

# COURSE OPTIONS FOR ICON

## AGRICULTURE COURSES

*Departments of PA and APS*

- AGR\*3010: Special Studies in Agriculture Science I S,F,W [0.50]
  - Requires: 10.00 credits, for students in semester 5-8, topic of study decided on by faculty and students
  - *Department of Plant Agriculture (PA) and Animal & Poultry Sciences (APS)*
  - Students can use this as an elective because it does not have the 'Science' component
  - Have worked with industry before
- AGR\*4010: Special Studies in Agriculture Science II S,F,W [0.50]
  - Requires: 15.00 credits, for students in semester 5-8, topic of study decided on by faculty and students
  - *Department of PA and APS*
  - Students can use this as an elective because it does not have the 'Science' component
  - Have worked with industry before

## ANIMAL SCIENCE

*Department of APS*

**NB: These courses may be harder to link with ICON as they are geared towards postgrad studies**

- ANSC\*4700: Research in Animal Biology I S,F,W [0.50]
  - For students who are potentially interested in post-grad studies to work with a faculty member on a research problem with data analysis
  - Requires substantive lit review and/or data analysis, 14.00 credits, registration in Animal Biology major or Animal Science major
- ANSC\*4710: Research in Animal Biology II S,F,W [0.50]
  - Continuation of ANSC\*4700. It allows for more sophisticated projects to be undertaken to provide the opportunity to build. It involves greater emphasis on data analysis or experimental design. Requires 14.00 credits & registration in Animal Bio major or Animal Science major

## ANTHROPOLOGY

*Department of Sociology and Anthropology*

- ANTH\*3950: Special Projects in Anthropology S,F,W [0.50]
  - Need 10.00 credits, instructor consent
  - It is a special study option/reading course designed to provide advanced undergrads with an opportunity to explore independently the frontiers and foundations of a field of knowledge-under the supervision of an instructor
  - Students can only have 1.00 credits for reading courses
- ANTH\*4880: Special Projects in Anthropology S,F,W [0.50]
  - Similar to the above course, but requires 12.50 credits
- ANTH\*4890: Special Projects in Anthropology S,F,W [0.50]
  - Similar to other two courses above, requires 12.50 credits

## ART HISTORY

### *School of Fine Art and Music*

- ARTH\*4600: Individual Study – Art History S,F,W [0.50]
  - Student and faculty agree on a special study area that is in the area of expertise of the instructor. Proposal needs to be submitted to the Director of the School (or designate) by the last day of classes in semester prior
- ARTH\*4800: Experiential Learning F,W [0.50]
  - Independent study based on art history related to voluntary or work experience. Evaluation based on student's performance on related work assignments at host institution as well as instructor decided assignments
  - Requires 14.00 credits with 2.50 in ARTH, Registration limited to BA:ARTH students with a minimum average of 70% in all Art History course attempts

## ARTS AND SCIENCE

### *Dean's Office, College of Arts – Limited to students in BAS degree program*

- ASCI\*3700: Independent Studies in Arts/Sciences S,F,W [0.50]
  - For students who want to pursue unique curricular opportunities and are approved as appropriate to BAS students; includes: independent reading and/or research under a faculty member's supervision in a research lab or program; a course developed in conjunction with experiential learning situations
  - See BAS website for learning contracts and other requirements that must be completed in advance to registration; need 9.00 credits and must be registered in BAS program
- ASCI\*4700 + 4710: Independent Studies in Arts/Sciences S,F,W [0.50]each
  - Similar to above, except requires 14.00 credits; 4710 is a continuation of 4700

## BIOMEDICAL SCIENCES

### *Department of Biomedical Sciences*

- BIOM\*4500: Literature-based Research in Biomedical Sciences S,F,W [0.50]
  - Independent literature research of a current topic in biomed sciences (e.g. anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Involves a primary literature review with annotated bibliography + research proposal + publication-quality lit review paper
  - Requires 12.00 credits, restriction: HK\*4230 and restricted to BSC.BIOM majors and BSC.NEUR minors
- BIOM\*4510: Research in Biomedical Sciences S,F,W [1.00]
  - Individual research project on a current topic in the biomed sciences (see above for topic examples).
  - Requires 14.00 credits, restricted to BSC.BIOM majors and cannot be taken if BIOM\*4521/2 is/has been taken

## BUSINESS

### *Department of Management*

- BUS\*4550: Applied Business Project I S,F,W [0.50]
  - Project-based independent study course on a business issue for 3<sup>rd</sup> or 4<sup>th</sup> year students in an agreed program of study with an instructor
  - Requires 10.00 credits, cannot be taken if taking AGECE\*4550, FARE\*4550
- BUS\*4560: Applied Business Project II S,F,W [0.50]
  - Opportunity to conduct a second independent study on a business issue in 3<sup>rd</sup> or 4<sup>th</sup> year
  - Must have already completed BUS\*4550, cannot be taken if taking AGECE\*4560, FARE\*4560

## CHEMISTRY

### *Department of Chemistry*

- CHEM\*4900: Chemistry Research Project I S,F,W [1.00]
  - Conduct research in an area of chemistry
  - Faculty supervision required
  - Often projects take two terms, in which case, CHEM\*4910 can be subsequently taken
  - Requires 5.00 credits in CHEM, including 1.50 credits from CHEM\*3430, CHEM\*3640, CHEM\*3650, CHEM\*3750, CHEM\*3750, CHEM\*3870

## CLASSICAL STUDIES

### *School of Language and Literature*

- CLAS\*4150: Research Paper in Classics F,W [0.50]
  - This is intended to complement courses in specific studies in classics. It engages the student in research and in critical writing and permits the examination, in depth, of a topic of importance to the discipline and interest of the student
  - Requires 1.50 credits in Classical Studies at the 3000 level

## COMPUTER SCIENCE

### *School of Computer Science (SoCS)*

- CIS\*4900: Computer Science Project S,F,W [0.50]
  - For senior undergraduates to pursue an independent course of study
  - Requires 7.00 credits in CIS + instructor consent
- CIS\*4910: Computer Science Thesis S,F,W [0.50]
  - Continuation of CIS\*4900, student writes an undergrad thesis, presents works in seminar and participates in the critical analysis and review of the work of other students taking the course
  - Requires CIS\*4900 and instructor consent

## ECONOMICS

### *Department of Economics and Finance*

- ECON\*4900: Special Study in Economics S,F,W [0.50]
  - Independent study course with subject matter related to regular 4000 level courses. It requires students to submit a major paper/report on the subject matter studied
  - Requires formal agreement between student and instructor
  - Requires ECON\*3600 or ECON\*3810 + ECON\*3710 + ECON\*3740
- ECON\*4910: Special Study in Economics S,F,W [0.50]
  - Same descriptions as above course, ECON\*4900

## ENGINEERING

### *School of Engineering (SOE)*

- ENGG\*4110: Biological Engineering Design IV F,W [1.00]
  - Capstone course that requires all 1000 and 2000 level core courses + ENGG\*3100
  - Usually run in teams and includes an assessment of socio-economic and environmental impact, requires reports and a professional poster presentation
  - Focus is on engineering analysis and design principles to a problem in a *biological system or process*
  - Ethics and legal case studies relevant to professional engineering practice are presented during the lectures.
  - Registration is in the 8<sup>th</sup> semester of the B.Eng program in a max of 3.25 credit registration with a min average of 60% or higher in all ENGG courses.
  - Requires instructor consent and waivers signed by Director, School of Engineering or designate **NB: Advisors must hold a P.Eng designation**
  - Departmental application package must be submitted to course coordinator by 40<sup>th</sup> day of class one semester prior and approved applicants will be register before the 1<sup>st</sup> day of classes
- ENGG\*4120: Engineering Systems and Computing Design IV F,W [1.00]
  - Same as above, except for a *control system, computer hardware or computer software technology*
- ENGG\*4130: Environmental Engineering Design IV F,W [1.00]
  - Same as 4110 for requirements, but focus in on environmental engineering problem
- ENGG\*4150: Water Resources Engineering Design IV F,W [1.00]
  - Same as 4110 for requirements, but focus is on water resources and wastewater engineering
- ENGG\*4160: Mechanical Engineering Design IV F,W [1.00]
  - Same as 4110 for requirements, but focus is on a mechanical engineering problem
- ENGG\*4170: Computer Engineering Design IV F,W [1.00]
  - Same as 4110 for requirements, but focus is on a computer engineering problem
- ENGG\*4180: Biomedical Engineering Design IV F,W [1.00]
  - Same as 4110 for requirements, but focus is on a biomedical engineering problem

## ENGLISH

### *School of English and Theatre Studies (SETS)*

- ENGL\*4810: Directed Reading S,F,W [0.50]
  - Intended as prep for ENGL\*4910 and is an option available for students performing well in the honours program
  - Course requirements are the same as the above and it requires instructor consents and can be used for creative writing upon instructor approval.
- ENGL\*4910: Honours English Essay S,F,W [0.50] **preferable course to use with ICON**
  - A major essay (approx 25 pages) on a subject of interest to the student, which is prepared and written under the direction of a faculty member
  - Requires instructor consents and the same list of courses that 4310 requires. It is an option for students doing well in the honours program and can be used for creative writing upon instructor approval.

## ENVIRONMENTAL SCIENCE

### *Department of Food, Agricultural, and Resource Economics (FARE), & School of ES*

- ENVS\*3100: Internship/Externship in Environmental Sciences S,F,W [0.50]\*
  - Experiential learning opportunity to be either on or off campus and developed with the director of the School of ES-a project advisor will be appointed prior to work experience and a description of the project and/or work experience will be done by the supervisor
  - Requires 12.00 credits with 1 of ENVM\*1000, ENVM\*1200, ENVS\*1020, ENVS\*1030
- ENVS\*3410: Independent Research I S,F,W [0.50]\*
  - Independent research project of practical and theoretical nature that relates to ES with the supervision of a faculty member
  - This is designed to introduce 3<sup>rd</sup> year students to independent research and projects can be completed in one term or it can be taken with ENVS\*3420 if two terms are needed
  - Requires a min of 10.00 credits with a minimum cumulative average of 70%
  - Restriction: ENVS\*3430, instructor consents, must be enrolled in BBRM:EM, BSC(Env), BSC(Agr), or BSCH.
- ENVS\*3430: Independent Research S,F,W [1.00]\*
  - Similar to the above course in requirements but this is designed to give students a longer, more in-depth project within a single term
  - Must be planned a semester in advance and registration must be done by the course coordinator no later than the second day of class of the semester in which the course is being taken. NB: Cannot take if have done ENVS\*3410, ENVS\*3420
- ENVS\*3510: Independent Study I S,F,W [0.50]
  - Similar to ENVS\*3410, can be a one term project or followed by ENVS\*3520
  - Students who have done ENVS\*3530 cannot do this course
  - Requires 10.00 credits and a minimum average of 70%
  - Must be planned a semester in advance and register by second day of class of semester in which the course is taken
- ENVS\*3530: Independent Study S,F,W [1.00]
  - Similar to ENVS\*3510, but is a longer, more in-depth project to be completed in one term.
  - Must have 10.00 credits and 70% cumulative average
  - Cannot take if have done ENVS\*3510/ENVS\*3520

- ENVS\*4410: Advanced Independent Research I S,F,W, [1.00]\*
  - Similar in goals to ENVS\*3410, but with the higher credit weighting, the course provides a more intensive research experience. Projects can be completed in one term or in conjunction with ENVS\*4420
  - Requires 15.00 credits with 70% cumulative average and (ENVS\*3410, ENVS\*3420) or ENVS\*3430
  - Must be planned a semester in advance and registration needs to be done no later than the second day of class of semester in which course is taken
  - Cannot take if taking ENVS\*4430. Requires instructor consent and registration in BSC(Env), BSC(Agr), BSCH or BBRM
- ENVS\*4430: Advanced Independent Research S,F,W [2.00]\*
  - Similar to ENVS\*4410, but more research intensive experience
  - Must be planned a semester in advance and registration form needs to be obtained no later than 2<sup>nd</sup> day of class in term which course is taken
- ENVS\*4510: Advanced Independent Study I S,F,W [0.50]
  - Engage in advanced research and study, requiring literature research that relates to environmental sciences; Can be completed in one term or followed with ENVS\*4520
  - Must be planned a semester in advance and registration needs to be done no later than the second day of class of the semester in which the course is taken
  - Requires one of ENVS\*3510, ENVS\*3520, ENVS\*3530, plus a min of 14.00 credits with a 70% cumulative average
  - Cannot be taken if taking ENVS\*4530 and must be enrolled in BBRM.EM, BSCH, BSC(Agr), BSC(Env)
- ENVS\*4530: Advanced Independent Study S,F,W [1.00]
  - Opportunity for students to engage in advanced independent research and study with projects based on literature research that relates to environmental sciences
  - Intensive one term study that must be planned a semester in advance and registered for by the second day of class
  - Cannot take if have done ENVS\*4510, ENVS\*4520 and need to be enrolled in same program as specified by ENVS\*4510 with 14.00 credits and a min average of 70%

**\*NB: The courses with the ‘\*’ were courses that Dr. Jonathan Newman supplied the course outline and learning contract for, and thus are more likely to be more effective in collaboration with ICON.**

## EUROPEAN STUDIES

### *School of Languages and Literatures*

- EURO\*4740: Research Project in European Studies F,W [0.50]
  - Independent study course that requires a research project on an aspect of European Studies that is approved by a faculty advisor
  - Seminar presentations will be included and a final research paper written in student’s core language.
  - Requires EURO\*1020, EURO\*1050, EURO\*2000, and EURO\*2070

FAMILY RELATIONS AND HUMAN DEVELOPMENT  
*Department of Family Relations and Applied Nutrition (FRAN)*

- FRHD\*4810 Thesis I U [0.50]
  - Planning, developing and writing a research proposal under faculty supervision. Consultation with advisor before course registration occurs
  - Students are advised to contact the department of FRAN for more info
  - Requires FRHD\*3070 (Research methods) and instructor consent
  - Equated to CSTU\*4810 (discontinued course)
- FRHD\*4910: Thesis II U [1.00]
  - Taken after FRHD\*4810
  - Equated to FRHD\*4911-2 (discontinued course)

FOOD SCIENCE  
*Department of Food Science*

- FOOD\*4220: Topics in Food Science S,F,W [0.50]
  - Independent study of a selected Food Science topic, involves a review and critical evaluation of current literature, requires library research, a concise report in a written paper and in a seminar. Can be followed by FOOD\*4230 (after ICON use of 4220)
  - Must make arrangements with faculty supervisor and course co-ordinator in a prior course selection period
  - Need 2.50 credits at the 3000 level in Food Science

FOOD, AGRICULTURE & RESOURCE ECONOMICS  
*Department of Food, Agricultural and Resource Economics (FARE)*

**Note that both of these courses are offered as the need arises. There are NO COURSE OUTLINES as they are designed and developed by the plan of study the student pursues.**  
<This information was provided by Debbie Harkies from the Department of FARE>

- FARE\*4550: Independent Studies I S,F,W [0.50]
  - Project based independent study course for majors in Agricultural Economics (Bachelor of Arts or Bachelor of Science in Agriculture degree programs), Agribusiness (of the Bachelor or Commerce degree program), and Environmental Economics and Policy (of the Bachelor of Science in Environmental Sciences degree program)
  - Requires 10.00 credits including 1 of AGECE\*2410, AGECE\*2700, AGR\*2401/2, FARE\*2410, FARE\*2700. Equated to: AGECE\*4550 (discontinued course)
- FARE\*4560: Independent Studies II S,F,W [0.50]
  - Same description as above, but is the opportunity to do a second independent study project
  - Needs same requirements otherwise

FRENCH STUDIES  
*Department of Language and Literatures*

- FREN\*4740: Research Paper in French Studies I S,F,W [0.50]
  - Research paper in French on approved topic in French literature or language is required
  - Attention to methods of research and techniques of writing as intended of M.A. and PhD. Interested students
  - Need 70% average in all French studies, but 75% is recommended
- FREN\*4750: Creative writing in French S,F,W [0.50] probably less suitable over other two
  - Development and revision of a major work of creative writing in French (fiction, poetry, drama)
  - Requires FREN\*2020 or FREN\*2060, FREN\*3520, FREN\*4740 with a 70% average in all French studies, although 75% is preferred
- FREN\*4770: Research Paper in French Studies II S,F,W [0.50]
  - Similar to FREN\*4740, but requires FREN\*2020, FREN\*2060, FREN\*3520, and FREN\*4740 with a 70% average (75% recommended)

GEOGRAPHY  
*Department of Geography*

- GEOG\*4990: Independent Study in Geography [0.50]
  - Independent study option for senior undergraduate students, requires library or field research under faculty supervision and to prepare a research report.
  - Formal agreement between the student and the faculty supervisor is required, as is approval of the department chair.
  - Restricted to majors in Earth Surface Science, Environmental Geoscience and Geomatics, Environmental Governance, Geography and B.Sc.(Env.) with an overall average of at least 70% at the time of registration

GERMAN STUDIES  
*School of Language and Literatures (SoLL)*

- GERM\*3600: Directed Readings in German Studies U [0.50]
  - A reading course in German literature designed according to the program and interest of the student
  - Requires instructor consent
- GERM\*4940 Research Paper in German Studies U [0.50]
  - A reading course on some approved topic in German language or literature, leading to an end-of-term research paper
  - Requires instructor consent



## HISPANIC STUDIES

### *SoLL*

- HISP\*3800: Directed Readings in Hispanic Studies U [0.50]
  - A reading course in Spanish or Spanish American literature designed according to the previous studies and the interests of the individual student. Requires instructor consent.
  - Students will not be permitted to take more than two courses in the Directed Readings sequence
  - Requires: 1.00 credits from the following: HISP\*3220, HISP\*3230, SPAN\*3080, SPAN\*3110, SPAN\*3120, SPAN\*3130, SPAN\*3160, SPAN\*3170, SPAN\*3180, SPAN\*3300, SPAN\*3320
  - The same as SPAN\*3800 (discontinued course)
- HISP\*3810 Directed Readings in Hispanic Studies U [0.50]
  - Same requirements as HISP\*3800
  - The same as SPAN\*3810 (discontinued course)
- HISP\*4840 Research Paper in Hispanic Studies U (3-0) [1.00] **Best course to use**
  - Students write an intensive research paper in Spanish on a topic relating to a literary or linguistic subject in Hispanic Studies. This paper will be completed within one semester and students will be assigned to a faculty supervisor who will oversee the project.
  - Requires instructor consent and HISP\*3220 or HISP\*3230
  - The same as SPAN\*4840 (discontinued course)

## HISTORY

### *Department of History*

- HIST\*3470 Independent Reading U [0.50]
  - Independent study, based on a comprehensive reading list provided by the department. Evaluation will be based on two written examinations.
  - Requires 7.50 credits and instructor consent
- HIST\*3480 Workplace Learning U [0.50]
  - Independent study course based on either History related voluntary or paid workplace experience. Evaluation will be based on assignments relating to work duties. These will usually be in the form of a weekly journal, and a major project relating to some specific aspect of the work experience
  - Project must be approved by the department prior to the semester in which students want to take the course. A faculty advisor will be assigned to oversee the project
  - Requires 7.50 credits with 1.50 History or equivalent credits + instructor consent
- HIST\*4470 Special History Project Seminar I U [0.50]
  - Designed to train honours students in the techniques of research, interpretation and writing of history. The student will choose a topic for intensive study from a list approved by the department.
  - Requires 10.00 credits, B.A. Honours program with min average of 70% in all History attempts. Need instructor consent.
- HIST\*4970 Special History Project Seminar II U [0.50]
  - Continuation of HIST\*4470
  - Has the same requirements as HIST\*4470

HUMAN KINETICS  
*Department of HHSN*

- HK\*4360 Research in Human Health and Nutritional Sciences S,F,W [1.00]
  - The student will select a research topic and design and complete a project in an area of interest, in consultation with a faculty advisor. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course.
  - A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.
  - Requires 12.00 credits and course coordinator consent
- HK\*4510 Teaching, Learning & Knowledge Transfer S,F,W [1.00]
  - Student will select, design and complete an independent project on the scholarship of teaching, learning and/or knowledge transfer in human health
  - Requires arrangements to be made a semester in advance, the signature of the course coordinator, and a departmental registration form (submitted no later than the second day of class in the semester which the student is registered for the course).
  - Need 10.00 credits including BIOL\*1080

HOSPITALITY AND TOURISM MANAGEMENT  
*School of Hospitality, Food, and Tourism Management (HFTM)*

- HTM\*4500 Special Study in Hospitality and Tourism U [0.50]
  - Special study option designed to give senior undergraduate students an opportunity to pursue an independent course of study.
  - Topic selected will be determined between student and faculty member with expertise in the desired area
  - Restricted to BCOMM:HAFA, BCOMM:HAFA:C or BCOMM:TMGT, requires instructor consents

INTERDISCIPLINARY UNIVERSITY

- UNIV\*3330 Confronting Science and Politics W [1.00]
  - Enquiry-based approach, this course will present students with a number of critical global issues where science and politics collide.
  - Students will be expected to research and understand the scientific, political and cultural issues that underlie the problems and identify tangible, real-world, and effective action or resolution. Requires practise of oral and written forms of communication to explore issues of science, politics, culture, environment, humanitarianism and health.
  - Need to have 7.50 credits including (1 of PSYC\*2040, STAT\*2040, STAT\*2060, STAT\*2080, STAT\*2100) and Instructor consent
  - *Department: Associate VP Academic*
- UNIV\*4410 Civic Engagement with Communities F [0.50]
  - Capstone course that has students critically reflect on the connections they have developed between their personal identity as engaged citizens and the impacts their contributions have made with the broader community

- Assessment: e-portfolio of their experiential learning activities will be used to gain an appreciation of their personal growth and acquired skills, and to identify the challenges and opportunities in a lifelong commitment to social justice, sustainability, and respect for diversity.
- First offer—Fall 2015
- Requires UNIV\*2410, 90 hours of approved community service
- *Department of Political Science*

## INTEGRATIVE BIOLOGY

### *Department of Integrative Biology (IB)*

- IBIO\*4500 Research in Integrative Biology I F,W [0.75]
  - An independent research project of a practical or theoretical nature that relates either to organismal biology or the teaching of organismal biology
  - Conducted under the supervision of a faculty member and requires an minimum cumulative average of 70% in the biology courses during the first 6 semesters of a major in the College of Biological Science; need instructor consent
  - Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the project is to be completed.
- IBIO\*4510: Research in Integrative Biology II F,W [0.75]
  - Continuation of IBIO\*4500 (if needed)

## INTERNATIONAL DEVELOPMENT

### *Dean's Office, College of SAHS*

- IDEV\*3200 Individual Work/Study in International Development S,F,W [0.50]
  - Intended for student who seek to combine work and study in development with academic course work. This can be used in connection with internships or work at international development agencies or other appropriate businesses and organizations (in Canada and abroad)
  - Goals: for research and/or experience in a developing country, or for other practica or programs
  - Any faculty at the University of Guleph with appropriate expertise can supervise the work/study project
  - Student and faculty will agree on a project outline and evaluation criteria. The project must involve a writing component.
  - Requires 10.00 credits, instructor consent, and written approval of the faculty advisor for International Development
- IDEV\*4200 Advanced Work/Study in International Development S,F,W [0.75]
  - Individual work/study option at an advanced level
  - Same description as IDEV\*3200 above
  - Requires IDEV\*4190

## ITALIAN STUDIES

*SoLL*

- ITAL\*4900 Research Paper in Italian Studies F,W [0.50]
  - This course is the equivalent of a semester course. It involves a research project on some aspect of Italian language, literature, or thought. Topic must be approved by the section; the paper will be written under regular guidance of a faculty advisor.
  - Restricted to the 6<sup>th</sup> semester in the Italian honours program.

## LANDSCAPE ARCHITECTURE

*School of Environmental Design and Rural Development (EDRD)*

**Note: LARC\*3500, LARC\*4730 & LARC\*4740 are all independent courses. They are related to the field of study in LA. The student and the advisor determine the content and outcomes of the course. These courses are only available to students in the Bachelor of Landscape Architecture Program. For further contact, email the BLA program coordinator, Prof. Sean Kelly @ [skelly03@uoguelph.ca](mailto:skelly03@uoguelph.ca)**

*<This info was provided by Diana Foolen, the LA programs assistant, SEDRD>*

- LARC\*3500 Independent Study S,F,W [0.50]
  - Students establish, in consultation with the faculty member chosen, the content of the special study in the area of expertise of the instructor
  - Requires LARC\*3040
- LARC\*4730 Special Study in Landscape Architecture S,F,W [0.50]
  - Supervised independent study course involving competitions, special projects, modules, and other formats.
  - Need LARC\*3040 to take this course
- LARC\*4740 Case Studies S,F,W [0.50]
  - Travel and field studies of selected projects as approved by a faculty member. Students are required to submit a project or paper
  - Need LARC\*3040 to take this course.

## LATIN

*SoLL*

- LAT\*4150 Research Paper: Latin F,W [0.50]
  - A major essay on an area of study to be determined in consultation with the Classics Faculty in the School
  - Must have CLAS\*3060 or CLAS\*3120

## MANAGEMENT

*Department of Management, Department of Management and Consumer Studies (MCS),  
School of HFTM*

- MGMT\*4050 Applied Community Project I F,W [0.50]
  - Offered through the Centre for Business and Social Entrepreneurship (CBaSE). It is a project-based independent study option designed to provide senior undergraduate students with an opportunity to pursue an applied course of study while engaging with the local community. The topic selected will be determined in agreement between the student and the faculty member with expertise in the area.
  - Need to have 10.00 credits with a min 70% cumulative average
  - Restricted to students in the B.Comm and requires instructor consent
  - *Department of Marketing and Consumer Studies (MCS)*
- MGMT\*4060 Applied Community Project II F,W [0.50]
  - Same description as MGMT\*4050 above

## MARKETING AND CONSUMER STUDIES

*Department of MCS*

- MCS\*4020 Research in Consumer Studies U [0.50]
  - Provides independent research investigation in pertinent topic in consumer studies
  - Registration requires department approval, instructor consent and registration in B.Comm. MKMN or B.Comm. MKMN:C, plus 15.00 credits including MCS\*3030
- MCS\*4910 Topics in Consumer Studies U [0.50]
  - lecture-discussion or seminar on a selected topic in consumer studies to be conducted by faculty with expertise in the area OR can ask a faculty member in MCS to supervise them as they study a topic or do a project of interest
  - Need 15.00 credits, including MCS\*2600 and must be registered in B.Comm. MKMN or REH major. Requires instructor consent
- MCS\*4920 Topics in Consumer Studies U [0.50]
  - Same description as above

## MATHEMATICS

*Department of Mathematics and Statistics*

- MATH\*4600 Advanced Research Project in Mathematics F,W [1.00]
  - Students undertake an individual research project in some area of mathematics under the supervision of a faculty member.
  - A written report and public presentation is required
  - Need approval of a supervisor and the course coordinator

## MOLECULAR AND CELLULAR BIOLOGY

### *Department of MCB*

- MCB\*4500 Research Project in Molecular & Cellular Biology I S,F,W [1.00]
  - Independent research of a practical or theoretical nature on a specific topic in molecular and cellular biology with the supervision of a faculty member.
  - Students need to make arrangements at least one semester in advance of taking the course and require a departmental registration form that must be submitted no later than the 2<sup>nd</sup> day of class of the semester in which the student is registered for the course
  - Need to have taken MBG\*3350 or equivalent lab experience (at discretion of faculty advisor); students should have completed 6 terms in appropriate program in biological science. Need to have a 70% cumulative average in science courses over the first 6 terms.
  - Restriction: Students in programs offering project courses cannot enroll & requires course coordinator consent.
- MCB\*4510 Research Project in Molecular & Cellular Biology 2 S,F,W [1.00]
  - Similar to MCB\*4500 above.
  - Requires 1 of MBG\*4500, MCB\*4500, MICR\*4310 and 70% cumulative average.
  - Restriction is the same as MCB\*4500
- MCB\*4600 Topics in Molecular and Cellular Biology S,F,W [0.50]
  - Independent study of a current topic in Molecular and Cellular Biology, selected from the recent research literature and involving a review and critical appraisal of the area.
  - Requires independent library research, participation in weekly meetings, and written and oral presentations.
  - Need to make arrangements with both faculty advisor and the course coordinator in a prior course selection period. Coordinator consent is also required
  - Need to have taken MBG\*3350 or equivalent lab experience (at discretion of faculty advisor). Students are recommended to have min of 3.00 credits in 3000 or 4000 BIOC, MBG, MCB, or MICR courses
  - Restriction: same as MCB\*4500. This course is designed for students who programs do NOT offer topics courses.

## MUSIC

### *School of Fine Art and Music (SFAM)*

- MUSC\*4200 Independent Project in Music S,F,W [0.50]
  - Independent learning option in music for qualified students working in consultation with a faculty advisor.
  - The project may take the form of a course of readings and assignments, enabling the student to investigate a topic in music not otherwise available in the curriculum. It may also include a creative component (such as composition) or an experiential learning component (such as a professional performance opportunity, or a community outreach opportunity).
  - A written proposal, signed by the faculty advisor, must be submitted to the Director of the School for approval by the last day of course selection in the previous semester.
  - Requirements: 3.00 credits in Music, instructor consent, and registration in an honours major or minor in music or an area of concentration (General program) in Music

## NANOSCIENCE

*Department of Chemistry, Department of Math and Stats, Department of Physics*

- NANO\*4900 Advanced Studies in Nanoscience W [0.50]
  - Guides students through the primary literature of the field with readings from recent achievements.
  - Students will select individual topics on which they will prepare seminars and written reports.
  - Need to have 1.50 credits in NANO courses at the 3000 level
  - Cannot have taken PHYS\*4300
  - *Department of Physics*

## NEUROSCIENCE

*Department of Biomedical Sciences*

- NEUR\*4450 Research in Neurosciences S,F,W [1.00]
  - Students will conduct independent laboratory research on a current topic in any of the biomedical neurosciences (such as anatomy, physiology, pharmacology, toxicology, molecular biology, biochemistry).
  - Students work under the supervision of individual faculty. Faculty consent must be obtained prior to being admitted into the course by the course coordinator.
  - Must have 14.00 credits and cannot have taken BIOM\*4510, BIOM\*4521/2, NEUR\*4401/2. Need to be enrolled in Neuroscience minor.

## NUTRITION

*Department of APS, Department of FRAN, Department of HHNS*

- NUTR\*4810 Applied Human Nutrition Thesis I U [0.50] *Department of FRAN*
  - Planning, developing and writing a research proposal under individual faculty supervision. Topic decided on by the student in consultation with the supervisory faculty member before course selection or registration period.
  - Requires FRHD\*3070, NUTR\*2050, (NUTR\*3040 or NUTR\*3090) and instructor consent.
- NUTR\*4910 Applied Human Nutrition Thesis II U [1.00] *Department of FRAN*
  - Student will conduct and write an undergraduate thesis under the direction of a faculty member.
  - Must have already taken NUTR\*4810

## PHILOSOPHY

*Department of Philosophy*

- PHIL\*3710 Directed Reading F,W [0.50]
  - This course is intended as an intensive course of reading chosen by the student in consultation with the faculty member.
  - Need 1.50 credits in Philosophy or 7.50 credits and instructor consent
- PHIL\*3720 Directed Reading F,W [0.50]

- Same requirements and descriptions as PHIL\*3710 above
- PHIL\*4710 Directed Reading F,W [0.50]
  - Similar to PHIL\*3710, but also requires 1.00 credits in philosophy at the 3000 level
- PHIL\*4720 Directed Reading F,W [0.50]
  - Similar to PHIL\*4710
- PHIL\*4800 Honours Philosophy Research Paper I U [0.50]
  - Major research paper under the supervision of a faculty member. Normally open only to 7<sup>th</sup> semester honours philosophy students.
  - Requires 1.00 credits in Philosophy at 3000 level, need instructor consent

## PHYSICS

### *Department of Physics*

**Note:** The 4<sup>th</sup> year independent Physics course: PHYS\*4001/2 is a two term research course that is required during terms 7 & 8. However, these other courses were found on the calendar as possible options, PHYS\*4300 serving as an acceptable replacement for PHYS\*4001/2. The other courses may be possible options for use with ICON as well.

- PHYS\*4300 Inquiry in Physics W [0.50]
  - Students will undertake independent study of the scientific literature and learn how to communicate scientific research effectively. Students will prepare seminars and written reports on approved topics drawn from current research initiatives in physics.
  - Need to have 7.00 PHYS credits

## POLITICAL SCIENCE

### *Department of Political Science*

- POLS\*3850 Experiential Learning in Political Science U [0.50]
  - Students reflect upon involvement in some form of politically related activity, including simulations, volunteer programs, or internship work with government or non-government organizations.
  - Student needs a faculty member from the Department of Political Science willing to act as a supervisor. See the Political Science website for the learning contract and other requirements that must be completed in advance of registering for this course.
  - Need at least 10.00 credits, 2.00 must be in political science
  - Need approval of the experienced and evaluation criteria by the Undergrad Committee of the Department of PoliSci and instructor consent
- POLS\*3960 Selected Topics in Political Science S,F,W [0.50]
  - Readings and research in selected areas of the discipline not covered by regular course offerings. Students present a proposal and approval form a semester previous to enrolment. Course presentation, emphasis, and evaluation are at the discretion of the instructor.
  - Requires 1.50 credits at the 3000 level in PoliSci
- POLS\*4910 Selected Topics in Political Science II S,F,W [0.50]
  - Independent reading and research in selected areas of the discipline not covered by regular course offerings. Students present a proposal and approval form a semester previous to enrolment.



- Students should have a proposal for readings and research, which may include reflection and expansion on a subject matter addressed in previous course assignments.
- Need 1.50 credits at the 3000 level in PoliSci or equivalent and instructor consent
- POLS\*4930 Selected Topics in Political Science II S,F,W [0.50]
  - Same requirements and description as POLS\*4910

## PSYCHOLOGY

### *Department of Psychology*

- PSYC\*3900 Psychology Research Internship F,W,S [0.50]
  - Experiential learning opportunity through the active participation of the student in a faculty member's ongoing research program.
  - Goal: students develop a broader appreciation of the relationship between knowledge, theory and research while acquiring basic skills in research methodologies and modes of inquiry. The course will require involvement in both the practice and reporting of research.
  - Need to have 1 of PSYC\*1000, PSYC\*1100 (discontinued), PSYC\*1200 (discontinued), and 1 of PSYC\*1010, PSYC\*2010 (discontinued), STAT\*2040, plus at least 1.00 credit in Psych at the 2000 level of the psych core + need instructor consent prior to registering
- PSYC\*3910 Psychology Externship F,W,S (0-6) [0.50]
  - An independent program of study formally integrating the student's academic study with one or more work experiences, to be decided by the student in consultation with the supervisory faculty (normally the department's co-op coordinator) prior to registration in the course. In order to qualify for this course, the student must be employed in a work setting at the time of registration to help ensure that a suitable project is feasible in the context of a work placement or employment.
  - The student must consult with the supervisory faculty before selecting or registering for the course.
  - Not open to co-op students
  - Need: (1 of PSYC\*1000, PSYC\*1100, PSYC\*1200), (1 of PSYC\*1010, PSYC\*2010, STAT\*2040) and at least 1.00 credits at the 2000 level of the psychology core) or enrollment in the B.Comm Program, Human Resources Management Major PLUS instructor consent
- PSYC\*4510 Current Issues in Psychology S,F,W [0.50]
  - The study of issues of current interests in psychology. Topics will vary with the interests of faculty members assigned to the course and will be announced prior to the course selection period. The course is available either as a senior lecture/seminar course with regularly scheduled class times, or as an **independent study course** with the topic and schedule decided in advance by the student in conjunction with a supervisory faculty member. (H)
  - Need 4.0 credits in PSYC with at least 1.0 credits @ the 3000 level or above and previous study related to the topic area (See Psyc core statement)
  - Requires instructor consent.
- PSYC\*4870 & PSYC\*4880: Honours Thesis Class
  - *This is a two term research course and is likely not applicable for use with pilot run for ICON*

## SOCIOLOGY

### *Department of Sociology and Anthropology*

- SOC\*3950 Special Projects in Sociology S,F,W [0.50]
  - Special study option/reading course designed to provide advanced undergraduates with an opportunity to explore independently the frontiers and foundations of a field of knowledge. Under supervision, the student will study in greater depth topics related to regular upper-level courses offered in the department which the student has taken or is taking. Permission of the instructor who will be supervising the study is required.
  - Need 10.00 credits and only a max of 1.00 credits only for reading courses
- SOC\*4880 Special Projects in Sociology S,F,W [0.50]
  - Same description as SOC\*3950, but requires 12.50 credits
  - Note that only a max of 1.00 credits for reading courses is allowed
- SOC\*4890 Special Projects in Sociology S,F,W [0.50]
  - Same description as SOC\*3950, but requires 12.50 credits
  - Note that only a max of 1.00 credits for reading courses is allowed

## STATISTICS

### *Department of Math and Stats*

- STAT\*4600 Advanced Research Project in Statistics F,W [1.00]
  - Students will undertake an individual research project in some area of statistics, under the supervision of a faculty member. A written report and a public presentation of the project will be required.
  - Need to have approval of the supervisor and the course coordinator

## STUDIO ART

### *School of FAM*

- SART\*3800 Experiential Learning I F,W [0.50]
  - Independent study based on either Studio Art-related voluntary or paid practical experience. Evaluation will be based on assignments related to work duties. Written proposals, signed by the instructor, must be submitted to the Director for the School for approval by the last day of course selection in the Fall (for Winter) or Winter (for the following Fall). Course requires instructor consent.
  - Need 3.00 credits in Studio Art and must be registered in Art History or Studio Art specialization of the BA program with an average of 70% in all ARTH or SART courses
- SART\*4880 Extended Practices IV W [1.00]
  - In close consultation with the instructor, students produce two self-directed projects based on their own research. Presentations, grants, writing and composing artist statements will provide students the opportunity to develop personal conviction and a professional approach to Studio Art practice.
  - Need 1 of SART\*4660, SART\*4760, SART\*4810 and same registration requirements and cumulative average as SART\*3800 above

## THEATRE STUDIES

### *School of English and Theatre Studies (SETS)*

- THST\*3600 Directed Readings and Special Independent Studies U [0.50]
  - Independent study based upon bibliographies established in consultation with the instructor. An essay will normally constitute the written requirement for the course. Tutoring and/or consultation will be arranged, depending on the topic or materials for study. Special studies may also be arranged in the practical aspects of the theatre, with appropriate assignments, not leading to a production.
  - Projects for this course are subject to the approval of the School, and must be submitted to the Director, on forms provided by the School, no later than the last day of classes in the semester prior to enrolment in the course. Instructor consent is required
  - Also need 3.00 credits in Theatre Studies, including THST\*2010, THST\*2230, 1 of THST\*2080, THST\*2120, THST\*2240.
- THST\*4250 Honours Project in Theatrical Production F,W [0.50]
  - The completion, under direction, of a project in acting, directing, dramaturgy, design or technical theatre
  - Need to have THST\*2010, THST\*2230, 1 of DRMA\*3440, THST\*3110, THST\*3220, THST\*3430, THST\*3480, THST\*3700 + Admission by application to the School and instructor or School Director consent

## TOXICOLOGY

*Department of Biomedical Sciences, Department of Chemistry, School of ES, Department of Math and Stats, Department of MCB, Department of Pathobiology*

- TOX\*4900 Toxicology Research Project I S,F,W [1.00]
  - Designed to provide senior undergraduate students with an opportunity to conduct research in an area of toxicology. Most projects are of two semesters' duration, and should plan their studies with the expectation that they will also register in TOX\*4910 in a subsequent semester.
  - Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester in advance. The project supervisor should normally be a faculty member from the Toxicology Program.
  - Need to have taken TOX\*3300 and have a cumulative average of 70%
  - *Department of Chemistry*