LIFE SCIENCES (LISC)

LISC 300 The Process of Discovery in the Biomedical Sciences  Units: 3.00
Teams of students will identify the critical questions that must be answered to resolve major controversies or gaps of knowledge that impede the application of fundamental principles in the Life Sciences to health care. The end product will be a written report and public presentation that is accessible to a wide audience.
NOTE Restricted to students registered in Level 3 or above in a (LISC Specialization or Major Plan or BCHM Specialization or Major Plan or BIOL Plan or PSYC Plan).
NOTE Limited enrollment available to BIOL and PSYC students.
Learning Hours: 126 (6 Lecture, 6 Seminar, 33 Group Learning, 33 Online Activity, 48 Private Study)
Requirements: Prerequisite Minimum 3rd year (Level 3) standing and registration in one of (LISC Honours Plan; BCHM Honours Plan; BHSc Program; BIOL Plan; PSYC Plan).
Offering Faculty: Faculty of Health Sciences

LISC 387 Sex Differences in Health and Disease  Units: 3.00
This course will focus on the role of sex/gender related differences in etiology, pathogenesis and immune responses of human diseases. Conventional and advanced tools in diagnosis and treatment of diseases affecting men and women.
Learning Hours: 120 (24 Lecture, 12 Seminar, 36 Group Learning, 48 Private Study)
Requirements: Prerequisite (Level 3 and registration in a LISC/BCHM Major or Specialization Plan or BHSC program) and (a GPA of 2.5) and one of (MICR 270/3.0; MICR 360/3.0; MICR 386/3.0) and BCHM 218/3.0. Exclusion REPD 387/3.0*.
Offering Faculty: Faculty of Health Sciences

LISC 390 Integrated Life Science Laboratory 1  Units: 3.00
Students will learn a number of different laboratory techniques, developing skills in scientific methodology, data acquisition, and interpretation. Students will also attain skills in critical thinking and hypothesis development, as well as gain experience in writing a laboratory report, and participating in research presentations.
NOTE Priority will be given to students registered in a LISC Specialization Plan.
Requirements: Prerequisite (PHGY 210/6.0 or PHGY 214/6.0 or (PHGY 215 and PHGY 216)) and (LISC 391 or PHAR 230 or PHAR 340 or PHAR 370 [formerly PHAR 270/3.0]). Exclusion BMED 384.
Offering Faculty: Faculty of Health Sciences

LISC 391 Integrated Life Sciences Laboratory  Units: 3.00
An intermediate laboratory course on the Physiology and Pharmacology of Cardiorespiratory Sciences and Neuroscience. Students develop skills to acquire and evaluate data and methods. Critical thinking skills are used for the development of arguments, assumptions, and information required to evaluate concepts and hypotheses.
NOTE Priority will be given to students registered in a LISC Specialization Plan.
Learning Hours: 108 (36 Laboratory, 36 Online Activity, 36 Private Study)
Requirements: Prerequisite PHGY 210/6.0 or PHGY 214/6.0 or (PHGY 215 and PHGY 216). Exclusion BMED 384.
Offering Faculty: Faculty of Health Sciences

LISC 400 Neuro-Immune Interactions in Health and Disease  Units: 3.00
This course is designed to advance critical thinking skills, as well as oral and written communication skills, via an inquiry-based approach in neuroimmunology. Teams of students identify the critical cellular and molecular processes regulating neuro-immune interactions in health and disease.
Learning Hours: 120 (24 Group Learning, 36 Individual Instruction, 36 Online Activity, 24 Private Study)
Requirements: Prerequisite Minimum 3rd year (Level 3) standing, registration in a LISC/BCHM/BHSc Major or SSP, a GPA of 2.5, and one of ([PHGY 290/3.0 and MICR 270/3.0]; LISC 300/3.0; NSCI 323/3.0; NSCI 324/3.0; MICR 360/3.0; MICR 386/3.0).
Offering Faculty: Faculty of Health Sciences

LISC 426 Current Concepts in Sensorimotor Neuroscience  Units: 3.00
A multi-disciplinary course exploring advanced concepts of sensorimotor integration from a systems neuroscience perspective. Topics include the neural basis of perception, action selection, reinforcement learning, and motor control. Students will learn to critically evaluate scientific literature and present these concepts to classmates.
Requirements: Prerequisite Level 4 or above and registration in the LISC Major or Specialization Plan and a cumulative GPA of 2.50 or higher and (NSCI 323 or NSCI 324).
Offering Faculty: Faculty of Health Sciences
LISC 594 Independent Study  Units: 3.00
Exceptionally qualified students entering their fourth-year may take an independent study provided it has been approved by the Program Office(s) principally involved. The Program Office may approve an independent study without permitting it to be counted toward a concentration in that Program Office. It is, consequently, the responsibility of a student taking an independent study to ensure that the concentration requirements for their degree will be met.
NOTE Requests for an independent study must be received one month before the start of the first term in which the student intends to undertake the independent study.
NOTE Also offered at Bader College, UK.
Requirements:  Prerequisite Permission of the Program Office(s) principally involved.
Offering Faculty:  Faculty of Health Sciences

LISC 595 Independent Study  Units: 6.00
Exceptionally qualified students entering their fourth-year may take an independent study provided it has been approved by the Program Office(s) principally involved. The Program Office may approve an independent study without permitting it to be counted toward a concentration in that Program Office. It is, consequently, the responsibility of a student taking an independent study to ensure that the concentration requirements for their degree will be met.
NOTE Requests for an independent study must be received one month before the start of the first term in which the student intends to undertake the independent study.
Requirements:  Prerequisite Permission of the Program Office(s) principally involved.
Offering Faculty:  Faculty of Health Sciences

LISC 596 Independent Study  Units: 12.00
Exceptionally qualified students entering their fourth-year may take an independent study provided it has been approved by the Program Office(s) principally involved. The Program Office may approve an independent study without permitting it to be counted toward a concentration in that Program Office. It is, consequently, the responsibility of a student taking an independent study to ensure that the concentration requirements for their degree will be met.
NOTE Requests for an independent study must be received one month before the start of the first term in which the student intends to undertake the independent study.
Requirements:  Prerequisite Permission of the Program Office(s) principally involved.
Offering Faculty:  Faculty of Health Sciences

LISC 598 Independent Study  Units: 9.00
Exceptionally qualified students entering their fourth-year may take an independent study provided it has been approved by the Program Office(s) principally involved. The Program Office may approve an independent study without permitting it to be counted toward a concentration in that Program Office. It is, consequently, the responsibility of a student taking an independent study to ensure that the concentration requirements for their degree will be met.
NOTE Requests for an independent study must be received one month before the start of the first term in which the student intends to undertake the independent study.
Requirements:  Prerequisite Permission of the Program Office(s) principally involved.
Offering Faculty:  Faculty of Health Sciences