial

Students will use the technology they use every day to learn a broad range of concepts in physics. The operation of devices including light bulbs, air conditioners, automobiles, motors, microwaves, LEDs, DVDs, cameras and iPods will be used to illustrate topics such as heat, thermodynamics, electricity, and light. Some modern applications such as medical imaging and nanotechnology will also be covered



*Prerequisite: General Education 2104.*

### **GNED 3302 – Wellness and the Student: From Community Health to Global Action**

(3 credits) 3 hours lecture

This course introduces how personal wellness impacts family and community health and highlights strategies for promoting global well-being. Utilizing a mix of theory and application, students gain an understanding of the interconnectivity of family and community well-being to global health. Students also explore individual, community and global actions that impact global health and well-being.





### **ENVS 4423 – Market Based Initiatives**

(3 credits) 3 hours lecture

This course will examine the initiatives being taken by local, regional, and national governments, and the United Nations to encourage organizations to improve their environmental outcomes for economic reasons. Emission trading, the evolution of environmental law and its role in regulatory management, and the elements of ISO-14000 will be reviewed.

*Prerequisite: Mathematics 1200 and Industrial Ecology 2205 or equivalents or consent of the department.*

### **ENVS 4431 – Management of Residuals**

(3 credits) 3 hours lecture

This course is designed to provide the students an understanding of the principles and concepts of waste management. Topics include: environmental chemistry of hazardous wastes, principles of industrial metabolism, waste disposal, health risks, regulatory aspects of residuals management, principles of industrial metabolism, optimization of materials.

*Prerequisite: Successful completion of Semester 1, 2, 3, 4 and 5 of the Biogeochemical Stream courses or equivalents or consent of the department.*

### **ENVS 4433 – Quality Assurance/Quality Control**

(3 credits) 3 hours lecture, 3 hours lab

This course will examine the use of QA/QC procedures to the management of the quality aspects of data collection, generation and use. It will provide an overview of the legal framework within which the data collection, generation and use must operate. It will examine the relationship between QA/QC and legal concepts such as due diligence and strict liability.

*Prerequisite: Computer Science 1209 and Environmental Science 2205 or equivalents or consent of the department.*

### **ENVS 4441 – Site System Remediation Design**

(3 credits) 3 hours lecture, 3 hours lab

This course will provide an in-depth technical and practical evaluation of remediation systems for contaminated sites.

*Prerequisite: Successful completion of Semesters 1, 2, 3, 4 and 5 of the Biogeochemical Stream courses or equivalents or consent of the department.*

### **ENVS 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **FINANCE (FNCE)**

### **FNCE 2010 – Directed Field Studies I**

(15 credits)

This Directed Field Studies course requires students to work for an employer in a financial services position. The employer and placement must be approved by the work experience coordinator. The work placement will normally be completed over a four month period. Any deviation from this pattern must be approved by the work experience coordinator and the Faculty Advisor. Under no circumstances will a work-term consist of less than 450 hours of work. Students are typically employed by banks or financial service firms. Students must complete a series of research projects to relate their practical experience with their academic studies.

*Prerequisite: Finance 3201, 3203, 3205, 3207, 3301 and 3303. Successful completion of work experience PD sessions.*

### **FNCE 2130 – Personal Finance**

(3 credits) 3 hours lecture

This course explores the importance of financial planning within the Canadian political and economic environment, enabling students to understand the principles and practices of managing personal finances. Students will develop an appreciation for financial planning, both in the short and long-term, including making informed decisions about personal budgeting, use of credit, insurance, taxation, investment alternatives, and other important considerations.



### **FNCE 2132 – Introduction to the Stock Market**

(3 credits) 3 hours lecture

This course focuses on key principles of fundamental and technical analysis necessary to make successful investment decisions. Examined are key factors which influence various financial markets such as stocks, bonds and gold. Students will participate in a group stock market game by applying stock selection principles to construct a portfolio.



### **FNCE 3010 – Directed Field Studies II**

(15 credits)

This Directed Field Studies course requires students to work for an employer in a financial services position. The employer and placement must be approved by the work experience coordinator. The work placement will normally be completed over a four month period. Any deviation from this pattern must be approved by the work experience coordinator and the Faculty Advisor. Under no circumstances will a work-term consist of less than 450 hours of work. Students are typically employed by banks or financial service firms. Students must complete a series of research projects to relate their practical experience with their academic studies.

*Prerequisite: Finance 2010 and successful completion of work experience PD sessions.*

### **FNCE 3201 – Retirement Planning**

(3 credits) 4 hours lecture

This course provides a detailed look at how individuals plan for, and make financial decisions related to, retirement. It is designed to prepare the financial planner to provide guidance to clients on the retirement planning process, the various private and government pension plans, investment products for retirement, income tax implications, and the numerous strategies available to them. The course begins with an overview of retirement planning through case studies, followed by a detailed look at pensions. The characteristics of registered retirement plans will be examined to illustrate how they are used in accumulating funds for retirement. The taxation of retirement income will be examined, along with the tax planning opportunities that are available.

### **FNCE 3203 – Income Tax Planning**

(3 credits) 4 hours lecture

This course is designed to help financial planners build the knowledge and judgement necessary to guide clients in managing their business and financial assets. The course examines how various business forms (including proprietorships, partnerships, and corporations) are structured and taxed, and how they can be used to generate wealth for the owner/manager or the passive investor. It reviews the taxation of employment income and benefits, with an emphasis on ways to increase an individual's compensation without necessarily increasing his/her taxable income. This course also explores the taxation of investment income, including property income, interest, dividends and capital gains, and reviews the main deductions available for various income sources. This is followed by a discussion of how an individual can make use of the different tax strategies available to maximize his or her wealth accumulation.

### **FNCE 3205 – Strategic Investment Planning**

(3 credits) 4 hours lecture

This course examines the theory and various strategies underlying decisions in the area of strategic investment planning. Among the instruments described are guaranteed, interest-producing investments; bonds and debentures; mutual funds and financial derivatives. Methods of fundamental and technical analysis of potential investments are discussed, as well as real estate and tax shelters.

### **FNCE 3207 – Risk Management and Estate Planning**

(3 credits) 4 hours lecture

This course provides a detailed look at the risk management process and the insurance products that are available to manage risk. It examines the risks of disability, death, and property and liability losses. Students will study the legal requirements of insurance policies and the application of the risk management process. This course also covers the estate planning process. It addresses the tools of estate planning, including property interests, family law, intestacy, probate, wills, powers of attorney, taxation upon death, trust and estate freezes. It then examines special considerations in estate planning such as non-traditional families or household units.

## GEOGRAPHY (GEOG)

### GEOG 1101 – The Physical Environment (formerly GEOG 2211)

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is an introduction to the physical elements of the environment. Topics include: weather, climate, hydrology, landforms, soils, vegetation, and the processes producing variations of these elements on the surface of the earth. Examples of environmental inter-relationships and problems that affect humanity are emphasized.



### GEOG 1102 – World Regional Geography (formerly GEOG 2213)

(3 credits – TG) 3 hours lecture

The major cultural regions of the world are introduced in this course. Emphasis is placed on cultural characteristics, including population, political situation, economy, language, and religion, as well as the physical environment, including landforms and climate, that make regions distinctive. Historical developments provide context for understanding regional features. This course provides the background for understanding current world affairs.



### GEOG 1103 – The Human Environment (formerly GEOG 2251)

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is the study of societies and cultures; their economies, technologies and political systems as these influence human use of physical and natural environments. The course concentrates on human/environment interrelationships and the manner in which humans attempt to impose order upon the surface of the earth. Some emphasis will be placed on student projects in the laboratories.



### GEOG 1105 – Introduction to Mapping, GIS and Remote Sensing (formerly GEOG 2231)

(3 credits – TG) 3 hours lecture, 3 hours lab

This course covers three key areas of geographical techniques: 1) an introduction to topographic and thematic maps, map projections, and map design and layout; 2) the use of geographic information systems to manipulate and visualize data and; 3) an introduction to digital imagery and remote sensing. This course utilizes descriptive statistics and includes a hands-on applied computer component.



### GEOG 2107 – Weather and Climate (formerly GEOG 3305)

(3 credits – TG) 3 hours lecture, 2 hours lab

This course involves the study of physical principles of meteorology and climatology. Air masses and fronts, mid-latitude depressions, small and large-scale storms, atmospheric-oceanic coupled circulations, and human-induced climate change are among the topics presented. The characteristics and distributions of climates are explored. Laboratory work emphasizes North American examples.

*Prerequisite: Geography 1101 or consent of the department.*

### GEOG 2109 – Soil Characteristics and Formation (formerly GEOG 3313)

(3 credits – TG) 3 hours lecture, 3 hours lab

This course includes a study of the physical, chemical and biological characteristics of soils, and the processes and factors of soil formation. Laboratory work will include the analysis of soil samples gathered during weekend field trips.

*Prerequisite: Geography 1101 or Geology 1101 or 1109 or consent of the department.*

### GEOG 2111 – Landform Processes and Morphology (formerly GEOG 3307)

(3 credits – TG) 3 hours lecture, 2 hours lab

This course involves a systematic study of the origin, nature and distribution of landforms. Laboratory work will include geomorphic interpretation of maps and air photographs. Weekend field trips are possible in this course.

*Prerequisite: Geography 1101 or Geology 1101, 1103 or 1109.*

### GEOG 2225 – Regional Geography of Canada (formerly GEOG 3381)

(3 credits – TG) 3 hours lecture

This course involves a regional geography approach to the study of Canada. Included is the study of the physical framework of Canada and its significance in Canada's historical development. The concept of geographic regions, and the patterns and characteristics of these regions are explored using selected detailed studies.

*Recommended Preparation: A previous course in Geography*

### GEOG 2230 – Regional Geography of Europe

(3 credits) 3 hours lecture

This course will explore Europe's regional geography, its physical setting, its human geography (history, demography, economics, politics, culture), and its environmental challenges. Students will be exposed to the internal and external forces that bind the continent's various parts together and the social geographic factors that pull them apart. Special emphasis will be placed on contemporary Europe in the era of globalization and the deepening and widening of the European Union.

*Recommended preparation: A previous course in Geography*

### GEOG 2333 – Economic Geography (formerly GEOG 3341)

(3 credits – TG) 3 hours lecture

This course provides a survey of the basic elements of economic geography. Included is the study of the environmental, economic, social and technological influences on the distribution of economic activities. Special reference is made to economic development, multinational corporations and newly industrializing economies.

*Recommended Preparation: Geography 1103.*

*Note: This course transfers as a senior Geography course to the University of Calgary and to other post-secondary institutions.*

### GEOG 2335 – Introduction to Urban Geography (formerly GEOG 3351)

(3 credits – TG) 2 hours lecture, 1 hour tutorial

This course introduces the topic of cities, focusing on the history of the urban environment and culture, and urban issues and sustainability from a geographical point of view. Major cities of the world and local examples will be studied.

*Prerequisite: Geography 1103 or consent of the department.*

### GEOG 2337 – Political Geography (formerly GEOG 3365)

(3 credits – TG) 3 hours lecture

Students will be instructed in the influence of physical and cultural landscapes on politics, and the influence of politics on the landscape. Topics of study include globalization, regionalism, terrorism, war and disputed territory. The political response to global environmental issues, and the politics of poverty and development are also discussed in this course.

*Prerequisite: A previous Geography course or consent of the department.*

### GEOG 2437 – Biogeography

(3 credits-TG) 3 hours lecture

Biogeography is the study of the spatial and temporal distribution of biota. As practiced by geographers, biogeography is closely related to biology, ecology and environmental science with an emphasis on systems and spatial analysis. This course uses a foundation of evolutionary theory and science that forms the basis for thinking critically about contemporary human uses of plants, animals and other biota. Further, the course will explore themes related to human adaptation and impacts in response to the evolution of the biosphere.

*Recommended preparation: A previous course in Geography.*

### GEOG 2443 – Tourism and Recreation Geography (formerly GEOG 3327)

(3 credits – TG) 3 hours lecture

This course involves the study of: dimensions of tourism and recreation, scales and impacts of human activities on recreational resources and environments, planning for sustainable tourism, cultural and heritage tourism, nature-based and ecotourism, and development and management issues.

*Recommended Preparation: Geography 1101 or 1103.*



## **GNED 1202 – Ideas that Matter; Special Topic: The Good Life**

(3 credits) 3 hours lecture

"Ideas that Matter" is a course that explores how specific ideas shape attitudes, belief systems, and values through the perspectives of various disciplines. Students will learn about the nature, origins and relevance of one or more complex concepts, such as beauty, mind, identity, modernity, or the good life.



## **GNED 1301 – Globalization**

(3 credits) 3 hours lecture

Students will gain an understanding of the impact and opportunities of globalization, as well as the barriers. A thorough discussion of the pros and cons of globalization will be included. The international environment will be introduced through a holistic analysis of political, economic, and cultural differences. International institutions and trading blocs will be discussed, and the factors contributing to cross-cultural effectiveness will be introduced.



## **GNED 1304 – Communities and Societies**

(3 credits) 3 hours lecture

Students will be guided to develop a richer awareness of the various communities and societies in which they live and participate. This interdisciplinary course will progressively examine family, communities of belonging, post-secondary education, the city, the province, the state, and global economic, political and cultural concentric systems.



## **GNED 1401/ENGL 1101 – Critical Writing and Reading**

(3 credits – TG) 4 hours lecture

This foundational composition course offered by the department of English focuses on effective writing styles for academic and wider social contexts. Students will respond to texts pertaining to a variety of disciplines and develop critical reading and thinking skills. Students will also refine their understanding and practice of the structures of writing.

*Prerequisite: English Language Arts 30-1 or equivalent with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.*



## **GNED 1402 – Writing for the Professions**

(3 credits – TG) 3 hours lecture

This course presents the principles and techniques of writing for the professions. The course provides students with an opportunity to develop skills in written and oral communication and to critically analyse documents and genres commonly used in various professions. Practice in a variety of writing situations encountered by professionals such as correspondence, proposals, documented research reports, abstracts, definitions, product and process descriptions is provided.

*Prerequisite: English 30 or the equivalent*

**Note:** Writing for the Professions is open to students with credit in English 30 or its equivalent, with a grade of 60% or higher, or English 0212 with a grade of "C" or higher.



## **GNED 2301 – Wellness and the Student: From Personal Health to Community Action**

(3 credits) 3 hours lecture

This course provides an introduction and overview to aspects of holistic health and wellness and highlights strategies for promoting well-being. Utilizing a mix of theory and application, students will gain an understanding of individual well-being and the interconnectivity between individual well-being and the well-being of families and communities. Students will also explore community actions that impact health and well-being.



## **GNED 3104 – How Things Work: The Physics of Everyday Technology**

(3 credits) 3 hours lecture, 1 hour tutorial

Students will use the technology they use every day to learn a broad range of concepts in physics. The operation of devices including light bulbs, air conditioners, automobiles, motors, microwaves, LEDs, DVDs, cameras and iPods will be used to illustrate topics such as heat, thermodynamics, electricity, and light. Some modern applications such as medical imaging and nanotechnology will also be covered

*Prerequisite: General Education 2104.*



## **GNED 3302 – Wellness and the Student: From Community Health to Global Action**

(3 credits) 3 hours lecture

This course introduces how personal wellness impacts family and community health and highlights strategies for promoting global well-being. Utilizing a mix of theory and application, students gain an understanding of the interconnectivity of family and community well-being to global health. Students also explore individual, community and global actions that impact global health and well-being.



## **GEOGRAPHY (GEOG)**

### **GEOG 1101 – The Physical Environment (formerly GEOG 2211)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is an introduction to the physical elements of the environment. Topics include: weather, climate, hydrology, landforms, soils, vegetation, and the processes producing variations of these elements on the surface of the earth. Examples of environmental inter-relationships and problems that affect humanity are emphasized.



### **GEOG 1102 – World Regional Geography (formerly GEOG 2213)**

(3 credits – TG) 3 hours lecture

The major cultural regions of the world are introduced in this course. Emphasis is placed on cultural characteristics, including population, political situation, economy, language, and religion, as well as the physical environment, including landforms and climate, that make regions distinctive. Historical developments provide context for understanding regional features. This course provides the background for understanding current world affairs.



### **GEOG 1103 – The Human Environment (formerly GEOG 2251)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is the study of societies and cultures; their economies, technologies and political systems as these influence human use of physical and natural environments. The course concentrates on human/environment interrelationships and the manner in which humans attempt to impose order upon the surface of the earth. Some emphasis will be placed on student projects in the laboratories.



### **GEOG 1105 – Introduction to Mapping, GIS and Remote Sensing (formerly GEOG 2231)**

(3 credits – TG) 3 hours lecture, 3 hours lab

This course covers three key areas of geographical techniques: 1) an introduction to **topographic and thematic maps, map projections**, and map design and layout; 2) the use of geographic information systems to manipulate and visualize **data** and; 3) an introduction to digital imagery and remote sensing. This course utilizes descriptive statistics and includes a hands-on applied computer component.



**HIST 2202 – The Historian's Craft (formerly HIST 3301)**

(3 credits – TG) 3 hours lecture

The Historian's Craft is an introduction to history as a distinct field of study. It aims to help students understand what history is, what it means to be a historian, and how to write history. The course is intended primarily but not exclusively for history majors in order to prepare them for the advanced study of history in upper-division courses.

*Prerequisite:* Any one of the following courses: History 1101, 1103, 1111, 1117, 1119, 1131, or 1133

**HIST 2205 – Health, Disease and Medicine in Western Society (formerly HIST 3305)**

(3 credits – TG) 3 hours lecture

This survey course in the social history of medicine focuses on the "medical revolution" of the nineteenth century. Topics include epidemics, mental illness, the development of the medical profession, and the role of medicine in culture and society.

*Recommended Preparation:* Any 1000-level History course.

**HIST 2207 – Histories of Western Sexualities (formerly HIST 3307)**

(3 credits – TG) 3 hours lecture

Histories of Western Sexualities aims to help students understand that, contrary to our intuitive understanding, sexuality – both our sexual practices and our attitudes towards sexuality – have varied enormously over time and between cultures – that is, our sexuality is "historically contingent" and "socially constructed". Given the enormity of the subject, the course will focus on sexuality in Western cultural experience and the topics covered will vary from semester to semester.

**HIST 2218 – Women in Industrial Europe, 1750 to the Present (formerly HIST 3317)**

(3 credits – TG) 2 hours lecture, 1 hour tutorial

A senior course designed as an introduction to European women's history focussing on women's experience in Britain, France and Germany since 1750. Some of the central themes which will be examined include: women and work; the family; sexuality and motherhood; ideology and the state; feminism and political action; and women, war and revolution.

*Recommended Preparation:* Any 1000-level History course.

**HIST 2228 – Alberta: Past and Present (formerly HIST 3328)**

(3 credits – TG) 3 hours lecture

This course provides a study of Alberta's past and present with emphasis on urbanization, agriculture and industry, political developments, outstanding personalities and cultural growth.

*Recommended Preparation:* Any 1000-level history course.

**Note:** Students who take both History 2228 and 2247 can obtain credit for Athabasca University HIST A338. Students may not, however, count History 2228 more than once.

**HIST 2229 – Early Modern Europe, 1453-1789**

(3 credits) 3 hours lecture

This course explores the social, political, and cultural history of Europe from the Renaissance to the eve of the French Revolution. Social and cultural changes are considered within the contexts of religious innovation and conflict, the development of capitalism, the rise of the modern state, and the impacts of global exploration and colonialism.

**HIST 2232 – Canadian Social History (formerly HIST 3331)**

(3 credits – TG) 3 hours lecture

This course focuses on the history of Canadians in a number of spaces such as home, workplace and recreational settings. A variety of topics such as religion, education, health, crime and punishment, the arts, and popular culture may be examined, as may issues such as race and ethnicity, gender and sexuality, regional identity and class.

*Recommended Preparation:* History 1131 or 1133.

**Note:** Students who take both Canadian Studies 1131 and History 2232 can obtain credit for Athabasca University HIST 329. Students may not, however, count History 2232 more than once.

**HIST 2237 – Modern European Intellectual History (formerly HIST 3337)**

(3 credits – TG) 3 hours lecture

This historical survey covers the ideas and thinkers of the period 1800-1930 that shaped the modern twentieth century world-view.

*Recommended Preparation:* Any 1000-level History course.

**HIST 2239 – European Nationalism in the Age of the Nation-State (formerly HIST 3339)**

(3 credits – TG) 3 hours lecture

This course examines the history of nationalism in Europe between 1780 and 1990. Two separate but related themes will be pursued: how the nation-state emerged as the dominant form of geo-political organization in Europe, and how nationalism confronted and was adapted to circumstances and rival ideologies. Topics may include popular sovereignty and nationalism in revolutionary and Napoleonic Europe liberal nationalism; the Vienna settlement and the revolutions of 1848; the unification of Italy and Germany; the decay of Europe's multi-national empires; racism, anti-Semitism, and national identity; nationalism and totalitarianism; communism and the nationality question; internationalism since 1945.

**HIST 2241 – Britain in the Nineteenth Century (formerly HIST 3341)**

(3 credits – TG) 3 hours lecture

This course will examine the history of Great Britain in the nineteenth century. Beginning with the struggles against Revolutionary and Napoleonic France, and ending with the death of Queen Victoria in 1901, the course will examine Britain's development as the world's leading industrial and imperial power, and the political, social and cultural changes associated with Victorianism. The central themes of the course may include reform and repression in British political life; responses to industrialization; Victorian thought and culture; and the changing face of imperial development.

**HIST 2243 – Europe in the Nineteenth and Twentieth Centuries**

(3 credits) 3 hours lecture

This course examines the history of Europe between 1789 and 1989. This period is distinguished by transformations in virtually every area of human life; the creation and destruction of a European-dominated world order; the rise, spread and collapse of communism; increasingly destructive spasms of organized violence; and ongoing efforts at collective identity formation.

**HIST 2247 – Western Canada (formerly HIST 3347)**

(3 credits – TG) 3 hours lecture

An historical approach to the study of Western Canada. Topics include: native peoples, European exploration and settlement, rural and urban society, social and political reform, the New West, and gender and culture.

*Recommended Preparation:* History 1131 and/or 1133.

**Note:** Students who take both History 2228 and 2247 can obtain credit for Athabasca University HIST 338. Students may not, however, count History 2247 more than once.

**HIST 2255 – Immigration, Ethnicity, and Race in the United States (formerly HIST 3355)**

(3 credits – TG) 3 hours lecture

This course studies the ways immigrants to the US and their descendants created and preserved community and identity at work, in politics, and in social relations. The course also examines the ways dominant groups responded to immigration and migration. The creation of and changes in racial and ethnic identities are central themes of the course.



## LATIN AMERICAN CULTURES (LAST)

### LAST 1101 – Introduction to Contemporary Latin American Cultures

(3 credits) 3 hours lecture

This course provides an overview of Latin American regional similarities and cultural differences through the study of contemporary indigenous peoples, the Iberian heritage and contemporary national cultures. Students will explore many forms of artistic expression, including literature, architecture and popular culture. The aim is the development of cultural understanding of the various societies in Hispanic America.



### LAST 2201 – Cultures of South America

(3 credits) 3 hours lecture

This course is a continuation of Introduction to Contemporary Latin American Cultures 1101. It offers a more in-depth study of the societies in South America from a Latin American perspective. Students will explore and analyse a variety of cultural contexts and forms of expression.

*Prerequisite: Latin American Cultures 1101*

### LAST 2202 – Cultures of Mexico, Central America and the Caribbean

(3 credits) 3 hours lecture

This course is a continuation of Introduction to Contemporary Latin American Cultures 1101. It offers a more in-depth study of the societies of Mexico, Central America and the Caribbean from a Latin American perspective. Students will explore and analyse a variety of cultural contexts and forms of expression.

*Prerequisite: Latin American Cultures 1101*

## LINGUISTICS (LING)

### LING 1111 – The Nature of Language I (formerly LING 2211)

(3 credits – TG) 3 hours lecture

This course provides a survey of the field of theoretical linguistics: its content, techniques, and objectives through the solution of problems from selected languages. Topics include articulatory phonetics and phonology; words and their meaning; and the formation of sentences.



### LING 1113 – The Nature of Language II (formerly LING 2213)

(3 credits – TG) 3 hours lecture

This course provides a survey of the field of applied linguistics; its content, techniques, and objectives. Topics include language in historical and social context; language change and variation; language families; writing systems; language acquisition; and psycholinguistics.

*Prerequisite: Linguistics 1111.*



### LING 2201 – Syntax I

(3 credits) 3 hours lecture

This course provides an overview of the theory and methodology of syntactic analysis, using English as a primary example. Topics will include syntactic categories, grammatical, thematic and structural relations, and syntactic movement.

*Prerequisite: Linguistics 1111 with a minimum grade C-*

### LING 2207 – Second Language Acquisition (formerly LING 3311)

(3 credits) 3 hours lecture

This course offers an overview of linguistic perspectives on second language acquisition and their implications for second language teaching. Topics will include: the nature of language proficiency; language and the mind; and the roles of first language and universal grammar in learning a second language.

*Prerequisite: Linguistics 1113.*



### LING 2221 – Modern English Grammar (formerly LING 3321)

(3 credits – TG) 3 hours lecture

A comprehensive exploration of contemporary English. The course is based on modern linguistic analysis, but also includes traditional grammatical terminology, as well as language change, attitudes to language varieties and problems in usage.



### LING 2231 – First Language Acquisition (formerly LING 3331)

(3 credits – TG) 3 hours lecture

An overview of major issues and developmental patterns in child language acquisition.

*Prerequisite: Linguistics 1111, 1113 (may be corequisite) or Psychology 1105 or equivalent.*



### LING 3371 – Introduction to Psycholinguistics

(3 credits – TG) 3 hours lecture

An introduction to the field of Psycholinguistics; its findings, research orientations and methodologies.

*Prerequisite: Linguistics 1111 or 1113.*



### LING 1199 – Directed Readings

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## LOGISTICS AND SUPPLY CHAIN MANAGEMENT (LSCM)

### LSCM 2010 – Directed Field Studies I

(15 credits)

This Directed Field Studies course requires students to be employed in a logistics or supply chain management position. The employer and placement must be approved by the work experience coordinator and the position must consist of at least 450 hours of work. Students will typically work in a supply chain function for an organization or in a company specializing in transportation, distribution, or logistics. Under the supervision of a faculty advisor, students must complete a series of applied research projects to relate their practical experience with their academic studies.

*Prerequisite: Accounting 2121, Logistics and Supply Chain Management 2201, 3203 or 2203, 3303, 3305 and 3307. Successful completion of work experience professional development sessions.*

### LSCM 2201 – Introduction to Logistics and Supply Chain Management

(3 credits) 3 hours lecture

This course provides an overview of the importance of logistics and the supply chain process in determining the competitive success of an organization. Students will be introduced to the various components of the supply chain and their logistical requirements. Topics to be surveyed in this course include value process management, transportation management, purchasing, inventory management, demand forecasting, materials and warehouse management, enterprise resource planning (ERP), supply chain information systems, production and operations management, e-commerce, customer and supplier relations, quality assurance, outsourcing, third-party logistics and global productions.

### LSCM 3010 – Directed Field Studies II

(15 credits)

This Directed Field Studies course requires students to be employed in a logistics or supply chain management position. The employer and placement must be approved by the work experience coordinator and the position must consist of at least 450 hours of work. Students will typically work in a supply chain function for an organization or in a company specializing in transportation, distribution, or logistics. Under the supervision of a faculty advisor, students must complete a series of applied research projects to relate their practical experience with their academic studies.

*Prerequisite: Logistics and Supply Chain Management 2010, 4402 or 4401 and 4405, and 4403 or consent of the department. Successful completion of work experience professional development sessions.*

### **LSCM 3203 – Principles of Quality Management**

(3 credits) 3 hours lecture

This course provides an introduction to basic concepts, processes, and issues in quality management practices with respect to services, goods and information. Topics include planning, organizing and controlling for quality; the human aspects of quality; quality assurance and purchasing; ISO standards; and, continuous improvement and reengineering.

*Prerequisite: Management 2262, and Marketing 2150, or consent of the department.*

### **LSCM 3301 – Introduction to Physical Distribution**

(3 credits) 3 hours lecture

The challenge of logistics is ensuring that the right products reach the right destination in the right condition, and at the right time. This course provides an overview of the various transportation modes and procedures in Canada. Topics include modes of transportation and intermodalism, intermediate agencies, and distribution methods such as warehousing, materials handling and unitization.

### **LSCM 3303 – Fundamentals of Purchasing**

(3 credits) 3 hours lecture

Organizations are recognizing the value of purchasing beyond the basic transactional level. This course introduces students to the principles of purchasing, while addressing the impacts of technology, supply chain management and business strategy on purchasing in today's business environment. Other topics include procurement planning and procedures and supplier relations.

### **LSCM 3305 – Physical Distribution and Logistics**

(3 credits) 3 hours lecture

Logistics and transportation are critical links in today's supply chain. Building on the fundamentals addressed in LSCM 3301, this course explores the concepts of physical distribution and logistics, as well as addressing the specific areas of contracts, loss and damage, dangerous goods, marine insurance, Canada Customs, international trade and the transportation regulatory environment.

*Prerequisite: Logistics and Supply Chain Management 3301.*

### **LSCM 3307 – Introduction to E-Business**

(3 credits) 3 hours lecture

This course examines the impact technological changes have made on the face of business. This course encompasses Internet technology, the nature of e-business competition, and underlying economics of e-business to provide a comprehensive look at how businesses survive and thrive on the Internet. Topics include web and Internet fundamentals, e-business models, customer interface, and marketing and e-business strategy.

*Prerequisite: Marketing 2150 or consent of the department.*

### **LSCM 4402 – Inventory and Warehouse Management**

(3 credits) 3 hours lecture

Through the application of sound materials management principles, students will be equipped to develop and implement strategic inventory and warehousing plans. The course is broken into two components; inventory management and warehouse management. Inventory management topics include inventory functions, demand forecasting, aggregate and production planning, master production and materials requirements planning, and lean or JIT inventory management. Warehouse management topics include facility layout, retrieval technologies, performance benchmarking, safety, security, and risk management.

*Prerequisite: Marketing 2150, Management 2263 and Logistics and Supply Chain Management 3303, or consent of the department.*

### **LSCM 4403 – Operations Management**

(3 credits) 3 hours lecture

This course is a survey of the decision processes in production and operations management, and the relationship to other business areas. Topics covered include forecasting, product and service design, capacity planning, waiting line models, facility location and layout, process selection, design of work systems, linear optimization, quality inspection and control, life cycle management, inventory management, aggregate planning, material requirements planning, project operations management, and operations scheduling.

*Prerequisite: Management 2263.*

### **LSCM 4407 – Business Negotiations/Project Management**

(3 credits) 3 hours lecture

This course provides an overview of the basic principles of interest-based bargaining and project management. The first part of the course will focus on the basics of interest-based bargaining and how those skills can be applied to supply chain management in a global environment. The second part of the course focuses on the input/output tools and techniques necessary to take a project from inception to completion. The students will also learn how to operate project management software for budgeting and scheduling purposes.

*Prerequisite: Management 3230 and Management 3276, or consent of the department.*

### **LSCM 4409 – Supply Chain Decision-Making**

(3 credits) 3 hours lecture

Participants in this course will solve various applied business problems in logistics and supply chain management. Emphasis will be on the application of critical evaluation and judgment, together with skills from the foundation disciplines in prerequisite courses, to formulate innovative business solutions for integrated case study scenarios.

*Prerequisite: Accounting 2121, Marketing 2150, Finance 3227, Management 3276, Logistics and Supply Chain Management 4402 or ~~4401 and 4405~~; and 4403 or consent of the department.*

### **LSCM 4411 – Integrated Business Solutions**

(3 credits) 3 hours lecture

This course demonstrates how to apply selected information technologies for supply chain management. Emphasis will be upon identifying, assessing and using the best available software to enable enhanced performance within an overall enterprise based systems environment. Participants will be exposed to a menu of commonly used software applications including Enterprise Resource Planning tools, transactional e-commerce packages, inventory management systems, materials supply and purchasing tools, planning and scheduling packages, demand forecasting and collaborative supply chain applications.

*Prerequisite: Logistics and Supply Chain Management 3305, 3307, and 4402 or consent of the department.*

## **MANAGEMENT (MGMT)**

### **MGMT 2130 – Management Principles and Practices**

(3 credits – TG) 3 hours lecture

This course is a comprehensive and practical study of the major functions that comprise management processes, and the constraints within which the manager must operate. The focus (through the use of case studies and experiential exercises) is on how to perform these functions in an ethical and socially responsible manner to maximize productivity within the constraints of the organizational environment. A strong emphasis is put on understanding and identifying ethical dilemmas in the business world.

### **MGMT 2131 – Introduction to Business Administration**

(3 credits – TG) 3 hours lecture

This course introduces the functional areas of business and the integration of these areas for effective and efficient operation of organizations in a variety of sectors. Emphasis is placed on effective team work skills, research skills, and decision-making skills.



### **MGMT 2262 – Business Statistics I**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course introduces descriptive and inferential statistical analysis while emphasizing thinking skills and computer literacy. Topics include descriptive statistics, probability theory, simple random samples, discrete and continuous random variables, the central limit theorem, confidence intervals, and hypothesis testing. This course will emphasize the application of statistical analysis to business situations, the understanding of which will be further enhanced through exposure to current statistical computer software.

### MICH 4407 – Critical Moments

(6 credits – TG) Distance Delivery

This course uses an adaptation-development framework to examine selected critical moments that may occur in the perinatal, neonatal populations. A critical moment is defined as the culmination of events that influences the patient to diverge from a trajectory toward health. For example, childbirth and the recovery phase are considered as critical moments in the perinatal period. Students will focus on one of the two patient populations. Students in the neonatal stream will also focus on the therapeutic modalities that promote the neonate's return to homeostasis.

*Pre- or Corequisite: Maternal Infant Child Healthcare 4401, 4403, 4405 or approval of department chair.*

### MICH 4411 – Advanced Decision-Making in Neonatal Intensive Care

(3 credits – TG) Distance Delivery

This course focuses on professional development and nursing practice in the Neonatal Intensive Care Unit. Theory related to advanced assessment, problem identification and intervention will be examined with particular emphasis on newborn resuscitation and stabilization.

*Prerequisite: Maternal Infant Child Healthcare 4401, 4403, 4405, 4407 and 4491 or approval of department chair. The student must have maintained a focus on the neonatal population throughout their studies in the Maternal Infant Child Healthcare program.*

**Note:** Students may register for this course only, providing they successfully complete a pretest and submit evidence of prior learning.

### MICH 4491 – Neonatal Clinical Experience

(6 credits – TG) 210 hours clinical practice

Students will be provided with the opportunity to integrate and apply knowledge of assessment, homeostasis, and adaptation to the neonate in a variety of clinical settings including Special Care Nursery, Level 3 Intensive Care and the community. With the approval and assistance of the program faculty, students will select a clinical experience that best meets their program objectives.

*Pre- or Corequisite: Maternal Infant Child Healthcare 4401, 4403, 4405 and 4407 and approval of the department. Respiratory Therapists must substitute Maternal Infant Child Healthcare 4409 for 4405.*

**Note:** This is an instructor-guided preceptored experience.

### MICH 4493 – Perinatal Nursing Clinical Experience

(6 credits – TG) 210 hours clinical practice

Students will be provided with the opportunity to integrate and apply knowledge of homeostasis and adaptation to the antenatal, labour and delivery, and postpartum/newborn periods. Students will select a clinical experience in either supportive care during labour and birth or supportive care for breast-feeding and postpartum families.

*Pre- or Corequisite: Maternal Infant Child Healthcare 4401, 4403, 4405 and 4407 and approval of the department.*

**Note:** This is an instructor-guided preceptored experience.

## MATHEMATICS (MATH)

### MATH 0109 – College Preparation Math Refresher

(0 credits)

This is a credit-free upgrading course; special fees apply.

This course is a math refresher geared for students who have been away from school and who need to revisit prealgebra concepts such as dealing with fractions, exponents and simple geometry.

### MATH 0115 – Algebra Foundations

(0 credits)

This is a credit-free upgrading course; special fees apply.

This course comprehensively covers the essential topics of algebra and the basic principles of geometry to an intermediate level. The course is designed to meet the needs of students who have minimal background in algebra or whose proficiency may have declined during years away from formal education. Successful completion of this course prepares students for MATH 0130, where algebraic skills are utilized to study more advanced topics.

### MATH 0130 – Algebra and Trigonometry

(0 credits)

This is a credit-free upgrading course; special fees apply.

Relations and functions, inequalities, polynomial functions, rational functions, quadratic relations, exponential and logarithmic functions, trigonometric functions, sequences and series.

Recommended Preparation: Mathematics 0115.

**Note:** Not recommended for students with credit in Pure Mathematics 30.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed mature under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

### MATH 0131 – Calculus and Matrices

(0 credits)

This is a credit-free upgrading course; special fees apply. Part 1: Calculus – Limits, differentiation of sums, products and quotients (excluding exponential, logarithmic and trigonometric functions), the Chain Rule, application to curve sketching, maximum and minimum problems, motion, simple integration, area under a curve and area between curves. Part 2: Matrices – Systems of linear equations, operations with matrices, special matrices, the determinant function, inverses of matrices.

**Note:** Not recommended for students with credit in Mathematics 31.

While this course may be presented for admission to the University of Calgary, credit-free upgrading courses completed at Mount Royal College are not eligible for Alberta Education graduation credits or transcript purposes. However, students who are deemed mature under Alberta Education criteria may challenge the Alberta Education Diploma examinations and receive credit towards an Alberta High School Diploma. Students should therefore confirm their maturity status in advance of Mount Royal College enrolment by contacting Student Records, Alberta Education for formal confirmation.

### MATH 1200 – Calculus for Scientists I (formerly MATH 2249)

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course provides an introduction to calculus with some exposure to applications in the sciences. Topics covered will include algebraic operations, functions and graphs, transcendental functions, limits, derivatives, integrals and the fundamental theorem of calculus. Studying calculus will expose students to a variety of important mathematical ideas and help students develop their calculation, critical thinking and problem solving skills.

*Prerequisite: A grade of 60% or higher in Pure Mathematics 30 or in Mathematics 0130, or a grade of "C-" or better in any of Mathematics 1283 or 1285 or equivalent.*

### MATH 1202 – Calculus for Scientists II (formerly MATH 2253)

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is an introduction to integral calculus and its applications. Methods of integration are studied and applied to the calculation of volumes, surface areas, arc lengths and work. Inverse trigonometric and hyperbolic functions, L'Hospital's Rule, first and second-order linear differential equations are also studied.

*Prerequisite: Mathematics 1200 with a grade of "C-" or higher.*

### MATH 1203 – Linear Algebra for Scientists and Engineers (formerly MATH 2221)

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is an introduction to linear algebra for science students. Topics covered are vector and matrix algebra, systems of linear equations, determinants, linear transformations, polar coordinates and complex numbers. Applications in the physical sciences are studied with the help of eigenvalues and eigenvectors.

*Prerequisite: Pure Math 30 with a 60% or higher.*



### **MATH 2233 – Statistics for Biological Sciences**

(3 credits) 3 hours lecture, 1 hour lab

This course involves descriptive statistics and some probability theory. A systematic treatment of inferential statistics is undertaken in this course. Topics include inferences of population means and proportions, regression and correlation, chi-square test, analysis of variance and nonparametric statistics. Applications of these statistical methods to problems in biological and health sciences are studied. Statistical computer software is used in this course.

*Prerequisite: Mathematics 1200 with a grade of "C-" or higher.*

### **MATH 2251 – Calculus I**

(3 credits – TG) 4 hours lecture

This course is designed for students with some previous exposure to calculus. Topics including functions and graphs, transcendental functions, limits, derivatives, integrals and the fundamental theorem of calculus with emphasis on why the theorems and formulae are true and how they can be applied. By studying calculus, students will improve their critical thinking and problem solving skills and gain insight into the discipline of mathematics.

*Prerequisite: Pure Mathematics 30 or equivalent with a grade of 65% or higher; or Mathematics 0130, 1283 or 1285 with a grade of "B-" or higher; and Mathematics 31 with a grade of 50% or higher, or Mathematics 0131 with a grade of "D" or higher.*

**Note:** Credit for more than one of Mathematics 1217, 2249 and 2251 will not be allowed.

### **MATH 2285 – Calculus with Applications**

(3 credits – TG) 3 hours lecture, 2 hours lab

This course is an introduction to calculus with an emphasis on applications in sciences. Problem solving is a major component of this course.

*Prerequisite: Pure Math 30 with a grade of 60% or higher or equivalent.*

**Note:** Credit for more than one of Mathematics 1217, 2249, 2251 and 2285 will not be allowed.

### **MATH 2301 – Calculus III (formerly MATH 3349)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is a continuation of the calculus stream. Convergence of sequences and series are studied, along with Taylor polynomials, curves and surfaces in three dimensions, multivariate functions and differentiation and Lagrange multipliers. Applications include three dimensional mechanics.

*Prerequisite: Mathematics 1202 and 1203 a grade of "C-" or higher.*

### **MATH 2302 – Calculus IV (formerly MATH 3353)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

*Functions of several variables are thoroughly studied in this course. The focus is on multivariate integration and differentiation, through the study of the theorems of Green, Gauss, and Stokes. Approximation, optimization techniques, and applications to fluid dynamics are also examined.*

*Prerequisite: Mathematics 2301 with a grade of "C-" or higher.*

### **MATH 2311 – Linear Algebra (formerly MATH 3311)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course is an introduction to abstract vector spaces and subspaces. Projections and best approximations are studied with the help of the Gram-Schmidt algorithm. Other topics that are studied are population dynamics, Fourier analysis, and eigenvalues and eigenvectors.

*Prerequisite: Mathematics 1203 with a grade of "C-" or higher.*

### **MATH 2321 – Mathematical Probability (formerly MATH 3321)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

This course involves probability theory, discrete and continuous random variables. Topics also include mathematical expectation, variance, moments, moment generating functions and the central limit theorem. There is a discussion of inferential statistics: estimation, confidence interval, and hypothesis testing procedure.

*Prerequisite: Mathematics 1202 with a grade of "C-" or higher.*

### **MATH 2323 – Introduction to Mathematical Statistics (formerly MATH 3323)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

Central limit theorem. Sampling distributions. F and t distributions. Estimation. Hypothesis tests (proportions, means, variance, chi-square). Method of moments. Maximum likelihood estimators. Concept of minimum variance unbiased estimators. Neyman-Pearson lemma. Likelihood ratio tests. Elementary regression and correlation.

*Prerequisite: Mathematics 2321 with a grade of "C-" or higher.*

*Corequisite: Mathematics 2302.*

### **MATH 2333 – Statistics for Life Sciences (formerly MATH 3333)**

(3 credits – TG) 3 hours lecture, 1 hours lab

Descriptive statistics, exploratory data analysis, probability, random variables, life tables, statistical inference, randomization, cause and effect, statistical software, application of statistical methods to medical and biological problems.

*Prerequisite: Pure Mathematics 30 or equivalent, or department approval.*

### **MATH 2505 – Puzzling Adventures in Mathematics**

(3 credits) 3 hours lecture, 1 hour tutorial.

This course is a problem-solving approach to discrete mathematics covering secret codes, public-key codes, error-correcting codes, applications of graph theory, and parallel algorithms. The material in the course is introduced and examined through the use of mathematical puzzles.

*Prerequisite: A grade of C- or higher in any level one, cluster one, GNEC course.*

### **MATH 3101 – Numerical Analysis (formerly MATH 3361)**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

In this course, the theory and practice of numerical computational procedures to solve practical problems will be studied. Methods for solutions of nonlinear equations, solutions of simultaneous linear equations, curve fitting, solution of the eigenvalue problem, interpolation and approximation, numerical differentiation and integration, solution of ordinary and partial differential equations are included. The laboratory includes the application to elementary problems and the computer solution of comprehensive problems.

*Prerequisite: Mathematics 3307 with a minimum grade of "C-", or equivalent or consent of the department.*

### **MATH 3303 – Topics in Applied Mathematics and Data Analysis**

(3 credits) 3 hours lecture, 2 hours lab

Techniques of applied mathematics are a great asset and an important quantitative tool for scientists. The course gives an introduction to Discrete Fourier transform, Fast Fourier Transform, filter design and wavelet analysis. Statistical data analysis and stochastic processes are also discussed. These topics will be addressed through their applications to the natural sciences.

*Prerequisite: Mathematics 2301 and 2311 both with a minimum grade of C- or equivalent.*

### **MATH 3307 – Differential Equations**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

Classification of ordinary differential equations, first order equations with applications, second order equations with applications, series solutions about regular and singular points, special functions. Laplace transforms, linear systems of differential equations.

*Prerequisite: Mathematics 1219 with a grade of "C-" or higher.*

### **MATH 3309 – Mathematics for Engineers IV**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

Functions of several variables, partial derivatives, Chain Rule and differentials. Vector calculus, with line and surface integrals; Green's, Gauss' and Stokes' Theorems.

*Prerequisite: Mathematics 1219 with a grade of "C-" or higher.*





### PHED 1261 – Organizing Special Events

(1.5 credits – TG) 3 hours lecture for 7 weeks

The presentation of strategies for organizing and managing special events. This course will provide a viable and totally practical how-to approach to organizing events in physical activity and sport.

### PHED 1293 – Introductory Aquatic Lifesaving

(3 credits – TG) 3 hours lecture

Students will learn techniques of first aid, artificial respiration and other emergency care procedures required to assist a victim of an aquatic emergency. Students will also learn and perfect life saving skills related to water rescue. The Lifesaving Society Bronze Medallion and Bronze Cross Awards will be available to students who successfully meet all evaluation criteria.

*Prerequisite: Students must be comfortable in deep water and be able to swim 200 metres continuously.*

**Note:** Students will be responsible for payment of fees to outside organizations when the issue of a certificate involves a fee.

### PHED 1295 – Water Safety Instructor

(3 credits – TG) 3 hours lecture

This course includes a comprehensive study of the techniques of teaching swimming, water safety and life saving. Other aquatic activities such as aqua aerobics, diving, competitive swimming and snorkelling will be introduced. Students must demonstrate competent swimming, rescue and artificial respiration skills and meet the requirements of the Canadian Red Cross Water Safety Instructor Award. Ten hours of student teaching must be completed during this course.

*Prerequisite: Current Lifesaving Society Bronze Medallion or higher award or consent of the department.*

**Note:** Students will be responsible for payment of fees to outside organizations when the issue of a certificate involves a fee.

### PHED 1296 – Advanced Aquatic Life Saving

(3 credits – TG) 4 hours lecture

Lifeguarding techniques for pools, basic first aid techniques and various emergency situations in aquatics will be studied. Students must meet the requirements for the Lifesaving Society National Lifeguard Service and Aquatic Emergency Care Awards and the Canadian Red Cross Standard First Aid and Basic Cardiopulmonary Resuscitation Awards.

*Prerequisite: Current Lifesaving Society Bronze Cross Award.*

**Note:** Students will be responsible for payment of fees to outside organizations when the issue of a certificate involves a fee.

### PHED 1297 – Basic SCUBA

(3 credits – TG) 3 hours lecture

This is a comprehensive course designed to prepare students for SCUBA diving certification. It includes diving physics and medicine as well as optional open water dives.

*Prerequisite: Medical certificate, Bronze Medallion or consent of the department.*

**Note:** Students will be responsible for payment of fees to outside organizations when the issue of a certificate involves a fee. An additional lab fee of \$50 will be charged for this course.

### PHED 2001 – Introductory and Intermediate Coaching (formerly PHED 3331)

(3 credits – TG) 3 hours lecture

This course provides exposure to motor learning, growth and development, philosophy, psychology, public relations, administration and training methods as it pertains to coaching. Students will be introduced to the material included in the National Coaching Certification Program Part A and Part B of the Competitive Coach Stream.

### PHED 2005 – Sport & Exercise Psychology (formerly PHED 2253)

(3 credits – TG) 3 hours lecture

This course provides an introduction to the psychosocial concepts underlying an understanding of human behaviour in physical activity, sport and health. This course is divided into two equal components. The first examines the perspective of Exercise and Health Psychology, while the second uses the perspective of Personality and Social Psychology.



### PHED 2007 – Introductory Nutrition (formerly PHED 2237)

(3 credits – TG) 3 hours lecture

This course will provide the student with a basic understanding of the role of nutrition in health and fitness. By surveying the basics of human nutrition, and considering practical applications, the student will be prepared to apply nutrition guidelines to their individual nutrition needs and those of specialized populations.



*Prerequisite: Biology 1216.*

### PHED 2102 – Basketball (formerly PHED 1235)

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is a comprehensive course in basic basketball skills, knowledge, teaching methods and team strategy.

*Prerequisite: Physical Education 1102*

### PHED 2104 – Introductory Power Skating and Hockey Coaching (formerly PHED 1269)

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is a theoretical and practical course on power skating techniques and ice hockey skills. The student will learn how to teach skating and organize hockey sessions for skill development. Topics include: proper use of biomechanical principles in skating; proper use of edges; drills to develop skating skills and techniques to develop necessary strength and power both on and off the ice. The student will be shown the proper execution of all basic hockey skills – shooting, passing, stickhandling and checking – and will be taught proven teaching progressions for each.

*Prerequisite: Physical Education 1102*

### PHED 2106 – Soccer (formerly PHED 1271)

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is a comprehensive course in basic soccer skills, knowledge, officiating and team strategy. Indoor and outdoor play will be covered. Lecture time will be spent on organizing tournaments, teaching methods and officiating the game of soccer.

*Prerequisite: Physical Education 1102*

### PHED 2108 – Introductory Golf (formerly PHED 1229)

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is an introductory course in golf with the emphasis on skills, rules, safety, etiquette, the care and selection of equipment and the organization of recreational activities.

*Prerequisite: Physical Education 1102*

### PHED 2110 – Volleyball (formerly PHED 1237)

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is a comprehensive course in basic volleyball skills, knowledge, teaching methods and team strategy. Students will learn how to organize and administrate volleyball tournaments and league play as well as prepare a comprehensive scouting report. Students will practice specific volleyball skills apart from class time.

*Prerequisite: Physical Education 1102*

### PHED 2201 – The Essence and Experience of Physical Activity

(3 credits – TG) 1 hour lecture, 3 hours tutorial

This course investigates the fundamental factors, which influence the physical activities we choose, and the kinaesthetic principles governing how we move. Active participation in a variety of movement experiences (novel and familiar) will be an essential component of this course. This course will establish the fundamental kinaesthetic, physical and management parameters of physical activity.

### PHED 2203 – Fundamental Fitness and Measurement

(3 credits – TG) 3 hours lecture, 2 hours tutorial

This is a foundation course in physical fitness incorporating the basic theory, testing and application of physical fitness, nutrition and weight control knowledge. It involves a lecture/tutorial presentation in which students will design personal fitness programs, apply the programs, test their progress and evaluate the results.

### **PHED 2228 – Flexibility and Relaxation (formerly PHED 1242)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is an introductory course, which will focus on developing a conceptual framework for utilizing flexibility and relaxation, in relation to overall fitness and personal well-being. A variety of relaxation techniques will be explored and incorporated in practical ways.

### **PHED 2255 – Elementary School Physical Education I (3 credits – TG) 3 hours lecture**

A comprehensive course involving aspects of the modern elementary school physical education program with a particular emphasis on movement experiences in games. Off campus travel is required for some field-work observation.

### **PHED 2257 – Elementary School Physical Education II (3 credits – TG) 3 hours lecture**

A comprehensive course involving aspects of the modern elementary school physical education program with particular emphasis on movement experiences in dance and gymnastics. Some off campus travel is required for practical experience.

### **PHED 2304 – Introduction to Strength Training (formerly PHED 1145)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is a practical course in strength training with emphasis on skill and safety and the design of basic personal strength training programs.

*Prerequisite: Physical Education 1302*

### **PHED 2308 – Cardiovascular Training (formerly PHED 1241)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This course is designed to both improve the cardiovascular fitness of the student and, at the same time, familiarize him or her with theoretical knowledge and training regimens.

*Prerequisite: Physical Education 1302*

### **PHED 2367 – Physical Activity for Special Populations (formerly PHED 3367)**

(3 credits – TG) 3 hours lecture

This course provides an examination of specific problems within the psychomotor domain and the related delivery systems for their identification and amelioration. This is an applied course that focuses on the issues and challenges of providing physical activity experiences for persons with a disability.



*Prerequisite: Physical Education 1001*

### **PHED 2402 – Backpacking (formerly PHED 1252)**

(1.5 credits – TG) 15 hours lecture and 22 hours fieldwork

This course is an exposure to the skills, knowledge and attitudes necessary for trail hiking, off trail rambling and below treeline camping in the backcountry. Harmonious and minimal impact living and walking in the natural environment is a major priority. Participation is required in one weekend of fieldwork.

### **PHED 2404 – Introductory Rock Climbing (formerly PHED 1253)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is an introductory course in rock climbing with the emphasis on the skills necessary for easy lead climbing. Use will be made of indoor and outdoor facilities.

### **PHED 2406 – Back Country Skiing (formerly PHED 1258)**

(1.5 credits) 15 hour lecture, 22 hours fieldwork

This course is an introduction to the basic skills and knowledge of back country skiing. Participation is required in one weekend of fieldwork.

### **PHED 2408 – Mountain Bike Trekking (formerly PHED 1255)**

(1.5 credits – TG) 15 hours lecture and 22 hours fieldwork

This course is designed to provide students with the ability to demonstrate basic skills regarding safety, mountain bike maintenance and repair, riding technique and planning for back country touring. Participation is required in one weekend of fieldwork.

### **PHED 2410 – Wilderness Survival Techniques (formerly PHED 1173)**

(1.5 credits – TG) 15 hours lecture and 22 hours fieldwork

This course prepares students to handle emergency situations in the Canadian climate. Participation is required in one weekend of fieldwork.

### **PHED 2412 – Introductory Swimming (formerly PHED 1290) (3 credits – TG) 3 hours lecture**

Students will perfect swimming strokes, water entries and basic self-rescue skills. Students will also complete the requirements for two levels of the Canadian Red Cross Aquaquest Program.

*Prerequisite: Students enrolling in the course must be comfortable in deep water and be able to swim 100 metres continuously.*

**Note:** Students will be responsible for payment of fees to outside organizations when the issue of a certificate involves a fee.

### **PHED 2414 – Introductory Canoeing (formerly PHED 1250)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is an introductory course in canoeing with the emphasis on basic techniques, equipment, safety precautions, group dynamics and leadership skills. Students may be involved in moving water situations.

*Prerequisite: Students must be able to swim 100 metres.*

### **PHED 2416 – Introductory Kayaking (formerly PHED 1251)**

(1.5 credits – TG) 3 hours lecture for 7 weeks

This is an introductory course in kayaking with the emphasis on basic techniques, equipment, safety precautions, group dynamics and leadership skills. Students may be involved in moving water situations.

*Prerequisite: Students must be able to swim 100 metres.*

### **PHED 2418 – Introductory Mountaineering (formerly PHED 1254)**

(1.5 credits – TG) 15 hours lecture and 22 hours fieldwork

This is an introductory course in mountaineering, which includes alpine and glacier techniques. Emphasis will be placed on safety and sound judgement. A peak ascent, within the Rocky Mountains, will be attempted. Participation is required in one weekend of fieldwork.

### **PHED 3001 – Biomechanics (formerly PHED 2263)**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

Muscular and mechanical analysis of human movement.

*Prerequisite: Physical Education 1001.*

### **PHED 3003 – Prevention and Care of Athletic Injuries (formerly PHED 3371)**

(3 credits – TG) 3 hours lecture, 2 hours tutorial

This course provides a study of the responsibilities of physical educators toward the basic principles of athletic therapy and their role in the prevention and treatment (first aid) of athletic injuries.

*Prerequisite: Physical Education 1001.*

**Note:** To obtain transfer credit at the University of Calgary, Physical Education 1001 must be completed with a grade of "C-" or higher before enrolling in Physical Education 3003.

### **PHED 3050 – Practicum for Physical Activity and Sport (formerly PHED 1285)**

(3 credits – TG) 250 hours practicum

This is formal work experience with an assigned agency. Participants will be required to participate in specified hours of practicum and to complete the assignments. Students will be accepted into the practicum on the basis of professional suitability and conduct as determined by a faculty committee.

*Prerequisite: Approval of the department*

### **PHED 3301 – Musculoskeletal Assessment – Spinal**

(3 credits – TG) 2 hours lecture, 2 hour tutorial

This course involves the study of athletic injuries that fall into the category of complex injuries, repetitive trauma; injuries common to athletics will be approached from the perspective of differential diagnosis. Assessment techniques utilized by Certified Athletic Therapists will be taught. Practical experience will emphasize the assessment of injured athletes as well as the utilization of appropriate intervention skills. Specific joints to be covered are: Cervical, Thoracic, Lumbar, Pelvis and Hip.

*Prerequisite: Admission to the Advanced Certificate in Athletic Therapy.*

### **PHYS 1211 – Physics I (formerly PHYS 2231)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

A discussion of fundamental concepts of mechanics, emphasizing rigorous reasoning based on definitions and physical laws. Topics include vectors, kinematics, statics, Newton's laws, force fields, work and energy, conservation laws, special relativity. Laboratory exercises provide further insight into these topics.

*Prerequisite: Pure Mathematics 30 and Physics 30 or equivalent.*

*Co requisite: Mathematics 1200.*

### **PHYS 1212 – Physics II (formerly PHYS 2233)**

(3 credits – TG) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course includes a discussion of mechanical systems using calculus, Newton's laws and applications. Also discussed and studied will be systems of particles; work and energy with variable forces; dynamics of rigid body motion; fluid mechanics; electrostatics; and DC Circuits. Laboratory exercises provide further insight into these topics.

*Prerequisite: Mathematics 1200 and Physics 1211 with grades of "C-" or higher.*

*Co requisite: Mathematics 1202.*

### **PHYS 1243 – Basic Physics for Aviation**

(3 credits) 3 hours lecture, 1 hour tutorial, 3 hours lab

This is an algebra-based physics course mainly designed to suit aviation students. This course will introduce students to relevant topics in mechanics and electricity. The topics include: motion in one and two dimensions, the laws of motion, work and energy, circular motion, impulse, linear momentum and collisions, kinematics and dynamics of a rigid body, current and resistance, D.C. circuits, basics of aerostatics and aerodynamics.

*Prerequisite: Pure Mathematics 30 or equivalent.*

### **PHYS 2104 – Everyday Physics – A Conceptual Introduction (formerly MATH 2104)**

(3 credits) 3 hours lecture, 1 hour tutorial

Physics is the study of the rules behind the working of the physical universe. This course makes the fun and excitement of doing physics accessible to non-science majors. Basic Concepts of physics will be introduced using the examples of everyday phenomena with reduced math content.



### **PHYS 2130 – Optics, Oscillations and Waves**

(3 credits – TG) 3 hours lecture, 1.5 hours tutorial

This course offers a calculus-level introduction to oscillations and wave motion, with applications to mechanics, optics and acoustics. The topics covered include the harmonic oscillator, travelling and standing waves, and geometrical and wave optics. This course is designed primarily for engineering students intending to transfer to the University of Alberta (engineering students intending to transfer to the University of Calgary should take Physics 3369). However, this course is also suitable for students whose programme requires a first-year course in physics.

*Prerequisite: Mathematics 31 or Mathematics 1200 or 2251 and Physics 30 or Physics 1201.*

### **PHYS 3369 – Acoustics, Optics and Radiation**

(3 credits – TG) 3 hours lecture, 1 hour tutorial

For students in Engineering. Wave motion as applied to acoustics, geometric and physical optics, and radiant energy transfer. Traditional and modern applications.

*Prerequisite: Mathematics 1217, 1219 and Engineering 1215.*

### **PHYS 3401 – Chemistry of the Solid State**

(3 credits) 3 hours lecture, 1 hour tutorial, 3 hours lab

This course is a study of the models and concepts underlying the field of inorganic chemistry, and the behaviour of chemical species in the solid state. Topics covered will include elemental periodic trends, solid state chemistry, and coordination complexes. The laboratory component involves isolation, purification and analysis of a variety of inorganic compounds, including cage complexes and superconductors. Credit for both CHEM 3401 and PHYS 3401 will not be permitted.

*Prerequisite: Chemistry 1202 and Physics 1212, both with a grade of "C-" or higher.*

### **PHYS 3601 – Thermodynamics**

(3 credits) 3 hours lecture, 3 hours lab

This is an introduction to thermodynamics from a classical, macroscopic perspective. Lecture topics will include the laws of thermodynamics, Maxwell relations, internal energy, enthalpy, entropy, Helmholtz and Gibbs free energies, chemical potential and equilibrium, as well as a detailed study of the Kinetic Theory of Gases for mono- and polyatomic gases, both ideal and real. The laboratory component will support the lecture material through theoretical modeling and basic thermodynamic and kinetic experiments.

*Prerequisite: Chemistry 1202, Physics 1212 and Mathematics 1202, with a grade of "C-" or higher or department consent.*

**Note:** Credit for both Chemistry 3601 and Physics 3601 will not be allowed.

### **PHYS 3602 – Elementary Quantum Mechanics**

(3 credits) 3 hours lecture, 3 hours lab

This is an introductory course in quantum mechanics. The basic theories and formalism of quantum mechanics will be developed, followed by its application to a variety of model systems from atomic and molecular physics and chemistry; including a discussion of electron spin with reference to both single- and multi-electron atoms. The lab will reinforce the lecture topics through both computer simulations and experiments to illustrate the use of quantum mechanics in spectroscopy.

*Prerequisite: Physics 3601 with a grade of "C-" or higher or department consent.*

*Pre- or Corequisite: Mathematics 2207*

*Recommended Preparation: Physics 2201*

**Note:** Credit for both Chemistry 3602 and Physics 3602 will not be allowed.

### **PHYS 1199, 1299 – Directed Readings**

See *Directed Readings* which are listed alphabetically in this section of the calendar.

## **POLICY STUDIES (POST)**

### **POST 2010 – Directed Field Studies I (formerly APST 2010)**

(15 credits)

This course will foster an understanding of the culture and professional practices of the administration and development of public policy. Students will participate in paid work experiences in a government agency or in a company, research institute or non-governmental organization. The initial directed field studies provides an opportunity to apply academic knowledge and analytical skills in a workplace, observe organizational behaviour, and develop methods of self-assessment. A significant time commitment will be needed to complete the orientation program offered by Career Services in the semester prior to placement.

*Prerequisite: Policy Studies 2209, 2201, 3305 and Economics 1101, 1103, Political Science 1101, 2231, 2259 and either Economics 2255 or 2213 and Political Science 2229 or Policy Studies 3303 with minimum grades of "C" or higher. Completion of the Introduction to Work Experience workshops through Career Services is required.*

### **POST 2201 – Introduction to Public Policy**

(formerly APST 3301)

(3 credits – TG) 3 hours lecture

This course is designed to advance the degree student's knowledge of public (government) policy development, initiation, and implementation. This course introduces students to various theories, models and approaches utilized by scholars and professional evaluators in the field of policy studies. This course also prepares students for the intellectual demands and skill-based practicalities needed in their future careers in the policy field.

*Prerequisite: Political Science 1101 and 2231, or permission from the department.*

## UNDERGRADUATE STUDIES

### UGST 1001 – Effective Learning in the Undergraduate Context

(3 credits) 3 hours lecture

Effective Learning in the Undergraduate Context provides students with opportunities to increase their knowledge of effective learning, enhance their use of strategies, and reflect on their learning. Activities and assignments in a collaborative classroom setting will facilitate the application of concepts from research to the students' own learning.

## WOMEN'S STUDIES (WMST)

### WMST 1172 – Introduction to Women's Studies (formerly WMST 20272)

(3 credits – TG) 3 hours lecture

An interdisciplinary study of major issues confronting Canadian women. Topics may include: Canadian feminism in historical perspective, health, sexuality, work issues (such as equal pay, unemployment, pensions and the impact of technology), family issues and women's role in Canadian politics.



### WMST 2205 – Issues for Women Globally (formerly WMST 3305)

(3 credits – TG) 3 hours lecture

This course is an interdisciplinary study of the major issues confronting women within a global context. This course explores the political, social and economic role and status of women from developing countries. Themes may include the impact of economic globalization; citizenship, migration and refugee issues; the global sex trade; women and AIDS; militarization and nationalism; and, transnational feminist alliances for social change.

Recommended Preparation: Women's Studies 1172.



### WMST 2207 – Contemporary Issues in Feminism (formerly WMST 3307)

(3 credits – TG) 3 hours lecture

A survey and analysis of issues concerning women's lives in their contemporary social context. Topics include images of women, mother/daughter and other family relations, marriage and divorce, women and work, violence against women, sexuality and power.

*Prerequisite: Women's Studies 1172 or one senior Women's Studies course.*

Note: Women's Studies 2207 = Athabasca University WMST 401. Credit will be allowed for only one of Women's Studies 2207 and A401.

### WMST 2221 – Women and Health (formerly WMST 3321)

(3 credits – TG) 3 hours lecture

An interdisciplinary examination of women's experience of physical and psychological health, of perceptions and treatment of women in health care systems, and of the role of women as health care providers in families and society. Examples will come primarily, but not exclusively, from the Canadian context.

Recommended Preparation: Women's Studies 1172 or one senior Women's Studies course.



### WMST 2239 – Gender and Popular Culture (formerly WMST 3339)

(3 credits – TG) 3 hours lecture

This course will introduce students to feminist and postmodern theoretical perspectives on gender and popular culture. Selected themes may include gender and spectatorship; representing difference; advertising as ideological practice; cyberbodies and technoculture; and subculture and cultural resistance.



### WMST 2241 – Women in Canada (formerly WMST 3341)

(3 credits – TG) 3 hours lecture

This course examines women's experiences in Canada from the 18th to the 21st century. Themes include family, sexuality, politics, economic roles, the law, social welfare, feminism, race, ethnicity and immigration.

*Prerequisite: Women's Studies 1172 or any first year history course.*



### WMST 2283 – Women and Aging (formerly WMST 3383)

(3 credits – TG) 3 hours lecture

An interdisciplinary examination of the reality and variation in women's lives as they age. The focus will be on Canadian society in social and historical context, but comparisons and examples will be taken from other societies, both developing and developed.

Recommended Preparation: Women's Studies 1172 or one senior Women's Studies course.



### WMST 3301 – Feminist Theories

(3 credits) 3 hours lecture

This course provides an introduction to Western European and North American feminist writings and their relationship to women's movements from the 17th to the early 21st centuries. The effects of historical ideas about gender, race, class and sexuality on early feminist analyses and visions of social change will be considered.

*Prerequisite: Women's Studies 1172.*

### WMST 3302 – Feminist Research and Methods

(3 credits) 3 hours lecture

This course is a feminist examination of the connections between epistemology, method and methodology. This course explores a range of approaches taken by feminist researchers when rethinking traditional analytic paradigms in order to create distinctly feminist models to guide their work.

*Prerequisite: Women's Studies 3301*

### WMST 3311 – Race, Femininity and Representation.

(3 credits – TG) 3 hours lecture

This course will examine the conventions by which subjugated colonial female identities are constructed, contested and negotiated in and through Eurocentric practices of intercultural representation. Various strategies aimed at challenging dominant codes of intercultural representation will be considered in terms of their potential to foster more empowering identities for women.

*Prerequisite: Women's Studies 2239 or Sociology 2275*



### WMST 3346 – Gender, Culture and Technology

(3 credits – TG) 3 hours lecture

An examination of the power relations structuring the development and use of technology. This course explores the interplay between gender, race, class and various technologies on the everyday lives of women, both locally and globally. The problems and possibilities associated with technological development will be considered.

*Prerequisite: Women's Studies 1172, 2205, 2221, 2239, 2241 or 2283*



## ZOOLOGY (ZOOL)

### ZOOL 3375 – An Introduction to Invertebrate Zoology

(3 credits – TG) 3 hours lecture, 3 hours lab

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 1204 with a grade of "C-" or higher.*

### ZOOL 3377 – The Vertebrates

(3 credits – TG) 3 hours lecture, 3 hours lab

Comparative anatomy; a basis for understanding the functional organization, development and adaptive radiation of vertebrates.

Recommended Preparation: Biology 3206.

### ZOOL 3379 – Patterns of Animal Development

(3 credits – TG) 3 hours lecture, 3 hours lab

An introduction to animal development through detailed examination of model systems. Topics will include: gametogenesis, fertilization, early development to neurulation, the vertebrate body plan, morphogenesis, cell fates, pattern formation, sex determination, evo/devo.

*Prerequisite: Biochemistry 3393 or U of C BCEM 411, and Biology 2101.*



- Meet with a Mount Royal College Disabilities Consultant at least six months prior to their first semester at the College. Delaying initial contact may result in academic accommodations and disability-related services not being available at the beginning of the first semester at Mount Royal.
  - Provide written documentation of their disability (specific guidelines apply).
  - Request individualized supports, services and accommodations
- \*Requested accommodations must be supported by assessment documentation.

For more information contact Disabilities Services at:

Location: Y 201

Phone: 403.440.6868

Website: <http://www.mtroyal.ca/learningskills/disabilitiesservices.shtml>

## LIBRARY

<http://library.mtroyal.ca>

The Library offers a wide range of services including in-class, and individual instruction, help with research and information questions. Computers are available in the library along with printing and photocopying to help you complete your assignments. We provide access to more than 31,000 ejournals, more than 48,000 ebooks, many statistical data files and more than 200,000 books and videos. Course reserves are also managed in the Library. If we don't have what you are looking for we can also borrow items from other libraries for you through our interlibrary loan services. Stop by the Information Desk or call 403.440.6140 for more information about our services and hours of operation.

Mount Royal Library is also a great place to study with wireless access, soft seating and table and carrel work areas. We also have a few group study rooms. Please note that the MR Library is a busy shared academic space and as such is maintained as a quiet zone for student work.

Director, Library Services, C. Shepstone: 403.440.6134

Library Chair & Coordinator, Technical Services, J. Monteith: 403.440.6137

Coordinator, Circulation & Reserves Services, A. Swabey: 403.440.7241

Coordinator, Media Services, G. Owens: 403.440.7737

Coordinator, Information Services, M. Sinotte: 403.440.5683

Coordinator, Information Systems (Acting), M. Sinotte: 403.440.5683

Coordinator, Instruction Services, F. May: 403.440.6128

Coordinator, Collections Services, M. Bowler: 403.440.6086

Instructional Services Librarians: K. Barrette: 403.440.6126, M. Bowler: 403.440.6086, P. Herscovitch: 403.440.6022, M. MacMillan: 403.440.6135, F. May: 403.440.6128, L. Malone: 403.440.5157, C. Merkley: 403.440.5068, M. Millard: 403.440.6136, J. Monteith: 403.440.6137, G. Owens: 403.440.7737, R. Sherwin: 403.440.7045, M. Sinotte: 403.440.5683, A. Swabey: 403.440.7241.

## LOCKERS

Full-length lockers are available for rent at \$30 for two semesters with a \$10 lock deposit. Box or half lockers rent for \$18 for two semesters with a \$10 lock deposit. Spring semester locker rentals are \$4 with a \$10 lock deposit. The Parking Office handles locker rentals soon after classes begin. Be forewarned – at the end of each semester the contents are turned over to the Lost & Found Department and will be disposed of, if not claimed, in 45 days.

Mount Royal College does not accept responsibility for any damage to the contents or loss of items from lockers, which have been rented to students and/or other parties. Valuables should not be stored in lockers. Students must

use the locks provided by the College.

The additional \$10 Lock Deposit Fee is refundable only when the lock is returned to the Parking Office.

Lockers are also available through the Mount Royal Recreation Customer Service Centre U130 for \$50 per year. They also offer a convenient towel service for \$50 annually.

## RECREATION

### Mount Royal Recreation

Mount Royal Recreation Customer Service Centre U130

Phone: 403.440.6517

Website: [www.mtroyal.ca/recreation](http://www.mtroyal.ca/recreation)

E-mail: [recreation@mtroyal.ca](mailto:recreation@mtroyal.ca)

**FACILITY HOURS** – September 1 – April 30

Monday - Friday . . . . . 6 a.m. to 11 p.m.  
Saturday . . . . . 6 a.m. to 8 p.m.  
Sunday . . . . . 8 a.m. to 8 p.m.  
Holidays . . . . . 8 a.m. to 8 p.m.

Mount Royal Recreation is a great way to have fun, meet new people, socialize with friends, get some exercise, learn new skills and enjoy friendly competition. How do you get involved? All credit students are automatically members. Stop by each semester to activate your membership. Other students and student family members can join at reduced rates. To validate your membership each semester, please stop by the Customer Service Centre U130. Membership allows you to use the recreation facilities and access Mount Royal Recreation programs and services at the lower member rate.

### PROGRAMS

• Aquatics • Climbing • Clubs & Drop-in Sports • Dance • First Aid & CPR  
• Group Exercise • Intramural Sports • Mind, Body & Spirit • Outdoor Experiences • Running • Sport Instruction • Squash • Triathlon

### FACILITIES

• 14,000 sq. ft. fitness centre • 40 ft. indoor climbing wall • 200 m indoor running track • Six international squash courts • Five volleyball/basketball courts • Aerobics studios & multi-purpose room • Six outdoor tennis courts • Four outdoor playing fields • Two outdoor beach volleyball courts • 25 m salt water pool with hot tub • Steam rooms & family change room

### Sport Instruction

Mount Royal Recreation is not just about competitive activities; you will find a tremendous selection of fun and energizing programs to choose from at amazing prices. Enjoy your leisure time by using Mount Royal Recreation to its fullest. Check out our website, pick up a Rec Guide or visit our Customer Service Centre U130 for more details.

## RESIDENCE

Mount Royal Residence Services Mount Royal Residence consists of 4 bedroom, 2 bedroom, and a few 1 bedroom townhouse and apartment style units, which house approximately 1,000 single students. Each unit is fully furnished and provides an individual bedroom for each student with individual phone and internet, as well as full living room and kitchen facilities. All utilities including local telephone service, high speed internet and cable TV are included in the Residence Fees. Laundry facilities as well as mail boxes are located in the West Administration Building and the East Community Building. There are seven barrier free units.

Students may apply for Residence accommodation once they have applied for admission to a program, but should not wait until they are admitted to Mount Royal before applying for housing. A non-refundable application fee is required to complete the application, and the submission of a security deposit is required for room placement. Guaranteed placement is offered for