

The following proposals, received on DAP between March 1-15, 2018, have been approved.
For more information on the DAP process, [see the Secretariat's website](#).

FACULTY OF ARTS AND HUMANITIES

CLASSICAL STUDIES

Effective **September 1, 2018**, the following courses be revised.

Classical Studies 1000 CLASSICAL CIVILIZATION ANCIENT GREECE AND ROME

Classical Studies 3150F/G LATIN ROMAN EPIC

In this course we will read (in translation English) two major Roman poems: Virgil's Aeneid and Ovid's Metamorphoses a selection of Roman epic poetry. We will use them the poems as the basis for discussions on many different topics, including mythology, literary and cultural history, rhetorical devices, and the history of poetry.

ENGLISH AND WRITING STUDIES

Effective **September 1, 2018**, the following courses be withdrawn.

Film Studies 2152F/G - CONTEMPORARY AMERICAN CINEMA

Film Studies 2158F/G - CONTEMPORARY CANADIAN CINEMA

Film Studies 2200F/G - FILM THEORIES, CRITICISMS, HISTORIES

Film Studies 2270F/G - FILM AESTHETICS

Effective **September 1, 2018**, the following module be revised.

MINOR IN FILM STUDIES

Module

4.0 courses:

1.0 courses: Film Studies 2230F/G, Film Studies 2252F/G.

0.5 course from: Film Studies 2158F/G Film Studies 2258F/G, or the former Film Studies 2158F/G.

2.5 additional courses in Film Studies at the 2100 level* or above. Other courses may be substituted with permission of the Department.

*No more than 1.0 course at the 2100 level may be counted towards the Minor in Film Studies.

FACULTY OF ENGINEERING

MECHATRONIC SYSTEMS ENGINEERING

Effective **September 1, 2018**, the following courses be introduced.

Mechatronic Systems Engineering 2273A/B - INTRODUCTION TO FLUID MECHANICS AND HEAT TRANSFER

An introduction to fluid mechanics and heat transfer. The fluid mechanics covers fluid properties, fluid statics including buoyancy and stability, one-dimensional fluid dynamics including conservation of mass and energy and losses in pipe networks. Heat transfer covers development

of the general energy equation for three dimensions and steady-state conduction in one and two dimensions.

Antirequisite(s): MME 2273A/B.

Pre-or Corequisite(s): Applied Mathematics 2270A/B.

Extra Information: 3 lecture hours, 2 tutorial hours, 0.5 laboratory hour, 0.5 course.

Mechatronic Systems Engineering 3310A/B – ELECTRIC MOTORS AND DRIVES

Overview of the fundamental principles related to the operation of DC and AC motors, the associated power electronic converters and drives. Emphasis will be placed on the design and integration of these devices into mechatronic systems.

Antirequisite(s): ECE 3332A/B, ECE 4457A/B.

Prerequisite(s): MSE 2201A/B, MSE 2233A/B.

Extra Information: 3 lecture hours, 3 laboratory hours, 0.5 course.

*Effective **September 1, 2018**, the following courses be revised.*

Mechatronic Systems Engineering 3302A/B - SENSORS & ACTUATORS

In this course, students are introduced to advanced concepts in sensing and actuation for mechatronic systems, including both traditional sensors and actuators, an introduction to advanced topics in micro electromechanical system (MEMS) sensing, and smart materials.

Prerequisite(s): MSE 2202A/B, **MSE 3310A/B**, ECE 3330A/B, ~~ECE 3332A/B~~.

Corequisite(s): ECE 3375A/B.

Mechatronic Systems Engineering 3360A/B - FINITE ELEMENT METHODS FOR MECHATRONIC SYSTEMS ENGINEERING

Antirequisite(s): MME 3360A/B, the former CEE 3384A/B.

Prerequisite(s): Engineering Science 1036A/B or Computer Science 1026A/B, Applied Mathematics 2270A/B, or the former Applied Mathematics 2415, MME 2202A/B or MSE 2212A/B or **CEE 2202A/B**, MME 2204A/B or MSE 2214A/B, MSE 2202A/B or **MME 2259A/B**.

*Effective **September 1, 2018**, the following options be revised.*

MECHATRONIC SYSTEMS ENGINEERING

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Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, **MSE 2273A/B**, ~~Statistical Sciences 2143A/B~~, Writing 2130F/G (or the former ES 2211F/G).

Third Year Program

Applied Mathematics 3415A/B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ~~ECE 3332A/B~~, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, **MSE 3310A/B**, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, 0.5 non- technical elective*

Fourth Year Program

MSE 4401A/B, MSE 4499, ECE 4460A/B, ~~ECE 4457A/B~~, ECE 4469A/B, ES 4498F/G, **Statistical Sciences 2141A/B**, 1.0 non-technical elective, three 0.5 technical electives**

Students who entered before September 2016 are required to take Business Administration 2299E.

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

**** Mechatronic Systems Engineering technical electives**

Technical electives not chosen from this list require special permission:

ECE 3380A/B, ECE 4429A/B, ECE 4438A/B, ECE 4445A/B, ECE 4455A/B, ECE 4468A/B, ~~ECE 4470A/B~~, MME 4424A/B, MME 4425A/B, MME 4459A/B, MME 4469A/B, MME 4470A/B, MME 4473A/B, MME 4480A/B, MME 4482A/B, MME 4492A/B, **the former ECE 4470A/B**.

B. MECHATRONIC SYSTEMS ENGINEERING/HBA

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Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, **MSE 2273A/B**, ~~Statistical Sciences 2143A/B~~, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

Applied Mathematics 3415A/B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ~~ECE 3332A/B~~, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, **MSE 3310A/B**, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Applied Project Requirement: Business Administration 4569

Fifth Year Program

MSE 4499, MSE 4401A/B, ES 4498F/G, **Statistical Sciences 2141A/B**, two 0.5 TE from the approved list.

3.0 Business Administration courses:

- 0.5 course: International Perspective Requirement: Business Administration 4505A/B.
- 0.5 course: Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- 0.5 course: Managerial Accounting Requirement: Business Administration 4624A/B.
- 1.5 elective courses chosen from 4000 level Business courses.

Approved Technical Electives: **ECE 4455A/B**, ~~ECE 4457A/B~~, ECE 4460A/B, ECE 4469A/B

For students who entered the HBA Program in September 2016 and prior, please refer to the 2016-2017 Academic Calendar.

C. MECHATRONIC SYSTEMS ENGINEERING/LAW

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Second-Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MME 2213A/B, MSE 2214A/B, MSE 2233A/B, **MSE 2273A/B**, ~~Statistical Sciences 2143A/B~~, Writing 2130F/G (or the former ES 2211F/G).

Third-Year Program

Applied Mathematics 3415A/B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ~~ECE 3332A/B~~, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, **MSE 3310A/B**, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, 0.5 non- technical elective*

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth-Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth-Year Programs

MSE 4499, MSE 4401A/B, **Statistical Sciences 2141A/B or Statistical Sciences 2143A/B**, one of ECE 4460A/B or ECE 4469A/B.

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FACULTY OF HEALTH SCIENCES

HEALTH SCIENCES

Effective **March 1, 2018**, the following courses be introduced.

Health Sciences 3990 – Internship

This course provides students with preparatory workshops and an applied professional learning experience for a period of 8-16 months at a sponsoring agency approved by the Faculty of Health Sciences. Using an application/interview process, selected students will be entered into the course once hired by external employers.

Antirequisite(s): Kinesiology 3890.

Prerequisite(s): Completion of 2nd year in the School of Health Studies with a minimum average of 70%, and participation in Preparation and Training Workshops. Approval of, and acceptance into, an internship work term and permission from the Faculty of Health Sciences.

Extra information: Pass/Fail. 1.0 course.

Credit for this course will not be given unless a minimum 8-month internship and all other mandatory components have been completed. Evaluation components will consist of an interim report, final written report and oral presentation. This course may not be used as a substitute for any other course in the School of Health Studies. Upon successful completion, credit for the course will be given in the year in which initial registration in the course took place.

Health Sciences 3991 - Internship work term (8 months)

Short title: 8mo HS internship #1

The activities, reports and other contractual obligations of a minimum 8-month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Health Sciences 3990.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Health Sciences 3990 and Health Sciences 3991 will be recognized on a student's transcript.

Health Sciences 3992 - Internship work term (9-12 months)

Short title: 9-12mo HS internship

The activities, reports and other contractual obligations of a 9-12 month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Health Sciences 3990.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Health Sciences 3990 and Health Sciences 3992 will be recognized on a student's transcript.

Health Sciences 3993 - Internship work term (13-16 months)

Short title: 13-16mo HS internship

The activities, reports and other contractual obligations of a 13-16 month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Health Sciences 3990.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Health Sciences 3990 and Health Sciences 3993 will be recognized on a student's transcript.

Health Sciences 3994 - Internship work term (8 months)

Short title: 8mo HS internship #2

The activities, reports and other contractual obligations of a minimum 8-month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Health Sciences 3990.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Health Sciences 3990 and Health Sciences 3994 will be recognized on a student's transcript.

Health Sciences 3995A/B – Health Sciences in Practice

This course is intended to enhance self-awareness and professionalism through the acquisition of problem solving, presentation, clinical, and transferable skills in a professional context. Students will gain experience and cultivate stronger career pathways through Community Engaged Learning projects, and acquire tangible skills to excel in the field of health studies and allied health.

Antirequisite(s): Kinesiology 3895A/B.

Prerequisite(s): Completion of 2nd year in the School of Health Studies, with a minimum average of 70%.

Extra information: 0.5 course. This course will prepare students interested in pursuing the 4th year practica courses.

Health Sciences 4995F/G - Practicum

This course provides 4th year Honors students the opportunity to gain experience applying theoretical knowledge in a community setting, including a full range of elements that comprise the

partners' operations. Students will be required to attend tutorial or seminar sessions. Applications due in the spring of the previous year.

Prerequisite(s): Health Sciences 3995A/B or permission of the School of Health Studies.

Corequisite(s): Registration in fourth year Honors Specialization in a School of Health Studies module. Specific location requirements may vary. Application required.

Extra information: 0.5 course, credit. Minimum of 75 practicum contact hours and 7 seminar hours over the 13 weeks.

Health Sciences 4996F/G - Practicum

This course provides 4th year Honors students the opportunity to gain experience applying theoretical knowledge in a community setting, including a full range of elements that comprise the partners' operations. Students will be required to attend tutorial or seminar sessions. Applications due in the spring of the previous year.

Prerequisite(s): Health Sciences 3995A/B or permission of the School of Health Studies.

Co-requisite(s): Registration in fourth year Honors Specialization in a School of Health Studies module. Specific location requirements may vary. Application required.

Extra information: 0.5 course, credit. Minimum of 75 practicum contact hours and 7 seminar hours over the 13 weeks.

KINESIOLOGY

Effective **September 1, 2018**, the following courses be withdrawn.

Kinesiology 3902Q/R/S/T - BASKETBALL COACHING

Kinesiology 3905Q/R/S/T - FOOTBALL COACHING

Kinesiology 3908Q/R/S/T - ICE HOCKEY COACHING

Kinesiology 3910Q/R/S/T - RUGBY COACHING

Kinesiology 3915Q/R/S/T - SWIMMING COACHING

Kinesiology 3916Q/R/S/T - TENNIS COACHING

Kinesiology 3917Q/R/S/T - TRACK & FIELD COACHING

Kinesiology 3918Q/R/S/T - VOLLEYBALL COACHING

Kinesiology 3925Q/R/S/T - ASSESSMENT OF PHYSICAL FUNCTION IN OLDER ADULTS

Kinesiology 3927Q/R/S/T - ADVENTURE EXPERIENCE 1

Kinesiology 3928Q/R/S/T - ADVENTURE EXPERIENCE 2

Kinesiology 3929Q/R/S/T - ADVENTURE EXPERIENCE 3

Kinesiology 3950Q/R/S/T - SPECIAL TOPICS SPORT SKILLS - COACHING

Kinesiology 3951Q/R/S/T - SPECIAL TOPICS SPORT SKILLS - COACHING

Kinesiology 3960A/B - CERTIFICATION FOR NATIONAL LIFEGUARD SERVICE (NLS) - POOL OPTION COURSE

Kinesiology 4410A/B - INTRODUCTION TO COACHING

Kinesiology 4411Y - COACHING PRACTICE

Effective **March 1, 2018**, the following courses be introduced.

Kinesiology 3515A/B - Sport and Health Policy Activity

Short title: *Sport & Health Policy Activity*

This course examines sport and health policy from national and international perspectives. It is concerned with social inclusion, focusing on the applicability of policies in terms of gender, race, ability, social class, and introduces various international examples of sport and health policy, including ramifications of hosting mega events, sport for development and peace, and sport diplomacy.

Extra Information: 3 lecture hours, 0.5 course.

Kinesiology 3890 - Internship

This course provides students with preparatory workshops and an applied professional learning experience for a period of 8-16 months at a sponsoring agency approved by the Faculty of Health

Sciences. Using an application/interview process, selected students will be entered into the course once hired by external employers.

Antirequisite(s): Health Sciences 3990.

Prerequisite(s): Completion of 2nd year in the School of Kinesiology with a minimum average of 70%, and participation in Preparation and Training Workshops; approval of, and acceptance into, an internship work term and permission from the Faculty of Health Sciences.

Extra information: Pass/Fail. 1.0 course.

Credit for this course will not be given unless a minimum 8-month internship and all other mandatory components have been completed. This course may not be used as a substitute for any other course in the School of Kinesiology. On successful completion, credit for the course will be given in the year in which initial registration in the course took place.

Kinesiology 3891 - Internship work term (8 months)

Short title: *8mo Kin internship #1*

The activities, reports and other contractual obligations of a minimum 8-month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Kinesiology 3890.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Kinesiology 3890 and Kinesiology 3891 will be recognized on a student's transcript.

Kinesiology 3892 - Internship work term (9-12 months)

Short title: *9-12mo Kin internship*

The activities, reports and other contractual obligations of a 9-12 month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Kinesiology 3890.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Kinesiology 3890 and Kinesiology 3892 will be recognized on a student's transcript.

Kinesiology 3893 - Internship work term (13-16 months)

Short title: *13-16mo Kin internship*

The activities, reports and other contractual obligations of a 13-16 month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Kinesiology 3890.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Kinesiology 3890 and Kinesiology 3893 will be recognized on a student's transcript.

Kinesiology 3894 - Internship work term (8 months)

Short title: *8mo Kin internship*

The activities, reports and other contractual obligations of a minimum 8-month internship work term recognized and approved by the Faculty of Health Sciences.

Prerequisite(s): Approval of, and acceptance into, an internship work term.

Corequisite(s): Kinesiology 3890.

Extra Information: non-credit, 3.0 courses, Pass/Fail.

Note: (1) Because Internships are not currently available to international students, they are not permitted to register in this course; (2) This course cannot be included in the number of courses counted toward any module or program; (3) Successful completion of Kinesiology 3890 and Kinesiology 3894 will be recognized on a student's transcript.

Kinesiology 3895A/B – Professionalism & Leadership in Practice

Short title: *Pre-practicum Course*

This course is intended to enhance self-awareness and professionalism through the acquisition of problem solving, presentation, clinical, and transferable skills in a professional context. Students will gain experience and cultivate stronger career pathways through Community Engaged Learning projects, and acquire tangible skills to excel in Kinesiology and allied health professions. Antirequisite(s): Health Sciences 3995A/B.

Prerequisite(s): Completion of 2nd year in the School of Kinesiology with a minimum average of 70%.

Extra information: 0.5 course. This course will prepare students interested in pursuing the 4th year practica courses.

Kinesiology 4995F/G - Practicum

This course provides 4th year Honors students the opportunity to gain experience applying theoretical knowledge in a community setting, including a full range of elements that comprise the partners' operations. Students will be required to attend tutorial or seminar sessions. Applications due in the Spring of the previous year.

Prerequisite(s): Kinesiology 3895A/B or permission of the School of Kinesiology. Registration in fourth year of an Honors Specialization module offered by the School of Kinesiology.

Extra information: 0.5 course, credit. Minimum of 75 practicum contact hours and 7 seminar hours over the 13 weeks. Specific location requirements may vary. Application required.

Kinesiology 4996F/G - Practicum

This course provides 4th year Honors students the opportunity to gain experience applying theoretical knowledge in a community setting, including a full range of elements that comprise the partners' operations. Students will be required to attend tutorial or seminar sessions. Applications due in the Spring of the previous year.

Prerequisite(s): Kinesiology 3895 A/B or permission of the School of Kinesiology. Registration in fourth year of an Honors Specialization module offered by the School of Kinesiology.

Extra information: 0.5 course, credit. Minimum of 75 practicum contact hours and 7 seminar hours over the 13 weeks. Specific location requirements may vary. Application required.

NURSING

Effective **September 1, 2018**, the following courses be introduced.

Nursing 3400A/B - Approaches to Mental Health Care

Short title: *Mental Health Care*

This course covers foundational concepts of mental health and nursing care in the context of mental illness, including addictions. Key course principles include health promotion, a recovery orientation, trauma and violence-informed care, stigma reduction, and the continuum of mental health. Learning includes participatory engagement in mental health assessment and therapeutic communication.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3410A/B - Gerontology: Care of the Older Adult and Their Families

Short title: *Gerontology*

This course examines concepts associated with caring for the geriatric population through a holistic, strengths-based lens. Students will focus on common health syndromes, social factors influencing health, and family considerations, to provide the context for addressing the unique care needs of the aging adult.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3420A/B - Principles of Public Health

This course has been designed to explore foundational knowledge, skills and abilities necessary for the practice of public health nursing. The focus will be on the Public health nursing competencies including public health sciences, assessment and analysis, policy development, program planning, implementation and intervention, partnership, advocacy, diversity, therapeutic communication, leadership, and professionalism in independent practice.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3430A/B Perinatal Health - Through the Child Bearing Continuum

Short title: *Perinatal Health*

The promotion of perinatal health is an integral component of professional nursing practice. This course provides a philosophical and theoretical foundation for understanding individual, newborn and family health issues throughout the childbearing continuum from preconception, pregnancy, labor, birth, neonatal transition to six weeks postpartum and for developing nursing interventions to promote perinatal and newborn health.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3440A/B Oncology - Care of Individuals and Families Through the Cancer Care Continuum

Short title: *Oncology*

This course will provide opportunities to develop an understanding of the cancer care continuum for clients and families. Students will focus on key concepts related to prevention, screening, diagnosis, management, palliation and survivorship within oncology care.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3450A/B - The Role of the Home Care Nurse Within Patient/Caregiver Environments

Short title: *Role of the Home Care Nurse*

This course will explore the roles that nurses perform in home care nursing practice. Exploration will be guided through two mid-range theories and the application of the Canadian Home Care Nursing Practice Competencies. Learners will gain an understanding of both similarities and differences between nursing roles in hospitals and home care nursing practice.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3460A/B - Development of Nursing Practice within Patient Caregiver Environments

Short title: *Home Care Nursing*

This course will explore the realities of providing care within the setting in which patients and their caregivers live and work. Learners will explore levels of risk and safety for patients, family members and the nurse through learning activities designed as composites of situational experiences commonly faced by home care nurses.

Prerequisite(s): Nursing 3450A/B, or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3470A/B - Management of Care Within Home Care Practice

Short title: *Management: Home Care Practice*

This course provides simulated learning in the application of common nursing practice skills within a variety of home based situations. Students will learn how to make autonomous decisions and how to adapt to unique situations that normally are not experienced in hospital-based practice. Simulated practice provides a “safe” learning environment to practice skills and learn from peer evaluation.

Prerequisite(s): Nursing 3450A/B and Nursing 3460A/B, or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

Nursing 3480A/B - Pediatrics: Care of Children and Their Families

Short title: *Pediatrics*

Pediatric nursing is dedicated to the health and care of young people, ranging from babies to teenagers. Children, as patients, have unique healthcare needs that require specialized knowledge and expertise in their growth, illness, and injury.

Prerequisite(s): Registration in year 3 or 4 of the Western-Fanshawe Collaborative BScN Program or permission of the Arthur Labatt Family School of Nursing.

Extra Information: 3 lecture hours; 0.5 credit.

DON WRIGHT FACULTY OF MUSIC

Effective September 1, 2018, the following course be withdrawn.

Music 3640 - SCORE PREPARATION & INSTRUMENTAL

Effective September 1, 2018, the following course be introduced.

Music 3641A/B/Y - Score Preparation and Instrumental Arranging

Instruments of the orchestra and band. Timbres, ranges, transpositions, terminology, and score arranging. Arranging for orchestral and/or wind ensembles.

Antirequisite(s): The former Music 3640.

Prerequisite(s): Music 2650A/B.

Extra Information: 3 hours, 0.5 course.

Effective September 1, 2018, the following programs be revised.

BACHELOR OF MUSIC WITH HONORS IN COMPOSITION

Second Year

Music 2629, Music 2635A/B, Music 2636A/B, Music 2649A/B, Music 2650A/B, Music 2710F/G, Music 2711F/G, Music 2920.

Ensemble: One, or more, of Music 2901, Music 2902, Music 2903, Music 2904, Music 2905, Music 2906, Music 2910, Music 2911, Music 2912, Music 2913. 1.0 course or equivalent from a Faculty other than Music.

Third Year

Music 3629, Music 3649A/B, Music 3650A/B.

Music 3920 and Ensemble* (Music 3901, Music 3902, Music 3903, Music 3904, Music 3905, Music 3906, Music 3910, Music 3911, Music 3912, Music 3913), or 1.0 music elective.

1.5 courses from Music 2695A/B, Music 3610A/B, Music 3611A/B, Music 3620A/B, Music 3621A/B, Music 3630A/B, **the former** Music 3640.

0.5 music or non-music elective.

*The ensemble requirement becomes an optional elective for those students not registered in Music 3920.

Fourth Year

Music 4629.

Music 4920 and Ensemble* (Music 4901, Music 4902, Music 4903, Music 4904, Music 4905, Music 4906, Music 4910, Music 4911, Music 4912, Music 4913), or 1.0 music elective.

1.5 courses from: Music 2695A/B, Music 3610A/B, Music 3611A/B, Music 3620A/B, Music 3621A/B, Music 3630A/B, ~~Music 3640~~, Music 3695, **the former Music 3640**.

1.5 music or non-music electives (of which no more than 0.5 can be music).

* The ensemble requirement becomes an optional elective for those students not registered in Music 4920.

MAJOR IN POPULAR MUSIC STUDIES

Module

6.0 courses:

0.5 course from: Music 2700A/B, Music 2701A/B, Music 2702A/B.

0.5 course Music 2736A/B.

0.5 course from: Music 3730A/B, Music 3731A/B, Music 3737A/B.

3.5 courses from: Music 2171A/B/Y, Music 2695A/B, Music 2700A/B, Music 2701A/B, Music 2702A/B, Music 2734A/B, Music 3713A/B/Y, Music 3730A/B, Music 3731A/B, Music 3733A/B, Music 3735A/B, Music 3736A/B, Music 3737A/B (if not already taken), Music 3738A/B, Music 3739A/B, Music 4720A/B/Y, Music 4735A/B, Music 4740A/B/Y.

1.0 courses from: English 2017, ~~Film Studies 2152F/G, Film Studies 2158F/G, Film Studies 2200F/G, Film Studies 2270F/G~~ **any 2000 level or higher Film Studies course**, Sociology 2106A/B, the former CLC 2205F/G, the former CLC 2273F/G, the former Film Studies 2253E, **the former Film Studies 2152F/G, the former Film Studies 2158F/G, the former Film Studies 2200F/G, the former Film Studies 2270F/G.**

FACULTY OF SCIENCE and SCHULICH SCHOOL OF MEDICINE & DENTISTRY

ANATOMY AND CELL BIOLOGY

Effective **September 1, 2018**, the following courses be revised.

Anatomy and Cell Biology 2221 - FUNCTIONAL HUMAN ANATOMY

Antirequisite(s): Anatomy and Cell Biology 3319, Health Sciences 3300A/B, Kinesiology 3222A/B.

Prerequisite(s): Grade 12U Biology (SBI4U) or equivalent.

Extra Information: 2 lecture hours, 2 laboratory hours. For Restricted to students in the BSc Degree in Kinesiology.

Anatomy and Cell Biology 3319 - SYSTEMIC HUMAN ANATOMY

Antirequisite(s): Anatomy and Cell Biology 2221, Health Sciences 3300A/B, Kinesiology 3222A/B.

Prerequisite(s): Registration in third or fourth year. A background in introductory biology is recommended.

Effective **September 1, 2018**, the following module be revised.

HONORS SPECIALIZATION IN MEDICAL CELL BIOLOGY

Module

11.0 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.

0.5 course from: Chemistry 2213A/B or Chemistry 2273A.

0.5 course from: Chemistry 2223B or Chemistry 2283G.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

1.0 course: Anatomy and Cell Biology 3309.

1.0 course from: Anatomy and Cell Biology 3319, Physiology 3120.

1.0 course: Biochemistry 3381A and Biochemistry 3382A with marks of at least 70% in each.

0.5 course from: Biology 3316A/B, Physiology 3140A with a mark of at least 70% in the course taken.

0.5 course from: Biochemistry 3380G, Biology 3326F/G with a mark of at least 70% in the course taken.

1.5 courses: Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B, Anatomy and Cell Biology 4429A.

0.5 course from: Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Anatomy and Cell Biology 4461B.

1.5 courses: Anatomy and Cell Biology 4480E (Research Project = 1.5 courses).

Note: ~~Some modular courses include a mark requirement in their prerequisite(s). See~~ UNDERGRADUATE COURSE INFORMATION. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM).

MAJOR IN MEDICAL CELL BIOLOGY

Admission Requirements for students pursuing this Major module in a Bachelor of Medical Sciences (BSc) degree:

Admission to this Major module occurs in Year 3 and requires admission to Year 3 of the Bachelor of Medical Sciences (BSc) Program. Students will usually complete MEDICAL SCIENCES FIRST ENTRY (Medical Sciences 1 and 2) prior to admission to a BSc degree.

The 1000-level half courses listed below must each be completed with a mark of at least 60%:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B.

0.5 course from: Calculus 1000A/B, Calculus 1500A/B, ~~the former Calculus 1100A/B.~~

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

The courses below must be completed with a minimum mark of 60% in each prior to admission to the Major module in Year 3. These courses will also be used towards the Module requirements. See **ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM** and **MODULES OFFERED IN THE BMSc PROGRAM** for additional requirements (averages, course load, etc.).

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Biology 2382A/B.

0.5 course from: Biology 2290F/G, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

Admission Requirements for students pursuing this Major module in a degree other than a Bachelor of Medical Sciences (BMSc) degree:

Completion of first-year requirements, including a mark of at least 60% in each of the 3.0 (full or half) principal courses below:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, ~~or the former Chemistry 1100A/B and the former Chemistry 1200B.~~

0.5 course from: Calculus 1000A/B, Calculus 1500A/B.

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

The following must be completed by the end of second year, with a mark of at least 60% in each half course:

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Biology 2382A/B.

0.5 course from: Biology 2290F/G, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course from: Biology 3316A/B, Physiology 3140A.

1.0 course: Anatomy and Cell Biology 3309.

1.0 course from: Anatomy and Cell Biology 3319, Physiology 3120.

1.0 course from: Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B, Anatomy and Cell Biology 4429A, Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Anatomy and Cell Biology 4461B.

Notes: Some modular courses include a mark requirement in their prerequisite(s). See **UNDERGRADUATE COURSE INFORMATION**

1. To register in Year 4 of a degree containing this module, students must satisfy the Admission Requirements for the module and have the prerequisite to register in at least two of the 4000-level courses in Anatomy and Cell Biology.
2. BSc and BSc students completing the Major in Medical Cell Biology in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

APPLIED MATHEMATICS

Effective **September 1, 2018**, the following courses be revised.

Applied Mathematics 1413 - APPLIED MATHEMATICS FOR ENGINEERS I

Antirequisite(s): Calculus 1000A/B, ~~the former Calculus 1100A/B~~ Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1225A/B, **Mathematics 1230A/B**.

Prerequisite(s): One or more of Ontario Secondary School MHF4U, MCV4U, or Mathematics 0110A/B.

Applied Mathematics 3611F/G - INTRODUCTION TO OBJECT ORIENTED SCIENTIFIC PROGRAMMING

Antirequisite(s): The former Applied Mathematics 4611F/G.

Prerequisite(s): Calculus 1301A/B, Calculus 1501A/B, Applied Mathematics 1201A/B or Applied Mathematics 1413.

Pre-or Corequisite(s): **Applied Mathematics 2402A, or Applied Mathematics 2811B, or Applied Mathematics 2814F/G, or Statistical Sciences 2857A/B**.

Applied Mathematics 3815A/B - PARTIAL DIFFERENTIAL EQUATIONS I

Prerequisite(s): (i) Mathematics 1600A/B ~~or the former Linear Algebra 1600A/B~~; Applied Mathematics 2402A ~~or the former Differential Equations 2402A~~; Calculus 2303A/B or Calculus 2503A/B; or (ii) Calculus 2402A/B **and Statistical Sciences 2503A/B or** ~~and the former Applied Mathematics 2503A/B~~. In each course a minimum mark of 60% is required.

BIOLOGY

Effective **September 1, 2018**, the following courses be revised.

Biology 1229A/B BIOLOGY: THE SECRETS OF LIFE

~~This course will provide a broad background of the history and main areas of biology, before embarking on a series of case studies and guest lectures including life in extreme environments, Antarctica, invasive species and extinctions.~~ **A course intended for non-scientists who want to make sense of life from a biological point of view. We will cover all levels from genes to ecosystems, and the biology behind current environmental and societal issues through case studies and discussions. Students will learn to read/interpret a scientific paper.**

Biology 3602A/B - ANIMAL PHYSIOLOGY II

Prerequisite(s): **A minimum mark of 60% in Biology 2601A/B**.

Pre-or Corequisite(s): ~~A minimum mark of 60% in Biology 2601A/B or Physiology 3120.~~

EARTH SCIENCES

Effective **September 1, 2018**, the following course be withdrawn.

Earth Sciences 4002A/B PLANETARY IMAGE INTERPRETATION

Effective **September 1, 2018**, the following course be introduced.

Earth Sciences 4606Y - Remote Sensing and Image Analysis for Earth and Planetary Science

Short title: *Remote Sensing for Earth Sci*

Introduction to the technical and conceptual basis for applying remote sensing and image analysis to Earth and planetary science. Hands on experience in computer processing of remote sensing data from diverse terrestrial and planetary data sets.

Antirequisite(s): Geography 2230A/B.

Prerequisite(s): Earth Sciences 2200A/B or Earth Sciences 2232F/G or Astronomy 2201A/B or Astronomy 2232F/G.

Extra Information: A six-day course offered usually in June, 15 lecture hours, 20 lab hours. 0.5 course.

Effective **September 1, 2018**, the following module be revised.

MINOR IN PLANETARY SCIENCE AND SPACE EXPLORATION

Module

4.0 courses:

0.5 course: Earth Sciences 2232F/G or Astronomy 2201A/B, Astronomy 2232F/G or the former Earth Sciences 2001F/G.

0.5 course: Geography 2090A/B.

3.0 courses from: Earth Sciences 2200A/B, Earth Sciences 2206A/B, Earth Sciences 2231A/B, Earth Sciences 2240F/G, Earth Sciences 2250Y, Earth Sciences 3001A/B, Earth Sciences 3312A/B, Earth Sciences 4001Y, ~~Earth Sciences 4002A/B~~, Astronomy 2021A/B, Physics 2070A/B, Geography 2220A/B, Geography 2230A/B, **the former Earth Sciences 4002A/B**.

Note: Some courses listed in this module have prerequisites not included in the module. Students in the Faculty of Science cannot take Astronomy 2021A/B and Physics 2070A/B for credit.

EPIDEMIOLOGY AND BIOSTATISTICS

Effective **September 1, 2018**, the following module be revised.

HONORS SPECIALIZATION IN EPIDEMIOLOGY AND BIOSTATISTICS

The 1000-level half courses listed below must each be completed with a mark of at least 60%:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, ~~or the former Chemistry 1100A/B and the former Chemistry 1200B~~.

0.5 course from: Calculus 1000A/B, Calculus 1500A/B.

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

0.5 course from: Physics 1028A/B, Physics 1301A/B or Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B or Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

The 2000-level courses below must be completed with a minimum mark of 60% in each (unless otherwise indicated) prior to admission to the Honors Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See **ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM** for additional average, course

load requirements, etc. and MODULES OFFERED IN THE BMSc PROGRAM for specific information about Honors Specialization modules, including the Weighted Average Chart.

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B, with a mark of at least 75%.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Epidemiology 2200A/B with a mark of at least 75%.

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B with a mark of at least 75%.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Epidemiology 2200A/B with a mark of at least 75%, or the former Epidemiology and Biostatistics 2200A/B, the former Epidemiology and Biostatistics 3300B.

1.0 course from the Social Science Subject List (see below).

0.5 1.0 course: Biostatistics 3100A, Biostatistics 3110B, with a mark of at least 70% in each.

~~0.5 course:~~ Biostatistics 3110B.

0.5 1.0 course: Epidemiology 3200A, Epidemiology 3210B, with a mark of at least 70% in each.

2.5 2.0 courses: ~~Epidemiology 3210B~~, Epidemiology 3330F/G, Epidemiology 4310A, Epidemiology 4320A, (one of Epidemiology 4500B or Epidemiology 4600A).

1.0 course from: Biostatistics 4115B, Epidemiology 3315B, Epidemiology 4600A (if not used above), Epidemiology 4615B, Epidemiology 4715B.

1.5 course: Epidemiology and Biostatistics 4900E (Research Project = 1.5 courses).

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Notes:

1. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

2. Students are encouraged to take at least one of the following ethics courses as options: Philosophy 2715F/G – Health Care Ethics, Philosophy 3730F/G – Research Ethics

MAJOR IN EPIDEMIOLOGY AND BIostatISTICS

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Admission Requirements for students pursuing this Major module in a degree other than a Bachelor of Medical Sciences (BMSc) degree:

Completion of first-year requirements, including a mark of at least 60% in each of the 3.0 (full or half) principal courses below:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, or the former Chemistry 1100A/B and the former Chemistry 1200B.

0.5 course from: Calculus 1000A/B, Calculus 1500A/B.

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

The following must be completed by the end of second year, with a mark of at least 60% in each half course:

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course from: Biology 2382A/B, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B, with a minimum mark of 75%.

0.5 course: Epidemiology 2200A/B with a minimum mark of 75%.

1.0 course: Biostatistics 3100A with a minimum mark of 70%, Biostatistics 3110B.

1.0 course: Epidemiology 3200A with a minimum mark of 70%, Epidemiology 3210B.

1.0 course from: Biostatistics 4115B, Epidemiology 4310A, Epidemiology 4320A, Epidemiology 4600A, Epidemiology 4615B (see note 2).

1.0 course from: Biology 2485A/B, Biology 3592A/B, Microbiology and Immunology 2500A/B, Pathology 3500, Pathology 4400A/B, additional courses in Biostatistics and Epidemiology at the 3000- and 4000-level, the former Pathology 3240A, the former Pathology 3245B.

Notes: ~~Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~

1. To register in Year 4 of a degree containing this module, students must satisfy the Admission Requirements for the module and have the prerequisite to register in at least two of Biostatistics 4115B, Epidemiology 4310A, Epidemiology 4320A, Epidemiology 4600A, and Epidemiology 4615B.

2. Biostatistics 4115B requires a minimum mark of 70% in Biostatistics 3110B. Epidemiology 4615B requires a minimum mark of 70% in either Epidemiology 4600A or Economics 2261A/B.

3. BSc and BSc students completing the Major in Epidemiology and Biostatistics in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

4. Students are encouraged to take at least one of the following ethics courses as options: Philosophy 2715F/G – Health Care Ethics, Philosophy 3730F/G – Research Ethics

MEDICAL HEALTH INFORMATICS

Effective **September 1, 2018**, the following courses be revised.

Medical Health Informatics 4100F - HEALTH INFORMATICS

Prerequisite(s): Enrolment in Year 4 of either an **one of the following** Honors Specialization **modules:** in Pathology, ~~or an Honors Specialization in Medical Health Informatics,~~ **One Health** or enrolment in Year 4 of Software Engineering (Health Informatics option) offered through the Department of Electrical and Computer Engineering, or permission of the course director.

Medical Health Informatics 4110G - HEALTH INFORMATION MANAGEMENT

Prerequisite(s): Medical Health Informatics 4100F or the former Pathology 4100F; and enrolment in Year 4 of either an **one of the following** Honors Specialization **modules** in Pathology, ~~or an Honors Specialization in Medical Health Informatics,~~ **One Health** or enrolment in Year 4 of Software Engineering (Health Informatics option) offered through the Department of Electrical and Computer Engineering, or permission of the course director.

Effective **September 1, 2018**, the following module be revised.

HONORS SPECIALIZATION IN MEDICAL HEALTH INFORMATICS

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course: Pathology 3500, or the former Pathology 3240A and the former Pathology 3245B.

1.0 course: Computer Science 2120A/B, Computer Science 2121A/B.

1.0 course: Computer Science 3120A/B, Computer Science 3121A/B.

1.0 course from: Computer Science 4411A/B, Computer Science 4412A/B, Computer Science 4415A/B, Computer Science 4416A/B, Computer Science 4417A/B, Computer Science 4418A/B, Computer Science 4442A/B.

1.0 course: Physiology 3120.

1.0 course from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319, Biochemistry 3385A, Biochemistry 3386B, Epidemiology 2200A/B, Medical Biophysics 3503G, Microbiology and Immunology 2500A/B, Pharmacology 3620, or the former Epidemiology and Biostatistics 2200A/B.

1.0 course: Medical Health Informatics 4100F, Medical Health Informatics 4110G.

1.5 courses: Medical Health Informatics 4980E (Research Project = 1.5 courses).

Notes: Some modular courses include a mark requirement in their prerequisite(s). See **UNDERGRADUATE COURSE INFORMATION**.

1. The prerequisite for both Biochemistry 3385A and Biochemistry 3386B is a mark of at least 65% in either Biochemistry 2280A or Biochemistry 2288A.

2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

ONE HEALTH

Effective **September 1, 2018**, the following course be revised.

One Health 4980E - SEMINAR & RESEARCH PROJECT

Antirequisite(s): Pathology 4980E.

Prerequisite(s): Pathology 3500 with a mark of at least 70% or the former Pathology 3240A and the former Pathology 3245B with marks of at least 70% in each; and registration in Year 4 of the Honors Specialization in One Health.

Effective **September 1, 2018**, the following module be revised.

HONORS SPECIALIZATION IN ONE HEALTH

Admission Requirements

Admission to this Honors Specialization module occurs in Year 3 and requires admission to Year 3 of the Bachelor of Medical Sciences (BMSc) Program. Students will usually complete MEDICAL SCIENCES FIRST ENTRY (Medical Sciences 1 and 2) prior to admission to the Honors Specialization module. Enrolment in this Honors Specialization module is limited and meeting the minimum requirements does not guarantee admission.

The 1000-level half courses listed below must each be completed with a mark of at least 60%:

1.0 course: Biology 1001A* and Biology 1002B*

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B

0.5 course from: Calculus 1000A/B, Calculus 1500A/B

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

1.0 course at the 1000-level from either Category A or B must be completed with a passing grade. 1.0 of the following first-year courses is recommended but not required: Sociology 1020 or ~~Sociology 1020E~~ **Sociology 1021E**, Geography 1400F/G, Geography 1500F/G, Health Sciences 1001A/B, Health Sciences 1002A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honors Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for additional requirements (average and course load), etc. See MODULES OFFERED IN THE BMSc PROGRAM for specific information about admission to the Honors Specialization modules, including the Weighted Average Chart.

0.5 course: Biochemistry 2280A

0.5 course: Biology 2382A/B

~~1.0~~ **0.5** course: Chemistry 2213A/B and ~~Chemistry 2210A/B~~

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B

Although not required prior to Year 3, students are encouraged to complete Chemistry 2210A/B in Year 2.

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

1.0 course: Chemistry 2213A/B and Chemistry 2210A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

0.5 course Biology 2483A/B.

1.0 course from: Geography 2133A/B, Geography 2153A/B, Sociology 2179A/B, Sociology 2180A/B, Sociology 2246A/B, Sociology 2247A/B, Sociology 2281A/B.

0.5 course: Environmental Science 3300F/G.

1.5 courses from: Anatomy and Cell Biology 3319, Biology 3316A/B or Physiology 3140A, Epidemiology 2200A/B, Microbiology and Immunology 2500A/B, Pharmacology 3620, Physiology 3120.

0.5 course from: Geography 3431A/B, Geography 3432A/B, Geography 3445F/G, Sociology 3308F/G.

1.5 courses: Pathology 3500 **with a minimum mark of 70%** (or the former Pathology 3240A, **and** the former Pathology 3245B **with marks of at least 70% in each**), Pathology 4400A/B.

1.0 course from: Medical Health Informatics 4100F, Medical Health Informatics 4110G, Pathology 3700F/G, Pathology 4200A/B.

0.5 course from: Biology 4230A/B, Biostatistics 3100A, Environmental Science 3350F/G.

1.5 courses: One Health 4980E (Research Project = 1.5 courses).

Notes:

1. ~~Some modular courses include a mark requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~
2. See the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM) for information about admission to the Honors Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

PATHOLOGY

*Effective **September 1, 2018**, the following course be revised.*

Pathology 4980E - SEMINAR AND RESEARCH PROJECT

Antirequisite(s): **The former** Pathology and Toxicology 4980E.

Prerequisite(s): Pathology 3500 with a mark of at least ~~75%~~ **70%** or the former Pathology 3240A and Pathology 3245B with marks of at least ~~75%~~ **70%** in each; and one of the following: (Pharmacology 3620, Physiology 3120, and registration in Year 4 of the Honors Specialization in Pathology), (Microbiology and Immunology 3610F, **and** Microbiology and Immunology 3620G **with marks of at least 70% in each** and registration in Year 4 of an Honors Specialization in Microbiology and Immunology with Pathology), or (Biochemistry 3380G **with a mark of at least 70%** and registration in Year 4 of an Honors Specialization in Biochemistry and Pathology of Human Disease).

Pre-or Corequisite(s): ~~Pathology 4500B.~~

*Effective **September 1, 2018**, the following modules be revised.*

HONORS SPECIALIZATION IN PATHOLOGY

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

0.5 course from: Biology 2290F/G, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2223B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course: Pharmacology 3620.

1.0 course from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319.

1.0 course: Physiology 3120.

1.0 course: Pathology 3500 with a mark of at least ~~75%~~ **70%**, or the former Pathology 3240A and the former Pathology 3245B with marks of at least ~~75%~~ **70%** in each.

0.5 course from: Biology 3316A/B, Chemistry 2272F, Epidemiology 2200A/B, Physiology 3140A, Medical Health Informatics 4100F, Medical Health Informatics 4110G ~~or the former Epidemiology and Biostatistics 2200A/B.~~

1.0 course: Pathology 4400A/B, Pathology 4500B.

1.0 course from: Medical Sciences 4100F/G, Pathology 3700F/G, Pathology 4200A/B, ~~4000-level courses in Pharmacology.~~

1.5 courses: Pathology 4980E (Research Project = 1.5 courses).

For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

MAJOR IN PATHOLOGY

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Biology 2382A/B.

0.5 course from: Chemistry 2213A/B, Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319.

1.0 course: Physiology 3120.

1.5 courses: Pathology 3500 with a minimum mark of 70% (or the former Pathology 3240A and the former Pathology 3245B with minimum marks of 70% in each), Pathology 4400A/B.

1.0 course from: Medical Health Informatics 4100F, Medical Health Informatics 4110G, Medical Sciences 4100F/G, Microbiology and Immunology 2500A/B, Pathology 3700F/G, Pathology 4200A/B, Pathology 4500B, Physiology 3140A.

Note: ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ A maximum of 1.0 "common course" can be double-counted towards two Major modules in a BMSc degree. See the Common Course Policy on the BMSc website for more information.

PATHOLOGY AND TOXICOLOGY

Effective **September 1, 2018**, the following course be withdrawn.

Pathology and Toxicology 4980E - SEMINAR AND RESEARCH PROJECT

PHYSIOLOGY AND PHARMACOLOGY

Effective **September 1, 2018**, the following courses be revised.

Pharmacology 4620A/B - MOLECULAR AND STRUCTURAL BASIS OF DRUG ACTION

~~This course will present mechanisms of major receptor, ion channel, exchanger and other protein actions that drive cell signalling processes in health and disease. Pharmacological interventions and drug design will be discussed in relation to dysfunctional cell signalling pathways and available protein structure information.~~ Drugs are designed to act on protein targets such as receptors, channels, exchangers and enzymes. This course explores the structures of these major targets and discusses how drugs are designed to treat dysfunction of the associated cell signaling pathways.

Prerequisite(s): **One of** Biochemistry 3381A, Pharmacology 3620, or **Physiology 3140A**.

Physiology and Pharmacology 3000E - PHYSIOLOGY AND PHARMACOLOGY

LABORATORY

Antirequisite(s): The former Pharmacology 3580Z, the former Physiology 3130Z.

Prerequisite(s): Biochemistry 2280A; either Chemistry 2213A/B or Chemistry 2273A; 1.0 course from: Physics 1028A/B, Physics 1029A/B, Physics 1301A/B, Physics 1302A/B, Physics 1501A/B, Physics 1502A/B; and 1.0 course from: Applied Mathematics 1201A/B, Calculus 1000A/B, Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1600A/B. A minimum average of 75% in the **Fall/Winter of the most recent academic** ~~previous~~ year is required. Open only to students who are registered in Years 3 or 4.

Pre-or Corequisite(s): Either Physiology 3120 or Pharmacology 3620 (**Physiology 3120 is strongly recommended**).

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN PHARMACOLOGY*

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 courses: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (see Notes).

0.5 course from: Biochemistry 3385A, Chemistry 2210A/B, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2223B, Epidemiology 2200A/B, Medical Biophysics 3501A, Microbiology and Immunology 2500A/B, Pathology 3500 (see Notes), or the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A (see Notes).

1.5 courses: Physiology and Pharmacology 4980E (Seminar and Research Project = 1.5 courses) or the former Pharmacology 4980E.

1.5 additional courses in Pharmacology at the 4000-level.

Notes:

~~2.~~ 1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. The former Pharmacology 3580Z may be used in place of Physiology and Pharmacology 3000E. The module will consist of 9.5 courses if the former Pharmacology 3580Z is included in the module.

~~4.~~ 2. If Pathology 3500 is included in the module, then the total number of courses required for the module increases by 0.5 course.

3. ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

HONORS SPECIALIZATION IN PHYSIOLOGY*

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Notes).

1.0 course from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319, Biology 2471A/B, Biology 2601A/B, Biology 3338A/B, Biology 3592A/B, Biology 3595A/B, Chemistry 2223B, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, **Pharmacology 3620.**

1.5 courses: Physiology and Pharmacology 4980E (Seminar and Research Project = 1.5 courses) or the former Physiology 4980E.

2.0 additional courses in Physiology at the 4000-level.

Notes:

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. The former Physiology 3130Z may be used in place of Physiology and Pharmacology 3000E. The module will consist of 9.5 courses if the former Physiology 3130Z is included in the module.
2. ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM).

HONORS SPECIALIZATION IN PHYSIOLOGY AND PHARMACOLOGY *

Module

10.0 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 courses: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (or the former Pharmacology 3580Z and the former Physiology 3130Z). (see Notes)

1.5 courses from: Physiology and Pharmacology 4980E or the former Pharmacology 4980E (Seminar and Research Project = 1.5 courses).

1.0 additional course in Pharmacology at the 4000-level.

1.0 additional course in Physiology at the 4000-level.

Notes:

~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~

1. A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM).

MAJOR IN PHARMACOLOGY

A degree containing this module normally requires 4 years for completion. When combined with one of the following Majors, this module leads to a Bachelor of Medical Sciences (BSc) degree: Biochemistry, Epidemiology and Biostatistics, Interdisciplinary Medical Sciences (IMS), Medical Biophysics, Medical Cell Biology, Microbiology and Immunology, or Pathology (see note). See BACHELOR OF MEDICAL SCIENCES (BSc) PROGRAM for more information.

Note: Students who successfully completed both the former Pharmacology 3580Z and the former Physiology 3130Z prior to September 1, 2017, may complete both a Major in Pharmacology and a Major in Physiology in a BSc degree. Students who do not successfully complete both the former Pharmacology 3580Z and the former Physiology 3130Z prior to September 1, 2017, may not register in both of these Major modules. The introduction of Physiology and Pharmacology 3000E creates too many common courses in the Major modules for both to be completed.

...

Admission Requirements for students pursuing this Major module in a degree other than a Bachelor of Medical Sciences (BSc) degree:

Completion of first-year requirements, including a mark of at least 60% in each of the 3.0 principal courses below:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, ~~or the former Chemistry 1100A/B and the former Chemistry 1200B.~~

0.5 course from: Calculus 1000A/B, Calculus 1500A/B.

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

The following must be completed by the end of second year, with a mark of at least 60% in each half course:

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

1.0 course: Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

1.0 course: Physiology 3120.

1.0 courses: Pharmacology 3620.

1.0 course: Physiology and Pharmacology 3000E (see notes).

1.0 courses in Pharmacology at the 4000-level.

Notes:

1. ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION~~ A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. Students requesting registration in Years 3 and 4 of the Major in Pharmacology who have not yet successfully completed either the former Pharmacology 3580Z or Physiology and Pharmacology 3000E must satisfy both the Admission Requirements for the module and the prerequisites for Physiology and Pharmacology 3000E to be allowed to register in the module.
2. With the introduction of Physiology and Pharmacology 3000E as a modular course in both the Major in Pharmacology and the Major in Physiology, students requiring this full-credit laboratory course may no longer complete both of these Major modules.
3. BSc and BSc students completing the Major in Pharmacology *in addition to another module* must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

MAJOR IN PHYSIOLOGY

A degree containing this module normally requires 4 years for completion. When combined with one of the following Majors, this module leads to a Bachelor of Medical Sciences (BSc) degree: Biochemistry, Epidemiology and Biostatistics, Interdisciplinary Medical Sciences (IMS), Medical Biophysics, Medical Cell Biology, Microbiology and Immunology, or Pathology (see note). See BACHELOR OF MEDICAL SCIENCES (BSc) PROGRAM for more information.

Note: Students who successfully completed both ~~the former~~ Pharmacology 3580Z and ~~the former~~ Physiology 3130Z prior to September 1, 2017, may complete both a Major in Pharmacology and a Major in Physiology in a BSc degree. Students who do not successfully complete both ~~the former~~ Pharmacology 3580Z and ~~the former~~ Physiology 3130Z prior to September 1, 2017, may

not register in both of these Major modules. The introduction of Physiology and Pharmacology 3000E creates too many common courses in the Major modules for both to be completed.

...

Admission Requirements for students pursuing this Major module in a degree other than a Bachelor of Medical Sciences (BMSc) degree:

Completion of first-year requirements, including a mark of at least 60% in each of the 3.0 (full or half) principal courses below:

1.0 course: Biology 1001A* and Biology 1002B*.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, ~~the former Chemistry 1100A/B and the former Chemistry 1200B.~~

0.5 course from: Calculus 1000A/B, Calculus 1500A/B.

0.5 course from: Applied Mathematics 1201A/B, Calculus 1301A/B, Calculus 1501A/B, Mathematics 1600A/B.

The following must be completed by the end of second year, with a mark of at least 60% in each half course:

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

* Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

Module

6.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

1.0 course from: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120 and Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Notes)

1.0 course: in Physiology at the 4000-level.

Notes:

1. ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E. Students requesting registration in Years 3 and 4 of the Major in Physiology who have not yet successfully completed either the former Physiology 3130Z or Physiology and Pharmacology 3000E must satisfy both the Admission Requirements for the module and the prerequisites for Physiology and Pharmacology 3000E to be allowed to register in the module.

2. With the introduction of Physiology and Pharmacology 3000E as a modular course in both the Major in Pharmacology and the Major in Physiology, students requiring this full-credit laboratory course may no longer complete both of these Major modules.

3. Students completing a Major in Physiology do not need to complete any rotations in Physiology and Pharmacology 3000E that required a background in Pharmacology.

4. BSc and BMSc students completing the Major in Physiology in addition to another module must adhere to the Common Course Policy if the same courses at the 2000- to 4000-level appear in more than one of the modules (see faculty websites for details).

SPECIALIZATION IN PHARMACOLOGY

Module

9.5 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.0 course: Pharmacology 3620.

1.5 courses: Physiology 3120, Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Note).

2.0 courses in Pharmacology at the 4000-level (with the exception of the former Pharmacology 4980E).

1.0 course from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319, Biochemistry 3385A, Epidemiology 2200A/B, Pathology 3500, Pathology 4400A/B, Chemistry 2210A/B, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2223B (a maximum of one half course in Chemistry may be chosen), Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Note: ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E.

SPECIALIZATION IN PHYSIOLOGY

Module

9.5 courses:

0.5 course: Biochemistry 2280A.

1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

0.5 course: Chemistry 2213A/B.

0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

1.5 courses: Physiology 3120, Physiology 3140A.

1.0 course: Physiology and Pharmacology 3000E (see Note).

2.0 courses from: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3319, Biology 2471A/B, Biology 2601A/B, Biology 3338A/B, Biology 3592A/B, Biology 3595A/B, Chemistry 2223B, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620.

2.0 courses in Physiology at the 4000-level (with the exception of the former Physiology 4980 E).

Note: ~~Some modular courses include a mark/average requirement in their prerequisite(s). See UNDERGRADUATE COURSE INFORMATION.~~ A minimum average of 75% in the Fall/Winter of the most recent academic year is included in the prerequisite for Physiology and Pharmacology 3000E.

MINOR IN PHARMACOLOGY

Admission Requirements

Completion of first-year requirements, including the following courses with a mark of at least 60% in each (full or half) course:

1.0 course: Biology 1001A and Biology 1002B.

1.0 course: Chemistry 1301A/B and Chemistry 1302A/B, or the former Chemistry 1100A/B and the former Chemistry 1200B.

Note:

Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

Module

4.0 courses:

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Biology 2382A/B.

1.0 course: Physiology 2130 or Physiology 3120.

1.0 course: Pharmacology 3620.

0.5 course: in Pharmacology at the 4000-level.

Notes for the Module:

- ~~1. Students may use Pharmacology 2060A/B in place of Biology 2382A/B, provided Pharmacology 2060A/B was completed prior to September 1, 2012.~~
- ~~2. Check the prerequisites for the 4000-level Pharmacology courses in the UNDERGRADUATE COURSE INFORMATION section.~~

BRESCIA UNIVERSITY COLLEGE

BIOLOGY

Effective **September 1, 2018**, the following courses be introduced.

Biology 0011A/B - Introductory Biology I

The concepts and processes of biological systems up to the cellular level. This course explores basic chemistry and the molecules of life, membrane and cell structure and function, enzymes and reactions, photosynthesis, DNA, protein synthesis, and mitosis and meiosis. Biology 0011A/B and Biology 0012A/B in combination are equivalent to Ontario Grade 12U Biology.

Antirequisite(s): Ontario High School SBI4U or equivalent, Biology 0010, any university-level Biology course.

Prerequisite(s): Registration in a Preliminary Year program at Brescia University College.

Extra Information: 2 lecture hours, 3 laboratory/tutorial 0.5 course.

Biology 0012A/B - Introductory Biology II

The concepts and processes of biological systems at the levels of the organism, population and ecosystem. This course explores genetics and inheritance, evolution and ecology, plant structure and function, animal structure and systems, and diversity of life. Biology 0011A/B and Biology 0012A/B in combination are equivalent to Ontario Grade 12U Biology.

Antirequisite(s): Ontario High School SBI4U or equivalent, Biology 0010, any university-level Biology course.

Prerequisite(s): registration in a Preliminary Year program at Brescia University College.

Pre-or Corequisite(s): Biology 0011A/B strongly recommended.

Extra Information: 2 lecture hours, 3 laboratory/tutorial 0.5 course.

CHEMISTRY

Effective **September 1, 2018**, the following courses be introduced.

Chemistry 0011A/B - Introductory Chemistry I

This course will explore the foundations of matter through atomic theory, investigate chemical reactions with stoichiometry, predict bonding and structure of compounds, and examine the

properties, reactions and structures of organic molecules. Chemistry 0011A/B and Chemistry 0012A/B in combination are equivalent to the Ontario Grade 12U level chemistry.

Antirequisite(s): Ontario High School SCH4U or equivalent, Chemistry 0010, any university-level Chemistry course.

Prerequisite(s): High School Chemistry (Grade 11 Advanced Level or equivalent) or permission of the Dean, and registration in a Preliminary Year program at Brescia University College.

Extra Information: 2 lecture hours, 3 laboratory/tutorial 0.5 course.

Chemistry 0012A/B - Introductory Chemistry II

This course explores thermodynamics, kinetics and equilibrium of chemical reactions, behaviour of ideal gases, and interpretation of redox reactions. Students will engage in problem solving and apply laws and theories to analyze chemical reactions that support our society with heat, batteries, buffers, and important materials. Chemistry 0011A/B and Chemistry 0012A/B in combination are equivalent to the Ontario Grade 12U level chemistry.

Antirequisite(s): Ontario High School SCH4U or equivalent, Chemistry 0010, any university-level Chemistry course.

Prerequisite(s): registration in a Preliminary Year program at Brescia University College, Chemistry 0011A/B.

Extra Information: 2 lecture hours, 3 laboratory/tutorial 0.5 course.

LEADERSHIP STUDIES

Effective **September 1, 2018**, the following course be introduced.

Leadership Studies 0010A/B - Introduction to Leadership

In this course students are introduced to the history and evolution of approaches to leadership, and discover what makes an effective leader in today's world.

Prerequisite(s): Registration in Preliminary Year Program at Brescia University College.

Extra Information: 3 hours, 0.5 course.

PHILOSOPHY

Effective **September 1, 2018**, the following course be introduced.

Philosophy 2669F/G - Introduction to Catholic Thought

A critical study of the origins and major themes of Catholic thought. Among the issues discussed are the existence and nature of God, the relationship between faith and reason, morality and natural law, and the nature of the self.

Antirequisites: Religious Studies 2268F/G.

Extra Information: 3 hours, 0.5 course.

PHYSICS

Effective **September 1, 2018**, the following courses be introduced.

Physics 0011A/B - Introductory Physics I

An introductory course in physics covering the foundation principles of kinematics, force and motion, work and energy, linear momentum, rotation, torque and angular momentum, fluids, oscillations, and waves. Physics 0011A/B and Physics 0012A/B in combination are equivalent to the Ontario Grade 12U level Physics.

Antirequisite(s): Ontario High School SPH4U, Physics 0010, any university-level Physics course.

Prerequisite(s): High School Physics (Grade 11 Advanced Level or equivalent) or permission of the Dean, and registration in the Preliminary Year program at Brescia University College.

Extra Information: 2 lecture hours, 3 laboratory/tutorial hours, 0.5 course.

Physics 0012A/B - Introductory Physics II

This course explores gravitation, electric circuits, electric fields and potential, magnetic fields and electromagnetic induction. Physics 0011A/B and Physics 0012A/B in combination are equivalent to the Ontario Grade 12U level Physics.

Antirequisite(s): Ontario High School SPH4U or equivalent, Physics 0010, any university-level Physics course.

Prerequisite(s): Physics 0011A/B or permission of the Dean, and registration in the Preliminary Year program at Brescia University College.

Extra Information: 2 lecture hours, 3 laboratory/tutorial 0.5 course.

RELIGIOUS STUDIES

Effective September 1, 2018, the following course be introduced.

Religious Studies 2268F/G - Introduction to Catholic Thought

A critical study of the origins and major themes of Catholic thought. Among the issues discussed are the existence and nature of God, the relationship between faith and reason, morality and natural law, and the nature of the self.

Antirequisite(s): Philosophy 2669F/G.

Extra Information: 3 hours, 0.5 course.

HURON UNIVERSITY COLLEGE

THEOLOGY

Effective September 1, 2018, the following modules be revised.

MAJOR IN RELIGION AND THEOLOGY

Module

6.0 courses:

1.0 course: Religious Studies 2130.

1.0 course from ~~Theological Studies and/or Religious Studies~~ Religious Studies 1029, Religious Studies 2124F/G, ~~Religious Studies 1040A/B~~, Religious Studies 2310F/G, Religious Studies 2420A/B, ~~Religious Studies 3260A/B~~ **Arabic 3260A/B, Hebrew 1040A/B.**

1.0 additional course in Theological Studies and/or Religious Studies at the 2000 level or above.

3.0 additional courses in Theological Studies and/or Religious Studies at the 3000 level or above.

MINOR IN RELIGION AND THEOLOGY

Module

4.0 courses:

1.0 course: ~~from Theological Studies and/or Religious Studies~~ Religious Studies 2130.

1.0 course from: ~~Theological Studies and/or Religious Studies~~ Religious Studies 1029, Religious Studies 2124F/G, ~~Religious Studies 1040A/B~~, Religious Studies 2310F/G, Religious Studies 2420A/B, ~~Religious Studies 3260A/B~~, **Arabic 3260A/B, Hebrew 1040A/B.**

2.0 courses in Theological Studies and Religious Studies at the 2000 level or above.

KING'S UNIVERSITY COLLEGE

CHILDHOOD AND SOCIAL INSTITUTIONS

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN CHILDHOOD AND SOCIAL INSTITUTIONS

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses, including Childhood and Social Institutions 1025F/G, plus 2.0 additional courses, with no mark in these principal courses below 60%.

~~Note: Childhood and Social Institutions 1025F/G is not required for admission to the module; however, students must complete this course with a minimum grade of 60% prior to graduation. This course is also a prerequisite for Childhood and Social Institutions 2210F/G.~~

MAJOR IN CHILDHOOD AND SOCIAL INSTITUTIONS

Admission Requirements

Completion of first-year requirements, including Childhood and Social Institutions 1025F/G with a mark of at least 60%.

~~Note: Childhood and Social Institutions 1025F/G is not required for admission to the module; however, students must complete this course with a minimum grade of 60% prior to graduation. This course is also a prerequisite for Childhood and Social Institutions 2210F/G.~~

ENGLISH, FRENCH AND WRITING

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE

Module

10.0 courses:

1.0 course: English 2301E, or the former English 2307E (mandatory in Year 2).

1.0 course from: English 2401E, English 2501E, English 2601E, or the former English 2308E, the former English 2309E, the former English 2310E.

1.0 course taken before fourth year from: English 2200F/G, English 2201F/G, English 2202F/G, English 2203F/G, ~~English 2230F/G~~, English 2261F/G, English 3200F/G, English 3201F/G, or the former English 2210F/G, the former English 2220F/G, the former English 2240F/G, the former English 2250F/G.

1.0 course from: English 3114E, English 3300, English 3310, English 3318E, English 3319F/G, or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E.

2.0 courses with no more than 1.5 from any one of the following six categories: English 3328E, English 3329F/G, English 3339F/G, or the former English 3224E, the former English 3228F/G; English 3345E, English 3347E, English 3348F/G, English 3349F/G, or the former English 3334E, the former English 3335E, the former English 3336F/G; English 3355E, English 3359F/G, English 3368E, English 3369F/G, or the former English 3444E, the former English 3445E, the former English 3446F/G; English 3376E, English 3377E, English 3378F/G, English 3379F/G, or the former English 3554E, the former English 3555E, the former English 3557F/G; English 3479F/G, English 3498E, English 3499F/G, or the former English 3665E, the former English 3667F/G, the former English 3668F/G; English 3579F/G, English 3599F/G, English 3774E, English 3775E, English 3884E, English 3891F/G, or the former English 3777F/G.

1.0 course from: English 2400E, English 3330E, English 3338E, English 3490F/G, English 3556E or English 3776F/G, or the former English 2440E, the former English 3226E, the former English 3227E, the former English 3666F/G.

1.0 course from: English at the 4000 level.

1.0 course from: English 2239E, English 2262F/G, English 3669E, English 3679F/G, English 3680F/G, English 3698F/G, English 3699F/G, English 3700E, English 3991F/G, English 3998E, English 3999F/G, or the former English 3880F/G, the former English 3882F/G, the former English 3886F/G.

1.0 course from: English essay course at the 2000 level or above.

Note: English 2017 and Speech 2001 may not be counted toward the Honors Specialization in English. French or a foreign language is recommended for students intending to apply to graduate schools or professional programs.

MAJOR IN ENGLISH LANGUAGE AND LITERATURE

Module

6.0 courses:

1.0 course: English 2301E, or the former English 2307E (Mandatory in Year 2).

1.0 course taken before fourth year from: English 2200F/G, English 2201F/G, English 2202F/G, English 2203F/G, ~~English 2230F/G~~, English 2261F/G, English 3200F/G, English 3201F/G, or the former English 2210F/G, the former English 2220F/G, the former English 2240F/G, the former English 2250F/G.

1.0 course from: English 2401E, English 2501E, English 2601E, or the former English 2308E, the former English 2309E, the former English 2310E.

1.0 course from: English 3114E, English 3300, English 3310, English 3318E, English 3319F/G, English 3328E, English 3329F/G, English 3330E, English 3338E, English 3339F/G, English 3347E, English 3348F/G, English 3349F/G, or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E, the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G, the former English 3334E, the former English 3336F/G.

1.0 course from: English 2239E, English 2262F/G, English 3210F/G, English 3355E, English 3379F/G, English 3368E, English 3369F/G, English 3376E, English 3377E, English 3378F/G, English 3379F/G, English 3479F/G, English 3490F/G, English 3498E, English 3556E, English 3579F/G, English 3599F/G, English 3669E, English 3679F/G, English 3774E, English 3775E, English 3776F/G, English 3884E, English 3698F/G, English 3699F/G, English 3991F/G, English 3998E, English 3999F/G or the former English 3444E, the former English 3445E, the former English 3446F/G, the former English 3554E, the former English 3555E, the former English 3557F/G, the former English 3665E, the former English 3666F/G, the former English 3667F/G, the former English 3777F/G, the former English 3882F/G.

1.0 course from: English essay course at the 2000 level or above.

Note: English 2017 and Speech 2001 may not be counted toward the Major in English. French or a foreign language is recommended for students intending to apply to graduate schools or professional programs.

SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE

Module

9.0 courses:

1.0 course: English 2301E, or the former English 2307E (Mandatory in Year 2).

1.0 course from: English 2401E, English 2501E, English 2601E or the former English 2308E, the former English 2309E, the former English 2310E.

1.0 course taken before fourth year from: English 2200F/G, English 2201F/G, English 2202F/G, English 2203F/G, ~~English 2230F/G~~, English 2261F/G, English 3200F/G, English 3201F/G, or the former English 2210F/G, the former English 2220F/G, the former English 2240F/G, the former English 2250F/G.

1.0 course from: English 3114E, English 3300, English 3310, English 3318E, English 3319F/G, or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E.

2.0 courses with no more than 1.5 from any one of the following six categories:

English 3328E, English 3329F/G, English 3339F/G, or the former 3224E, 3228F/G;

English 3345E, English 3347E, English 3348F/G, English 3349F/G, or the former English 3334E, the former English 3335E, the former English 3336F/G;

English 3355E, English 3359F/G, English 3368E, English 3369F/G, or the former English 3444E, the former English 3445E, the former English 3446F/G;

English 3376E, English 3377E, English 3378F/G, English 3379F/G, or the former English 3554E, the former English 3555E, the former English 3557F/G;

English 3479F/G, English 3498E, English 3499F/G, or the former English 3665E, the former English 3667F/G, the former English 3668F/G;

English 3579F/G, English 3599F/G, English 3774E, English 3775E, English 3884E, English 3891F/G, the former English 3777F/G.

1.0 course from: English 2400E, English 2420E, English 3330E, English 3338E, English 3490F/G, English 3556E or English 3776F/G, or the former English 2440E, the former English 3226E, the former English 3227E, the former English 3666F/G.

1.0 course from: English 2239E, English 2262F/G, English 3669E, English 3679F/G, English 3680F/G, English 3698F/G, English 3699F/G, English 3700E, English 3991F/G, English 3998E, English 3999F/G or the former English 3880F/G, the former English 3882F/G, the former English 3886F/G.

1.0 course from: English essay course at the 2000 level or above.

Note: English 2017 and Speech 2001 may not be counted toward the Specialization in English.

MINOR IN ENGLISH LANGUAGE AND LITERATURE

Module

4.5 courses:

0.5 course from: English 2202F/G, English 2510F/G, or the former English 2230F/G.

1.0 course from: English 2033E, English 2071F/G, English 2072F/G, English 2073F/G, English 2074F/G, English 2203F/G, English 2110E, English 2261F/G, English 2600F/G, English 2730F/G, English 2735F/G, or the former English 2220F/G, the former English 2500E.

1.0 course from: English 2400E, ~~English 2420E~~, English 3330E, English 3338E, English 3490F/G, English 3556E, English 3776F/G, or the former English 2440E, the former English 3226E, the former English 3227E, the former English 3666F/G, **the former English 2420E**.

1.0 course from: English 2301E, English 3300, English 3310, English 3318E, English 3319F/G, English 3328E, English 3329F/G, English 3339F/G, English 3345E, English 3347E, English 3348F/G, English 3349F/G, or the former English 2307E, the former English 3001, the former English 3012, the former English 3115E, the former English 3116E, the former English 3224E, the former English 3228F/G, the former English 3334E, the former English 3335E, the former English 3336F/G.

1.0 course from: English 2239E, English 2262F/G, English 2401E, English 2501E, English 2601E, English 3355E, English 3359F/G, English 3368E, English 3369F/G, English 3376E, English 3377E, English 3378F/G, English 3379F/G, English 3479F/G, English 3498E, English 3669E, English 3774E, English 3775E, English 3579F/G, English 3679F/G, English 3884E, or the

former English 2308E, the former English 2309E, the former English 2310E, the former English 3444E, the former English 3445E, the former English 3446F/G, the former English 3554E, the former English 3555E, the former English 3557F/G, the former English 3665E, the former English 3667F/G, the former English 3777F/G, the former English 3882F/G.

RELIGIOUS STUDIES

Effective **September 1, 2018**, the following course be withdrawn.

Religious Studies 3170F/G - AN EYE FOR AN EYE: BIBLICAL FOUNDATIONS OF CRIME AND PUNISHMENT

Effective **September 1, 2018**, the following course be introduced.

Religious Studies 2163A/B – “An Eye for an Eye”: Biblical Foundations of Crime and Punishment

Short title: “An Eye for an Eye”

How similar are biblical ideas of crime and punishment to our own? We cover topics like vengeance, blood feud, ordeal, and collective punishment alongside more familiar issues such as courtroom procedure, rules of evidence, and remedies for wrongful judgments. Do ancient, biblical approaches to crime and punishment remain relevant today?

Antirequisite(s): The former Religious Studies 3170F/G.

Extra Information: 3 lecture hours, 0.5 course.

Effective **September 1, 2018**, the Admission Requirements for the **CATHOLIC STUDIES FOR TEACHERS PROGRAM** be revised.

Admission Requirements for the Catholic Studies for Teachers Program

The admission of each candidate is determined by the Admissions Committee. In the admissions process, candidates are chosen according to academic and non-academic criteria:

1. Completion of first-year requirements with an overall average of at least 75% on at least 5.0 courses including Religious Studies 1027E and the necessary first-year course, if required, for a declared second teachable subject. ~~Philosophy 1300E or Philosophy 1150E~~ **Philosophy 1900E** is highly recommended; and

2. Submission of:

- a) a personal statement;
- b) reference letters;
- c) an experience profile.

Catholic Studies for Teachers is a limited enrollment program. Admission is dependent upon meeting both academic and non-academic requirements. More competitive academic standing may be required when demand exceeds capacity.

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN CATHOLIC STUDIES FOR TEACHERS

Admission Requirements

Completion of first-year requirements with an overall average of at least 75% on at least 5.0 courses including Religious Studies 1027E and the required first-year course for a declared second teachable subject.

~~Philosophy 1300E or Philosophy 1150E~~ **Philosophy 1900E** is highly recommended.

MAJOR IN CATHOLIC STUDIES FOR TEACHERS

Admission Requirements

Completion of first-year requirements with an overall average of at least 75% on at least 5.0 courses including Religious Studies 1027E and the required first-year course for a declared second teachable subject.

~~Philosophy 1300E or Philosophy 1150E~~ **Philosophy 1900E** is highly recommended.

Enrollment in this module is limited. Meeting the minimum requirements does not guarantee acceptance.

SOCIAL JUSTICE AND PEACE STUDIES

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN SOCIAL JUSTICE AND PEACE STUDIES

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in the following 3.0 principal courses, with no mark in these principal courses below 60%:

0.5 course: Social Justice and Peace Studies 1025F/G, or the former Social Justice and Peace Studies 1020E.

0.5 course: Social Justice and Peace Studies 1026F/G, or the former Social Justice and Peace Studies 2200E.

1.0 course from: Childhood and Social Institutions 1025F/G, the former Childhood and Social Institutions 1020; Disability Studies 1010A/B; Economics 1021A/B, Economics 1022A/B, the former Economics 1020; First Nations Studies 1020E; Geography 1100, Geography 1500F/G, Geography 1400F/G; History 1401E, History 1404E, or the former History 1403E, History 1601E, History 1801E, History 1812F/G, History 1813F/G, History 1814F/G, History 1901E; **Philosophy 1050F/G**, Philosophy 1150E, Philosophy 1300E, Philosophy 1360E, **Philosophy 1900E**, Philosophy 1901E; Political Science 1020E; Psychology 1000, Psychology 1000W/X; Religious Studies 1022A/B, Religious Studies 1023E, Religious Studies 1027E; Social Work 1021A/B, Social Work 1022A/B, the former Social Work 1020; Sociology 1020, Sociology 1020W/X, Sociology 1021E; or Women's Studies 1020E.
1.0 additional course.

Module

9.0 courses:

2.0 courses from: Social Justice and Peace Studies 2301A/B, Social Justice and Peace Studies 2302A/B, Social Justice and Peace Studies 2303A/B, Social Justice and Peace Studies 2304F/G* or the former Interdisciplinary Studies 2240F/G.

0.5 course: from: First Nations Studies 2218F/G, Social Justice and Peace Studies 2270A/B-2271A/B.

0.5 course: Social Justice and Peace Studies 3201A/B/Y, or the former Social Justice and Peace Studies 2201F/G/Z.

2.0 courses from: Social Justice and Peace Studies 3210F/G, Social Justice and Peace Studies 3211F/G, Social Justice and Peace Studies 3360F/G, Social Justice and Peace Studies 3361F/G, Social Justice and Peace Studies 3374F/G-3378F/G, Social Justice and Peace Studies 3380F/G, Social Justice and Peace Studies 3381F/G, Social Justice and Peace Studies 3382F/G, Social Justice and Peace Studies 3383F/G, Social Justice and Peace Studies 3451F/G.

1.0 course(s) from: Interdisciplinary Studies 2252F/G, Social Justice and Peace Studies 3373F/G, Childhood and Social Institutions 3311F/G, Economics 3313E, **Political Science**

3324F/G, Political Science 4422F/G, Psychology 2840F/G, Sociology 2206A/B, Social Work 2206A/B.

0.5 course: Social Justice and Peace Studies 4404F/G.

2.5 courses from: the Social Justice and Peace Studies Approved List, at least 1.0 of which must be at the 3000-level or above.

***Note:** It is highly recommended that you take Social Justice and Peace Studies 2304F/G in year two.

MAJOR IN SOCIAL JUSTICE AND PEACE STUDIES

Admission Requirements

Completion of first-year requirements, including the following 2.0 courses with a mark of at least 60%:

0.5 course: Social Justice and Peace Studies 1025F/G, or the former Social Justice and Peace Studies 1020E.

0.5 course: Social Justice and Peace Studies 1026F/G, or the former Social Justice and Peace Studies 2200E.

1.0 course from: Childhood and Social Institutions 1025F/G, the former Childhood and Social Institutions 1020; Disability Studies 1010A/B; Economics 1021A/B, Economics 1022A/B, the former Economics 1020; First Nations Studies 1020E; Geography 1100, Geography 1500F/G, Geography 1400F/G; History 1401E, History 1404E, or the former History 1403E, History 1601E, History 1801E, History 1812F/G, History 1813F/G, History 1814F/G, History 1901E; Philosophy 1050F/G, Philosophy 1150E, Philosophy 1300E, Philosophy 1360E, Philosophy 1900E, Philosophy 1901E; Political Science 1020E; Psychology 1000, Psychology 1000W/X; Religious Studies 1022A/B, Religious Studies 1023E, Religious Studies 1027E; Social Work 1021A/B, Social Work 1022A/B, the former Social Work 1020; Sociology 1020, Sociology 1020W/X, Sociology 1021E; or Women's Studies 1020E.

SPECIALIZATION IN SOCIAL JUSTICE AND PEACE STUDIES

Admission Requirements

Completion of first-year requirements, including the following 2.0 courses with a mark of at least 60%.

0.5 course: Social Justice and Peace Studies 1025F/G, or the former Social Justice and Peace Studies 1020E. 0.5 course: Social Justice and Peace Studies 1026F/G, or the former Social Justice and Peace Studies 2200E.

1.0 course from: Childhood and Social Institutions 1025F/G, the former Childhood and Social Institutions 1020; Disability Studies 1010A/B; Economics 1021A/B, Economics 1022A/B, the former Economics 1020; First Nations Studies 1020E; Geography 1100, Geography 1500F/G, Geography 1400F/G; History 1401E, History 1404E, or the former History 1403E, History 1601E, History 1801E, History 1812F/G, History 1813F/G, History 1814F/G, History 1901E; Philosophy 1050F/G, Philosophy 1150E, Philosophy 1300E, Philosophy 1360E, Philosophy 1900E, Philosophy 1901E; Political Science 1020E; Psychology 1000, Psychology 1000W/X; Religious Studies 1022A/B, Religious Studies 1023E, Religious Studies 1027E; Social Work 1021A/B, Social Work 1022A/B, the former Social Work 1020; Sociology 1020, Sociology 1020W/X, Sociology 1021E; or Women's Studies 1020E.

MINOR IN SOCIAL JUSTICE AND PEACE STUDIES

Admission Requirements

Completion of first-year requirements, including the following 2.0 courses with a mark of at least 60%:

0.5 course: Social Justice and Peace Studies 1025F/G, or the former Social Justice and Peace Studies 1020E.

0.5 course: Social Justice and Peace Studies 1026F/G, or the former Social Justice and Peace Studies 2200E.

1.0 course from: Childhood and Social Institutions 1025F/G, the former Childhood and Social Institutions 1020; Disability Studies 1010A/B; Economics 1021A/B, Economics 1022A/B, the former Economics 1020; First Nations Studies 1020E; Geography 1100, Geography 1500F/G, Geography 1400F/G; History 1401E, History 1404E, or the former History 1403E, History 1601E, History 1801E, History 1812F/G, History 1813F/G, History 1814F/G, History 1901E; **Philosophy 1050F/G**, Philosophy 1150E, Philosophy 1300E, Philosophy 1360E, **Philosophy 1900E**, Philosophy 1901E; Political Science 1020E; Psychology 1000, Psychology 1000W/X; Religious Studies 1022A/B, Religious Studies 1023E, Religious Studies 1027E; Social Work 1021A/B, Social Work 1022A/B, the former Social Work 1020; Sociology 1020, Sociology 1020W/X, Sociology 1021E; or Women's Studies 1020E.

*Effective **September 1, 2018**, the **Social Justice and Peace Studies Approved List of Courses** be revised.*

The following courses may be taken to complete requirements for the Social Justice and Peace Studies modules. Students may request permission to substitute other courses not on this list. These requests will be considered on a case by case basis. Students are advised to consult the Program Coordinator when planning their program.

Centre for Global Studies 2002F/G, CGS 3509F/G, CGS 3512F/G, CGS 3513F/G, CGS 3514F/G, CGS 3515F/G, CGS 3517F/G, CGS 3518F/G, CGS 3519F/G, CGS 3521F/G, CGS 3522F/G, CGS 3523F/G, CGS 3524F/G, CGS 3525F/G.
Economics 2124A/B, Economics 2125A/B, Economics 2161F/G.
Disability Studies 2201F/G, Disability Studies 2202A/B, Disability Studies 2210A/B.
English 2017, **English 2262F/G**, English 2601E, English 2730F/G, English 2735F/G, the former English 2310E.
First Nations Studies 2218F/G.
Geography 2020A/B, Geography 2030A/B, Geography 2142A/B, Geography 3442F/G, Geography 3445F/G.
History 2125F/G, History 2187, History 2201E, History 2301E, History 2501E, History 3218E, History 3802F/G, History 3850F/G, History 3851F/G, History 4805E.
Philosophy 2074F/G, Philosophy 2080.
Political Science 2225E, Political Science 2230E, Political Science 2231E, Political Science 2235E, Political Science 2245E, Political Science 2255F/G, Political Science 2257, Political Science 2270E, Political Science 3302F/G, Political Science 3307F/G, Political Science 3311F/G, Political Science 3312F/G, Political Science 3319F/G, **Political Science 3332F/G**, **Political Science 3345E**, Political Science 3357E, Political Science 3369F/G, Political Science 3400F/G, Political Science 4421F/G, **Political Science 4422F/G**, Political Science 4439F/G, or the former Political Science 3300E, the former Political Science 3309E, the former Political Science 3325E, ~~the former Political Science 3332F/G, the former Political Science 3345E.~~
Psychology 2012F/G, Psychology 3710F/G, Psychology 3725F/G, Psychology 4303F/G.
Religious Studies 2134A/B, Religious Studies 2166A/B, Religious Studies 2203F/G, Religious Studies 2204F/G, Religious Studies 2281F/G, Religious Studies 2506F/G, Religious Studies 3451F/G, Religious Studies 3452F/G, Religious Studies 3453F/G.
Sociology 2140, Sociology 2143E, Sociology 2145A/B, Sociology 2220A/B-2221A/B, Sociology 2239, Sociology 2256A/B, Sociology 2260A/B, Sociology 2266A/B, Sociology 2267A/B, Sociology 3305F/G, Sociology 3318F/G, Sociology 3338E, Sociology 3339F/G, Sociology 3340F/G, Sociology 3341F/G, Sociology 3371F/G, the former Sociology 3377F/G.
Social Justice and Peace Studies 2190, Social Justice and Peace Studies 2195A/B-2199A/B, Social Justice and Peace Studies 2270A/B-2279A/B, Social Justice and Peace Studies 3360F/G, Social Justice and Peace Studies 3361F/G, Social Justice and Peace Studies 3370F/G-3378F/G, Social Justice and Peace Studies 3380F/G, Social Justice and Peace Studies 3381F/G, Social Justice and Peace Studies 3382F/G, Social Justice and Peace Studies 3383F/G, Social Justice and Peace Studies 3396F/G-3399F/G, Social Justice and Peace Studies 3451F/G, Social Justice

and Peace Studies 3452F/G, Social Justice and Peace Studies 4404F/G, Social Justice and Peace Studies 4496F/G-4499F/G, the former Social Justice and Peace Studies 4401F/G, the former Social Justice and Peace Studies 4402F/G, the former Social Justice and Peace Studies 4403E.

Social Work 3308F/G, Social Work 3318A/B, Social Work 3319F/G, Social Work 3344A/B, Social Work 4414F/G, Social Work 4481A/B.
Thanatology 3322A/B.

Approved List courses may only be counted once towards module requirements.

SOCIOLOGY

Effective **September 1, 2018**, the following module be revised.

MINOR IN CRIMINOLOGY

Module

4.0 courses:

3.0 courses from: Sociology 2140, ~~Sociology 2143E~~, **Sociology 2200E**, Sociology 2223A/B, Sociology 2253A/B, Sociology 2256A/B, Sociology 2259, Sociology 2260A/B, Sociology 2266A/B, Sociology 2267A/B.

1.0 additional Sociology course at the 2200 level.

STATISTICAL SCIENCES

Effective **September 1, 2018**, the following course be revised.

Statistical Sciences 2035 - STATISTICS FOR BUSINESS AND SOCIAL SCIENCES

Antirequisite(s): All other courses in Introductory Statistics (except Statistical Sciences 1023A/B and Statistical Sciences 1024A/B): Biology 2244A/B, Economics 2122A/B, Economics 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, MOS 2242A/B, Psychology 2810, Psychology 2820E, Psychology 2830A/B, Psychology 2850A/B, Psychology 2851A/B, Social Work 2207A/B, Sociology 2205A/B, Statistical Sciences 2141A/B, Statistical Sciences 2143A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B, Statistical Sciences 2037A/B if taken prior to Fall 2010, former Psychology 2885 (Brescia), former Statistical Sciences 2122A/B, former Social Work 2205.

Prerequisite(s): One full course or equivalent from: Applied Mathematics 1201A/B, Applied Mathematics 1413, Statistical Sciences 1024A/B, Calculus 1000A/B or the former Calculus 4400A/B or Calculus 1500A/B, Calculus 1301A/B or Calculus 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B, Mathematics 1225A/B, **Mathematics 1230A/B**, Mathematics 1228A/B, Mathematics 1229A/B.

THANATOLOGY

Effective **September 1, 2018**, the following course be revised.

Thanatology 3601A/B - CRISIS, TRAUMA AND LOSS IN EVERYDAY LIFE

WORLD RELIGIONS AND CULTURES

Effective **September 1, 2018**, the following modules be revised.

HONORS SPECIALIZATION IN WORLD RELIGIONS AND CULTURES

Module

9.0 courses:

0.5 course normally taken in second year: Religious Studies 2200F/G.

3.5 courses: Religious Studies 2218F/G, Religious Studies 2281F/G, Religious Studies 2283F/G, Religious Studies 2285F/G, Religious Studies 2286F/G, Religious Studies 3300F/G, Religious Studies 4400F/G.

4.0 courses from: Philosophy 2660E, Religious Studies 2260F/G, Religious Studies 2261F/G, Religious Studies 2262F/G, Religious Studies 2263F/G, Religious Studies 2284F/G, Religious Studies 2289F/G, Religious Studies 2345F/G, Religious Studies 2346F/G, Religious Studies 2347F/G, Religious Studies 2500F/G, Religious Studies 2501F/G, Religious Studies 2502F/G, Religious Studies 2503F/G, Religious Studies 2504F/G, **Religious Studies 3360F/G** Religious Studies 3452F/G, ~~Social Justice and Peace Studies 3360F/G~~; 0.5 language course* from: Arabic 1030, Chinese 1150, Chinese 1151, Chinese 1152A/B, Chinese 1153A/B, Hebrew 1030, Hebrew 1040A/B, Hebrew 1041A/B.

1.0 additional Religious Studies course at the 3000 level or above, not listed above, except Religious Studies 2208U, Religious Studies 3308U and Religious Studies 4408Y.

* If a 1.0 language course is taken, the module will be 9.5 courses.

SPECIALIZATION IN WORLD RELIGIONS AND CULTURES

Module

9.0 courses:

0.5 course normally taken in second year: Religious Studies 2200F/G.

2.5 courses: Religious Studies 2218F/G, Religious Studies 2281F/G, Religious Studies 2283F/G, Religious Studies 2285F/G, Religious Studies 2286F/G.

0.5 course from: Religious Studies 3300F/G, Religious Studies 4400F/G.

2.0 additional courses in Religious Studies at the 2100 level or above, except Religious Studies 2208U, Religious Studies 3308U and Religious Studies 4408Y.

3.5 additional courses from: Philosophy 2660E, Religious Studies 2260F/G, Religious Studies 2261F/G, Religious Studies 2262F/G, Religious Studies 2263F/G, Religious Studies 2284F/G, Religious Studies 2345F/G, Religious Studies 2346F/G, Religious Studies 2347F/G, Religious Studies 2500F/G, Religious Studies 2501F/G, Religious Studies 2502F/G, Religious Studies 2503F/G, Religious Studies 2504F/G, Religious Studies 2289F/G, **Religious Studies 3360F/G** Religious Studies 3452F/G, ~~Social Justice and Peace Studies 3360F/G~~; or 0.5 language course* from: Arabic 1030, Chinese 1150, Chinese 1151, Chinese 1152A/B, Chinese 1153A/B, Hebrew 1030, Hebrew 1040A/B, Hebrew 1041A/B.

* If a 1.0 language course is taken, the module will be 9.5 courses.

KING'S UNIVERSITY COLLEGE and BRESCIA UNIVERSITY COLLEGE

SOCIOLOGY

Effective **September 1, 2018**, the following course be revised.

Sociology 2205A/B - STATISTICS FOR SOCIOLOGY

Antirequisite(s): Biology 2244A/B, Economics 2122A/B, Economics 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, MOS 2242A/B, Psychology 2810, Psychology 2820E, Psychology 2830A/B, Psychology 2850A/B, Psychology 2851A/B, Social Work 2207A/B, Statistical Sciences 2035, Statistical Sciences 2141A/B, Statistical Sciences 2143A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B.

Prerequisite(s): At least 60% in 1.0 from Sociology courses at the 1000 level, or ~~Social Work 4021A/B and 4022A/B~~ **Thanatology 1025A/B**.

KING'S UNIVERSITY COLLEGE, HURON UNIVERSITY COLLEGE and FACULTY OF SOCIAL SCIENCE

JEWISH STUDIES

Effective **September 1, 2018**, the following modules be revised.

MAJOR IN JEWISH STUDIES

Module

6.0 courses:

1.0 courses: History 2821F/G, History 2822F/G, the former History 2809E, the former History 2815E, the former History 3811E.

0.5 course: Religious Studies 2345F/G.

0.5 course from: Religious Studies 2346F/G, Religious Studies 2347F/G.

1.0 course from: Hebrew 1030, Hebrew 1040A/B, Hebrew 1041A/B, Hebrew 2200, Hebrew 2240A/B, Hebrew 2241A/B.

3.0 courses from the former Jewish Studies 2801F/G or the following three categories, including a minimum of 0.5 course from each category:

Expressions - Literature and Art: Film Studies 3316F/G (only if taken prior to September 2013); French 2211F/G; the former German 2140F/G, German 2141A/B; Hebrew 1030, Hebrew 1040A/B, Hebrew 1041A/B, Hebrew 2200, Hebrew 2240A/B, Hebrew 2241A/B (if not taken to satisfy the requirements described earlier in the module); MIT 3931F/G; Women's Studies 2152A/B.

Experience - History and Social Science: ~~Centre for Global Studies 2340F/G, Centre for Global Studies 2341F/G~~; History 3427E, History 3608F/G, History 3807E, History 3808F/G, History 4426E; Political Science 3329F/G (only if taken prior to September 2015), Political Science 4409F/G; Religious Studies 3450F/G, **the former Centre for Global Studies 2340F/G, the former Centre for Global Studies 2341F/G**.

Ideas - Classical and Modern Jewish Thought: Philosophy 2665F/G, Philosophy 2667F/G; Religious Studies 2114A/B, **Religious Studies 2163A/B**, Religious Studies 2168A/B, Religious Studies 2169A/B, Religious Studies 2204F/G, Religious Studies 2213F/G, Religious Studies 2286F/G, Religious Studies 2320F/G, Religious Studies 2346F/G (if not taken to satisfy the requirements described earlier in the module), Religious Studies 2347F/G (if not taken to satisfy the requirements described earlier in the module), Religious Studies 2420A/B, Religious Studies 3020F/G, Religious Studies 3030F/G, ~~Religious Studies 3170F/G~~, Religious Studies 3175F/G, Religious Studies 4040F/G, the former Religious Studies 2400F/G, the former Religious Studies 2410F/G; or other courses in each category from a list maintained by the History Department in the Faculty of Social Science

MINOR IN JEWISH STUDIES

Module

4.0 courses:

1.0 course: History 2821F/G, History 2822F/G, the former History 2809E, the former History 2815E, the former History 3811E.

0.5 course: Religious Studies 2345F/G.

0.5 course from: Religious Studies 2346F/G, Religious Studies 2347F/G.

0.5 course: Expressions - Literature and Art: Film Studies 3316F/G (only if taken prior to September 2013); French 2211F/G; German 2141A/B, the former German 2140F/G; Hebrew 1030, Hebrew 1040A/B, Hebrew 1041A/B, Hebrew 2200, Hebrew 2240A/B, Hebrew 2241A/B; MIT 3931F/G; Women's Studies 2152A/B; *

0.5 course: Experience - History and Social Science: ~~Centre for Global Studies 2340F/G, Centre for Global Studies 2341F/G~~; History 3427E, History 3437F/G, History 3608F/G, History 3807E, History 3808F/G, History 4426E; Political Science 3329F/G (only if taken prior to September 2015), Political Science 4409F/G; Religious Studies 3450F/G, **the former Centre for Global Studies 2340F/G, the former Centre for Global Studies 2341F/G**;

0.5 course: Ideas - Classical and Modern Jewish Thought: Philosophy 2665F/G, Philosophy 2667F/G; Religious Studies 2114A/B, **Religious Studies 2163A/B**, Religious Studies 2168A/B, Religious Studies 2169A/B, Religious Studies 2204F/G, Religious Studies 2213F/G, Religious Studies 2286F/G, Religious Studies 2320F/G, Religious Studies 2346F/G (if not taken to satisfy the requirements described earlier in the module), Religious Studies 2347F/G (if not taken to satisfy the requirements described earlier in the module), Religious Studies 2420A/B, Religious Studies 3020F/G, Religious Studies 3030F/G, ~~Religious Studies 3170F/G~~, Religious Studies 3175F/G, Religious Studies 4040F/G, the former Religious Studies 2400F/G, the former Religious Studies 2410F/G.

0.5 course from any of the three categories listed above, Expressions, Experience, and Ideas, or the former Jewish Studies 2801F/G.

Or other courses in each category from a list maintained by the History Department in the Faculty of Social Science.

DAP UPDATE: MINOR CHANGES

FACULTY OF ENGINEERING

*Effective **September 1, 2018**, the following courses be revised as part of administrative clean-up of Academic Calendar content; to add former text to courses that have been withdrawn and to remove withdrawn courses that have not been offered for more than 5 years.*

Chemical and Biochemical Engineering 3318A/B INTRODUCTION TO CHEMICAL PROCESS SIMULATION

Antirequisite(s): The former CBE 3317Y.

Prerequisite(s): Engineering Science 1050, CBE 2220A/B, CBE 2221A/B, and either CBE 2224A/B or **the former** GPE 2218A/B.

Chemical and Biochemical Engineering 3319A/B INTRODUCTION TO PLANT DESIGN & SAFETY

Antirequisite(s): GPE 3382A/B, the former CBE 3317Y.

Prerequisite(s): Engineering Science 1050, CBE 2220A/B, CBE 2221A/B, and either CBE 2224A/B or **the former** GPE 2218A/B.

Chemical and Biochemical Engineering 4407A/B SOLID WASTE TREATMENT

Prerequisite(s): CBE 3323A/B, CBE 2220A/B, CBE 3315A/B or GPE 3315A/B, CBE 3322A/B or **the former** GPE 3322A/B, CBE 3325A/B.

Civil and Environmental Engineering 3344A/B STRUCTURAL DYNAMICS I

Antirequisite(s): **the former** CEE 4490.

Prerequisite(s): CEE 2221A/B.

Corequisite(s): CEE 3340A/B.

Civil and Environmental Engineering 4426A/B GEOTECHNICAL ENGINEERING DESIGN

Prerequisite(s): CEE 3322A/B or **the former** CEE 3326.

Electrical and Computer Engineering 3389A/B COMPUTER SYSTEM DESIGN

Antirequisite(s): **The former** ECE 4470A/B, **the former** ECE 4489A/B.

Prerequisite(s): ECE 3375A/B and ECE 3380A/B, or the former ECE 4434A/B, or completion of third year of the Software Engineering program.

Green Process Engineering 3382A/B FUNDAMENTALS OF GREEN PROCESS ENGINEERING AND SAFETY

Antirequisite(s): ~~CBE 4467A/B~~, the former CBE 3319A/B.

Prerequisite(s): CBE 2224A/B or the former GPE 2218A/B, GPE 2214A/B.

Corequisite(s): GPE 3315A/B, CBE 3318A/B.

Green Process Engineering 4484A/B GREEN FUELS AND CHEMICALS

Antirequisite(s): ~~CBE 4467A/B~~.

Prerequisite(s): CBE 2207A/B or GPE 2214A/B, CBE 2224A/B or the former GPE 2218A/B, CBE 3315A/B or GPE 3315A/B.

Green Process Engineering 4497 GREEN PROCESS DESIGN

Antirequisite(s): CBE 4497, CEE 4441, ECE 4416, MME 4499, SE 4450, Engineering Science 4499, MSE 4499, ECE 4415.

Prerequisite(s): CBE 2220A/B, CBE 2224A/B, GPE 3315A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, and CBE 3318A/B and GPE 3382A/B or the former CBE 3317Y ~~or CBE 3397~~.

FACULTY OF INFORMATION AND MEDIA STUDIES

*Effective **September 1, 2018**, the following course be revised.*

Media, Information and Technoculture 1025F/G FIRST YEAR FOUNDATIONS

Extra Information: 4 **2** lecture hours, **2 1** tutorial hours.

FACULTY OF SCIENCE and SCHULICH SCHOOL OF MEDICINE & DENTISTRY

*Effective **September 1, 2018**, the following courses be revised.*

Earth Sciences 2130Y FIELD GEOGRAPHY AND GEOLOGY OF SOUTHWESTERN ONTARIO

Antirequisite(s): Geography 2130Y.

Extra Information: Enrolment limited to students registered in the Minor or Major in Earth and Planetary Sciences; recommended to be taken in second year and may not be taken after ~~ES Earth Sciences 2250Y~~. ~~Transportation fee of approximately \$60 required.~~ **A transportation fee is required, see the Department of Earth Sciences website for more information.** This course does not fulfill the field course requirements for students registered in an Earth Sciences Specialization, Honors Specialization or Professional Program.

Earth Sciences 2250Y INTRODUCTORY FIELD MAPPING TECHNIQUES

Pre-or Corequisite(s): Earth Sciences 2200A/B and registration in a module or program where Earth Sciences 2250Y is mandatory; or registration in an Earth Sciences Minor and a minimum mark of 60% in Earth Sciences 2200A/B.

Extra Information: 11 day field course. Note: Students must register prior to the September "Add" deadline for full courses (see Undergraduate Sessional Dates). Partial cost of the field expenses must be borne by the student, and is payable to the Department prior to the September "Add" deadline. ~~The cost per student is \$415 in 2017-18, and will increase by \$15 every year thereafter.~~ There is an associated cost with this course, see the Department of Earth Sciences website for more information. Fees are non-refundable in the event of a course drop, except in extenuating circumstances.

Earth Sciences 3350Y ADVANCED FIELD MAPPING TECHNIQUES

Prerequisite(s): Earth Sciences 2201A/B and Earth Sciences 2250Y.

Corequisite(s): Any two of Earth Sciences 3313A/B, Earth Sciences 3314A/B, Earth Sciences 3315A/B, and registration in the Major, Specialization or Honors Specialization in Geology, or in the Honors Geology or Honors Environmental Geoscience Programs for Professional Registration.

Extra Information: 11 day field course in May, 0.5 course. Note: Students must register prior to the September "Add" deadline for full year courses (see Undergraduate Sessional Dates). Partial cost of the field expenses must be borne by the students, and is payable to the Department prior to the September "Add" deadline. ~~The cost per student is \$355 in 2014, and will increase by \$15 every year thereafter.~~ There is an associated cost with this course, see the Department of Earth Sciences website for more information. Fees are non-refundable in the event of a course drop, except in extenuating circumstances. Students will receive the maximum subsidy if the course is a requirement for their module. In the case that the course is not a requirement, partial subsidy may be provided depending on the module in which the student is currently enrolled (please contact the Departmental Undergraduate Chair).

*Effective **September 1, 2018**, the following courses be revised as part of administrative clean-up of Academic Calendar content*

Biochemistry 4420A MOLECULAR BIOLOGY OF PROTEINS

Antirequisite(s): ~~The former Biochemistry 4420B.~~

Prerequisite(s): Biochemistry 3381A.

Medical Biophysics 3970Z GENERAL BIOPHYSICS LABORATORY

Pre-or Corequisite(s): Medical Biophysics 3330F/G, Medical Biophysics 3501A and Medical Biophysics 3505F; or Medical Biophysics 3501FA and Medical Biophysics 3507G and registration in the Honors Specialization in Medical Biophysics and Biochemistry.

Pathology 2420A PATHOLOGY FOR NURSING STUDENTS

Antirequisite(s): ~~The former~~ Pathology 3240A.