SOC APPROVALS
May 14, 2025

The following proposals were approved at the May 14, 2025 meeting of the Subcommittee on Undergraduate Academic Courses (SOC).

FACULTY OF ARTS AND HUMANITIES

DEPARTMENT OF ENGLISH AND WRITING STUDIES

Course Revision – Effective September 1, 2025, the following change(s) be made:

WRITING 3228F/G
CONCEPT TO PRODUCT: PUBLISHING

Course Description
In this workshop course, students develop an issue of a journal, a season of chapbooks, or a print anthology. It is of particular interest to students considering a career in print/digital publishing. The roles of managing editor, copy editor, web designer, book designer, and writer are part of the experience.

Prerequisite(s): ~~Writing 2203F/G or permission of the Department (consult the Undergraduate Program Director, Writing).~~ **At least 65% in one of Writing 2101F/G, Writing 2111F/G, Writing 2130F/G or Writing 2131F/G; or at least 65% in one of Writing 1000F/G or Writing 1031F/G; or at least 65% in each of MediaCom 1020E (or both of MediaCom 1021F/G and MediaCom 1022F/G) and MediaCom 1025F/G; or permission of the Department (consult the Undergraduate Program Director, Writing).**

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

WRITING 4999E
CREATIVE WRITING THESIS

Course Description
Individual instruction ~~in selection of a topic, preparation of materials, and writing of~~ **toward** a creative writing thesis. ~~To take this course, s~~**S**tudents must apply to the **Undergraduate Program** Director ~~of Undergraduate Studies, (~~Writing**)** ~~Studies~~. **Normally** restricted to students **with at least an 80% average and** in **the** fourth year of ~~an English Honours Specialization module~~ **the Honours Specialization in Creative Writing and English Language and Literature or the Major in Creative Writing.**

~~Antirequisite(s): English 4999E if taken prior to the 2014-15 academic year.~~

Prerequisite(s): Permission of the department.

Extra Information: 3 hours**.**
Course Weight: 1.00

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN CREATIVE WRITING AND ENGLISH LANGUAGE AND LITERATURE

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:

a) Writing 1000F/G; and
b) 2.0 additional courses including 1.0 course from English 1020-1999; and 1.0 course from Art History 1640, Art History 1641A/B, Art History 1642A/B, Art History 1644A/B, Art History 1646A/B, Art History 1648A/B, Art History 1649A/B, Classical Studies 1000, Film Studies 1020E, Film Studies 1022, French 1900E, Philosophy 1020, GSWS 1020E or both of GSWS 1021F/G and GSWS 1022F/G, Studio Art 1601, Studio Art 1605.
c) 0.5 additional course.

A minimum mark of 70% in Writing 1000F/G is required, with no mark below 60% in the other principal courses.

Module
10.0 courses:

3.5 Writing courses:

1.0 course in Writing Genres from: Writing 2204F/G, Writing 2214F/G, Writing 2218F/G, Writing 2220F/G.
2.~~0~~5 courses from: Writing 2203F/G, Writing 2213F/G, Writing 2219F/G, Writing 2222F/G, Writing 2223F/G, Writing 2225F/G, **Writing 2520A/B, Writing 2530A/B, Writing 2540A/B, Writing 2550A/B,** Writing 3225F/G, Writing 3228F/G, Writing 3401F/G, Writing 3402F/G, Writing 3403F/G (or the former Writing 2226F/G), Writing 3600F/G, Writing 3610F/G, Writing 3620F/G, Writing 3640F/G (or the former Writing 2227F/G), Writing 3814F/G, Writing 3820F/G, Writing 3824F/G (or the former Writing 2224F/G). Other courses in Writing may be substituted with permission of the ~~Department~~ **Undergraduate Program Director (Writing)**. Note: Students may enrol in Creative Writing genre courses and/or Special Topics courses not previously taken in order to fulfill this part of the module.
~~0.5 course: Writing 4998F/G.~~

5.5 English courses:

1.0 course in a Survey of Literary Traditions from: English 2301E, English 2401E, English 2501E, English 2601E.
1.0 course in Theory from: English 2200 to English 2260, English 3200 to English 3210, 0.5 of this requirement may be substituted from Theatre Studies 3205F/G, Film Studies 3371F/G, or Writing 2215F/G.
1.0 course in Pre-1800 Literature from: English 3300 to English 3349, English 3440 to English 3449, English 3540 to English 3549, English 3640 to English 3649, (but not English 3333E (Huron)).
1.0 course in Post-1800 Literature from: English 3350 to English 3399, English 3450 to English 3499, English 3550 to English 3599, English 3650 to English 3699, English 3700 to English 3799, English 3850 to English 3899.
1.0 courses from: English 2000 to English 3999; 0.5 of this requirement may be substituted from Medieval Studies or Theatre Studies numbered 2200 to 3999; this requirement must include at least 0.5 from English 3000 to English 3999.
0.5 course from: English 4000 to English 4990.

1.0 Capstone:

1.0 course from: English 4000 to English 4999 or Writing 4000 to Writing 4999.

DEPARTMENT OF PHILOSOPHY

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHILOSOPHY 3002F/G
PLATO'S REPUBLIC

Course Description
This course is a comprehensive examination of Plato's *Republic*, which is one of the most influential works in the history of political philosophy. The Republic deals with a whole host of philosophical issues suited to all students, both philosophy majors and students from other disciplines.

Antirequisite(s): Philosophy 3170F/G if taken in 2021-22, 2022-23, or 2024-25.

Prerequisite(s): At least 60% in 1.0 Philosophy course at the 2000-2999 level, or permission of the department.

Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHILOSOPHY 3007F/G
ARISTOTLE'S ETHICS

Course Description
This course looks at Aristotle's *Nicomachean Ethics*, which is one of his most influential works in philosophy. It examines questions in meta- and normative ethics, and also serves as the foundation for contemporary virtue ethics. Suitable for philosophy majors as well as students in other disciplines.

Antirequisite(s): Philosophy 3170F/G if taken in 2020-21 or 2023-24. Philosophy 4007F/G if taken in 2021-22.

Prerequisite(s): At least 60% in 1.0 Philosophy course at the 2000-2999 level, or permission of the department.

Extra Information: 3 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PHILOSOPHY

Admission Requirements

Completion of first year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses with no mark below 60%. 1.0 course from Philosophy 1020, Philosophy 1022E, Philosophy 1100E, Philosophy 1200 is recommended.

Module
9.0 courses:

1.0 course in Logic from: Philosophy 2020, Philosophy 2250 or Philosophy 2252W/X.
1.0 course in History of Philosophy from: Philosophy 2200F/G, Philosophy 2202F/G, **Philosophy 3002F/G,** Philosophy 3003F/G, Philosophy 3006F/G, **Philosophy 3007F/G,** Philosophy 3012F/G, Philosophy 3020F/G, Philosophy 3022F/G, Philosophy 3023F/G, Philosophy 3024F/G, Philosophy 3026F/G, Philosophy 3027F/G, Philosophy 3028F/G, Philosophy 3030F/G, Philosophy 3031F/G, Philosophy 3032F/G, Philosophy 3033F/G, Philosophy 3035F/G, Philosophy 3170F/G, Philosophy 4007F/G, Philosophy 4035F/G, Philosophy 4045F/G, Philosophy 4050F/G or Philosophy 4107F/G, the former Philosophy 4023F/G.
1.0 course in Ethics, Politics and Law from: Philosophy 2062F/G, Philosophy 2700F/G, Philosophy 2800F/G, Philosophy 2801F/G, Philosophy 2821F/G, Philosophy 3170F/G, Philosophy 3180F/G, Philosophy 3435F/G, Philosophy 3710F/G, Philosophy 3720F/G or Philosophy 3810F/G.
1.0 course in Knowledge, Representation and Reality from: Philosophy 2037F/G, Philosophy 2044F/G, Philosophy 2050F/G, Philosophy 2061F/G, Philosophy 2253A/B, Philosophy 2260F/G, Philosophy 2265A/B, Philosophy 2300F/G, Philosophy 2350F/G, Philosophy 2400F/G, Philosophy 2410F/G, Philosophy 2500F/G, Philosophy 2661F/G, Philosophy 3040F/G, Philosophy 3260F/G, Philosophy 3270F/G, Philosophy 3340F/G, Philosophy 3410F/G, Philosophy 3420F/G, Philosophy 3450F/G, Philosophy 3501F/G, Philosophy 3601F/G, Philosophy 4210F/G, Philosophy 4410F/G, Philosophy 4510F/G or Philosophy 4610F/G, the former Philosophy 3430F/G.
0.5 course in Equity, Diversity, and Inclusion from: Philosophy 2062F/G, Philosophy 2077F/G, Philosophy 2355F/G, Philosophy 2664F/G, Philosophy 2810F/G, Philosophy 3031F/G, Philosophy 3555F/G, Philosophy 3810F/G, Philosophy 3830F/G, Philosophy 4107F/G, Philosophy 4331F/G, Philosophy 4530F/G, Philosophy 4730F/G, Philosophy 4750F/G or Philosophy 4751F/G. Additional special topics courses to be announced annually; special permission for appropriate courses offered outside the department will be considered.
0.5 Honours Capstone course from: Philosophy 4900F/G or Philosophy

4901F/G.
4.0 additional courses in Philosophy at the 2000 level or higher.

Note: At least 4.0 of the 9.0 must be at the 3000 level or higher.

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN PHILOSOPHY

Admission Requirements

Completion of first year requirements. 1.0 course from Philosophy 1020, Philosophy 1022E, Philosophy 1100E, Philosophy 1130F/G, Philosophy 1200, Philosophy 1350F/G is recommended.

Module
9.0 courses:

1.0 course in History of Philosophy from: Philosophy 2200F/G, Philosophy 2202F/G, **Philosophy 3002F/G,** Philosophy 3003F/G, Philosophy 3006F/G, **Philosophy 3007F/G,** Philosophy 3012F/G, Philosophy 3020F/G, Philosophy 3022F/G, Philosophy 3023F/G, Philosophy 3024F/G, Philosophy 3026F/G, Philosophy 3027F/G, Philosophy 3028F/G, Philosophy 3030F/G, Philosophy 3031F/G, Philosophy 3032F/G, Philosophy 3033F/G, Philosophy 3035F/G, Philosophy 3170F/G, Philosophy 4007F/G, Philosophy 4035F/G, Philosophy 4045F/G, Philosophy 4050F/G or Philosophy 4107F/G, the former Philosophy 4023F/G.
1.0 course in Ethics, Politics and Law from: Philosophy 2062F/G, Philosophy 2700F/G, Philosophy 2800F/G, Philosophy 2801F/G, Philosophy 2821F/G, Philosophy 3170F/G, Philosophy 3180F/G, Philosophy 3435F/G, Philosophy 3710F/G, Philosophy 3720F/G or Philosophy 3810F/G.
1.0 course in Knowledge, Representation and Reality from: Philosophy 2037F/G, Philosophy 2044F/G, Philosophy 2050F/G, Philosophy 2061F/G, Philosophy 2253A/B, Philosophy 2260F/G, Philosophy 2265A/B, Philosophy 2300F/G, Philosophy 2350F/G, Philosophy 2400F/G, Philosophy 2410F/G, Philosophy 2500F/G, Philosophy 2661F/G, Philosophy 3040F/G, Philosophy 3260F/G, Philosophy 3270F/G, Philosophy 3340F/G, Philosophy 3410F/G, Philosophy 3420F/G, Philosophy 3450F/G, Philosophy 3501F/G, Philosophy 3601F/G, Philosophy 4210F/G, Philosophy 4410F/G, Philosophy 4510F/G or Philosophy 4610F/G, the former Philosophy 3430F/G.
0.5 course in Equity, Diversity, and Inclusion from: Philosophy 2062F/G, Philosophy 2077F/G, Philosophy 2355F/G, Philosophy 2664F/G, Philosophy 2810F/G, Philosophy 3031F/G, Philosophy 3555F/G, Philosophy 3810F/G, Philosophy 3830F/G, Philosophy 4107F/G, Philosophy 4331F/G, Philosophy 4530F/G, Philosophy 4730F/G Philosophy 4750F/G or Philosophy 4751F/G. Additional special topics courses to be announced annually; special permission for appropriate courses offered outside the department will be considered.
5.5 additional courses in Philosophy at the 2000 level or above.

Note: At least 4.0 of the 9.0 must be at the 3000 level or higher.

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN PHILOSOPHY

Admission Requirements

Completion of first year requirements. 1.0 course from Philosophy 1020, Philosophy 1022E, Philosophy 1100E, Philosophy 1130F/G, Philosophy 1200, Philosophy 1350F/G is recommended.

Module
6.0 courses:

0.5 course in History of Philosophy from: Philosophy 2200F/G, Philosophy 2202F/G, **Philosophy 3002F/G,** Philosophy 3003F/G, Philosophy 3006F/G, **Philosophy 3007F/G,** Philosophy 3012F/G, Philosophy 3020F/G, Philosophy 3022F/G, Philosophy 3023F/G, Philosophy 3024F/G, Philosophy 3026F/G, Philosophy 3027F/G, Philosophy 3028F/G, Philosophy 3030F/G, Philosophy 3031F/G, Philosophy 3032F/G, Philosophy 3033F/G, Philosophy 3035F/G, Philosophy 3170F/G, Philosophy 4007F/G, Philosophy 4035F/G, Philosophy 4045F/G, Philosophy 4050F/G or Philosophy 4107F/G, the former Philosophy 4023F/G.
0.5 course in Ethics, Politics, and Law from: Philosophy 2062F/G, Philosophy 2700F/G, Philosophy 2800F/G, Philosophy 2801F/G, Philosophy 2821F/G, Philosophy 3170F/G, Philosophy 3180F/G, Philosophy 3435F/G, Philosophy 3710F/G, Philosophy 3720F/G or Philosophy 3810F/G.
0.5 course in Knowledge, Representation, and Reality from: Philosophy 2037F/G, Philosophy 2044F/G, Philosophy 2050F/G, Philosophy 2061F/G, Philosophy 2253A/B, Philosophy 2260F/G, Philosophy 2265A/B, Philosophy 2300F/G, Philosophy 2350F/G, Philosophy 2400F/G, Philosophy 2410F/G, Philosophy 2500F/G, Philosophy 2661F/G, Philosophy 3040F/G**,** Philosophy 3260F/G, Philosophy 3270F/G, Philosophy 3340F/G, Philosophy 3410F/G, Philosophy 3420F/G, Philosophy 3450F/G, Philosophy 3501F/G, Philosophy 3601F/G, Philosophy 4210F/G, Philosophy 4410F/G, Philosophy 4510F/G or Philosophy 4610F/G, the former Philosophy 3430F/G.
0.5 course in Equity, Diversity, and Inclusion from: Philosophy 2062F/G, Philosophy 2077F/G, Philosophy 2355F/G, Philosophy 2664F/G, Philosophy 2810F/G, Philosophy 3031F/G, Philosophy 3555F/G, Philosophy 3810F/G, Philosophy 3830F/G, Philosophy 4107F/G, Philosophy 4331F/G, Philosophy 4530F/G, Philosophy 4730F/G, Philosophy 4750F/G or Philosophy 4751F/G. Additional special topics courses to be announced annually; special permission for appropriate courses offered outside the department will be considered.
4.0 additional courses in Philosophy at the 2000 level or above.

Note: At least 3.0 of the 6.0 must be at the 3000 level or higher.

DEPARTMENT OF VISUAL ARTS

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN MUSEUM AND CURATORIAL STUDIES

Admission Requirements

Completion of first-year requirements including 1.0 course either from Art History 1640 ~~or the former VAH 1040~~ or two of Art History 1641A/B, Art History 1642A/B, Art History 1644A/B, Art History 1646A/B or Art History 1648A/B, ~~or the former VAH 1041A/B, the former VAH 1042A/B, the former VAH 1043A/B, the former VAH 1044A/B, and the former VAH 1045A/B,~~ with a minimum grade of 60% in each course.

Module
4.0 courses:

~~0.5 course: Museum and Curatorial Studies 2610F/G or the former VAH 2296F/G or the former VAH 3386F/G.~~
0.5 course: ~~in~~ Museum and Curatorial Studies 2620~~F/G~~**A/B** ~~or the former VAH 2292F/G~~.
0.5 course in Museum and Curatorial Studies at the 3600-level or above.
~~1.0 courses in Museum and Curatorial Studies at the 2600-level or above from: Museum and Curatorial Studies 3610F/G or the former VAH 2284F/G or Museum and Curatorial Studies 3620A/B/Y or the former VAH 3383A/B/Y, the former VAS 3383A/B/Y, or Museum and Curatorial Studies 3660A/B/Y.~~
~~2~~**3.0 courses** from: Museum and Curatorial Studies 2600-level or Art History 2600-level or above ~~or the former VAH 2200-level or above~~.

Related Information

For modules that can and cannot be combined, please visit the Visual Arts Modular Checklist site https://www.uwo.ca/visarts/undergraduate/Modules.html

IVEY BUSINESS SCHOOL

Course Introduction – Effective January 1, 2025, the following course be introduced:

BUSINESS ADMINISTRATION 4404A/B
CORPORATIONS AND SOCIETY: GLOBAL BUSINESS AND SUSTAINABLE DEVELOPMENT GOALS

(Short Title: C&S Global Business and SDG's)

Course Description
This course explores the contemporary economic, social, and environmental challenges in our interconnected world and why corporate and societal objectives may not coincide and how governments and civil society try to realign them.

Antirequisite(s): Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4557A/B, Business Administration 4588A/B, Business Administration 4608A/B.

Extra Information: 20 classes of 80 mins each delivered twice a week.
Course Weight: 0.50

FACULTY OF HEALTH SCIENCES

BRESCIA SCHOOL OF FOOD AND NUTRITIONAL SCIENCES

Course Revision – Effective September 1, 2025, the following change(s) be made:

FAMILY STUDIES AND HUMAN DEVELOPMENT 3310~~A/B~~F/G
WORK/LIFE BALANCE AND RESOURCES

Course Description
This course examines the resources and social forces that shape life choices for individuals in a Canadian context. Particular attention is given to the increased opportunity for education and paid employment. How individuals manage resources and balance work, family, and other life domains is considered.

Prerequisite(s): Any 0.5 course at the 2000-level or higher from any department in the Faculty of Health Sciences, the Department of Anthropology, the Department of Gender, Sexuality and Women's Studies, the Department of Psychology or the Department of Sociology; or permission of the Department.

Extra Information: 3 lecture/tutorial hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN FAMILIES AND COMMUNITIES – BA (HUMAN ECOLOGY)

Academic Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in these principal courses: 1.0 from Sociology 1000-level courses, ~~and~~ 1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses, **and 1.0 from Psychology 1000-level courses,** with no mark below 60%. ~~It is recommended that students take Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B.~~

Additional Requirements

To register in this module, students are required to submit a Community Development Application Form by May 1 (late applications will be considered at the discretion of the program). Enrolment in this module is limited. Meeting the minimum requirements does not guarantee that students wishing to transfer into this module will be offered enrolment. Priority will be given to students already registered ~~at Brescia~~ **in the Brescia School of Food and Nutritional Sciences**.

Module
9.0 courses:

0.5 course~~s from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during 1st or 2nd year~~.
3.0 courses: Family Studies and Human Development 2300F/G ~~or the former Family Studies 2300F/G~~, Family Studies and Human Development 3325A/B ~~or the former Family Studies 3325A/B~~, Family Studies and Human Development 4220A/B ~~or the former Family Studies 4220A/B~~; Sociology 2205A/B, Sociology 2215A/B; Family Studies and Human Development 3230A/B or Sociology 3322A/B or Sociology 3307F/G.
1.0 course~~s~~ from: any of the Family Studies and Human Development (formerly Family Studies) 2000-level courses.
1.0 course~~s~~ from: any of the Family Studies and Human Development (formerly Family Studies) 3000-level courses.
2.0 courses from: any of **the** Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-, 3000-, or 4000-level courses, **Psychology 2042A/B, Psychology 2043A/B,** ~~Psychology 2041,~~ Psychology 2050, Psychology 2075, Psychology 2410A/B, Psychology 2620A/B, ~~Psychology 3434E,~~ Psychology 2054A/B or Sociology 2142A/B, ~~Religious Studies 2151A/B or Religious Studies 2266F/G or Religious Studies 2288E,~~ Sociology 2267A/B, Sociology 3333F/G, Sociology 3335A/B, Sociology 3341F/G, Sociology 3360F/G~~, Sociology 4496E~~.

1.5 courses: Sociology 3330F/G and then Sociology 3331F/G, concurrent with Sociology 3334A/B.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN FAMILY STUDIES AND HUMAN DEVELOPMENT – BA (HUMAN ECOLOGY)

Admission Requirements

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

1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses, ~~and~~ 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B, plus 1.0 additional course. Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B, is needed for those students wishing to take Psychology 2410A/B or Psychology 3434E instead of Psychology 2041~~ **and 1.0 from Psychology 1000-level courses**.

Module
9.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year.
1.5 courses: Family Studies and Human Development 2300F/G ~~or the former Family Studies 2300F/G~~, Family Studies and Human Development 3325A/B ~~or the former Family Studies 3325A/B~~; Psychology 2850A/B or Sociology 2205A/B.
0.5 course from: Family Studies and Human Development 2245A/B ~~or the former Family Studies 2245A/B~~, Family Studies and Human Development 2260A/B ~~or the former Family Studies 2260A/B~~, or Family Studies and Human Development 2265A/B ~~or the former Family Studies 2265A/B~~.
1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level courses.
1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 3000-level courses.
1.5 courses from: any Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level or above course, Human Ecology 2222A/B, **Psychology 2042A/B, Psychology 2043A/B,** ~~Psychology 2041,~~ Psychology 2054A/B, Psychology 2620A/B, ~~Religious Studies 2151A/B~~ or ~~Religious Studies 2266F/G,~~ Sociology 2267A/B.
1.5 courses from: any Family Studies and Human Development ~~(formerly Family Studies)~~ 3000- or 4000-level course, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B, ~~Psychology 3434E,~~ Sociology 3341F/G~~,~~ ~~Sociology 4496E~~.
1.5 courses: Family Studies and Human Development 3230A/B ~~or the former Family Studies 3230A/B~~, Family Studies and Human Development 4220A/B ~~or~~

~~the former Family Studies 4220A/B~~, Family Studies and Human Development 3352A/B.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN FAMILY STUDIES AND HUMAN DEVELOPMENT – BA (HUMAN ECOLOGY)

Admission Requirements

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

1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses ~~and~~**,** 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B, plus 1.0 additional course. Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B, is needed for those students wishing to take Psychology 3434E instead of Psychology 2041~~ **and 1.0 from Psychology 1000-level courses**.

Module
9.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during 1st or 2nd year~~.
2.5 courses: Family Studies and Human Development 2300F/G ~~or the former Family Studies 2300F/G~~, Family Studies and Human Development 3230A/B ~~or the former Family Studies 3230A/B~~, Family Studies and Human Development 3325A/B ~~or the former Family Studies 3325A/B~~, Family Studies and Human Development 3352A/B; Psychology 2850A/B or Sociology 2205A/B.
0.5 course from: Family Studies and Human Development 2245A/B ~~or the former Family Studies 2245A/B~~, Family Studies and Human Development 2260A/B ~~or the former Family Studies 2260A/B~~, or Family Studies and Human Development 2265A/B ~~or the former Family Studies 2265A/B~~.
1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level courses.
1.0 courses from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 3000-level courses.
2.0 courses from: any Family Studies and Human Development (formerly Family Studies) 2000-level or above course, Human Ecology 2222A/B, **Psychology 2042A/B, Psychology 2043A/B,** ~~Psychology 2041,~~ Psychology 2054A/B, Psychology 2620A/B, ~~Religious Studies 2151A/B or Religious Studies 2266F/G,~~ Sociology 2267A/B.
1.5 courses from: any Family Studies and Human Development ~~(formerly Family Studies)~~ 3000- or 4000-level course, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B, ~~Psychology 3434E,~~ Sociology 3341F/G.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN FAMILY STUDIES AND HUMAN DEVELOPMENT – BA (HUMAN ECOLOGY)

Admission Requirements

Completion of first-year requirements including 1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses; ~~and~~ 1.0 from Sociology 1000-level courses; ~~Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B,~~ **and 1.0 from Psychology 1000-level courses,** with a mark of at least 60% in each of these courses. ~~Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B is needed for those students wishing to take Psychology 3434E instead of Psychology 2041.~~

Module

6.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during 1st or 2nd year~~.
1.5 courses: Family Studies and Human Development 2300F/G ~~or the former Family Studies 2300F/G~~, Family Studies and Human Development 3325A/B ~~or the former Family Studies 3325A/B~~, Family Studies and Human Development 3352A/B.
0.5 course from: Family Studies and Human Development 2245A/B ~~or the former Family Studies 2245A/B,~~ Family Studies and Human Development ~~(formerly Family Studies)~~ 2260A/B or Family Studies and Human Development ~~(formerly Family Studies)~~ 2265A/B.
1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level courses.
1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 3000-level courses.
1.5 courses from: any Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level or above courses, Human Ecology 2222A/B, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B, **Psychology 2042A/B, Psychology 2043A/B,** ~~Psychology 2041,~~ Psychology 2054A/B, Psychology 2620A/B, ~~Psychology 3434E, Religious Studies 2151A/B or Religious Studies 2266F/G,~~ Sociology 2267A/B, Sociology 3341F/G.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN FAMILY STUDIES AND HUMAN DEVELOPMENT

Admission Requirements

Completion of first-year requirements including 1.0 from Family Studies and Human Development 1000-level courses ~~or the former Family Studies 1000-level courses~~, ~~and~~ 1.0 from Sociology 1000-level courses, ~~Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B,,~~ **and 1.0 from Psychology 1000-level courses,** with a mark of at least 60% in each of these courses. ~~Psychology 1000 or Psychology 1010A/B and Psychology 1015A/B, is needed for those students wishing to take Psychology 3434E instead of Psychology 2041.~~

Module

4.0 courses:

1.0 course~~s~~ from: any of the Family Studies and Human Development ~~(formerly Family Studies)~~ 2000-level courses.
0.5 course from: Family Studies and Human Development 2245A/B ~~or the former Family Studies 2245A/B~~, Family Studies and Human Development 2260A/B ~~or the former Family Studies 2260A/B~~, or Family Studies and Human Development 2265A/B ~~or the former Family Studies 2265A/B~~.
1.0 course~~s~~: Family Studies and Human Development 3325A/B, Family Studies and Human Development 3352A/B.
1.5 courses from: any Family Studies and Human Development ~~(formerly Family Studies)~~ 2000- or 3000-level courses, Human Ecology 2222A/B, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B~~, Psychology 2041, Psychology 3434E~~.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN FAMILY STUDIES AND HUMAN DEVELOPMENT – BS~~C~~c (HUMAN ECOLOGY)

Admission Requirements

Completion of first-year requirements with no failures and an average of at least 70% in the following principal courses with no mark less than 60%:

1.0 from Family Studies and Human Development 1000-level courses~~ or the former Family Studies 1000-level courses~~; 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B~~ **and 1.0 from Psychology 1000-level courses**; Chemistry 1301A/B and Chemistry 1302A/B; Foods and Nutrition 1070A/B and Foods and Nutrition 1241A/B~~ or the former Foods and Nutrition 1030E or the former Foods and Nutrition 1021~~.

Module
9.0 courses:

1.0 course~~s~~: Family Studies and Human Development 2300F/G~~ or the former Family Studies 2300F/G~~; Psychology 2850A/B or Sociology 2205A/B.
1.5 courses: Chemistry 2003A/B, Physiology 1021.
1.5 courses: ~~Foods and Nutrition 2232,~~ Foods and Nutrition 2230A/B**, Foods and Nutrition 2140A/B, Foods and Nutrition 2142A/B**.
3.0 courses: Foods and Nutrition 2266F/G, Foods and Nutrition 3361F/G, Foods and Nutrition 3364A/B, Foods and Nutrition 3373A/B, Foods and Nutrition 3380A/B, Foods and Nutrition 3450F/G.
2.0 courses: Human Ecology 2222A/B, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN FAMILY STUDIES AND HUMAN DEVELOPMENT – BS~~C~~c (HUMAN ECOLOGY)

Admission Requirements

Completion of first-year requirements with no failures and an average of at least 65% in the following principal courses with no mark less than 60%:

> 1.0 from Family Studies and Human Development 1000-level courses~~ or the former Family Studies 1000-level courses~~; 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B~~ **and 1.0 from Psychology 1000-level courses**; Chemistry 1301A/B and Chemistry 1302A/B; Foods and Nutrition 1070A/B and Foods and Nutrition 1241A/B~~ or the former Foods and Nutrition 1030E or the former Foods and Nutrition 1021~~.

Module
9.0 courses:

1.0 course~~s~~: Family Studies and Human Development 2300F/G~~ or the former Family Studies 2300F/G,~~**;** Psychology 2850A/B or Sociology 2205A/B.
1.5 courses: Chemistry 2003A/B, Physiology 1021.
1.5 courses: **Foods and Nutrition 2140A/B, Foods and Nutrition 2142A/B,** Foods and Nutrition 2230A/B~~, Foods and Nutrition 2232~~.
3.0 courses: Foods and Nutrition 2266F/G, Foods and Nutrition 3361F/G, Foods and Nutrition 3364A/B, Foods and Nutrition 3373A/B, Foods and Nutrition 3380A/B, Foods and Nutrition 3450F/G.
2.0 courses: Human Ecology 2222A/B, Human Ecology 3033A/B, Human Ecology 3338A/B, Human Ecology 3343A/B.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN NUTRITION AND FAMILIES – BA (HUMAN ECOLOGY)

This module, appropriate for (but not exclusive to) those wishing to go on to a **degree within the** Faculty of Education, combines coursework from Food and Nutritional Sciences and Family Studies and Human Development. This program may qualify graduates for the designation of Professional Home Economist (P.H.Ec.) post-graduation.

Admission Requirements

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

> Foods and Nutrition 1070A/B and Foods and Nutrition 1241A/B ~~or the former Foods and Nutrition 1021 or the former Foods and Nutrition 1030E~~, 1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses, ~~and~~ 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B~~ **and 1.0 from Psychology 1000-level courses**.

Module
9.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during the 1st or 2nd year~~.
1.5 courses: Family Studies and Human Development 2300F/G; Psychology 2850A/B or Sociology 2205A/B, Family Studies and Human Development 3352A/B.
0.5 course from: Family Studies and Human Development 2245A/B, Family Studies and Human Development 2260A/B, or Family Studies and Human Development 2265A/B.
0.5 course from: any Family Studies and Human Development course at the 2000-, 3000-, or 4000-level.
0.5 course from: Human Ecology 3033A/B, Human Ecology 3343A/B, Human Ecology 3338A/B, ~~Psychology 2041,~~ **Psychology 2042A/B, Psychology 2043A/B,** Psychology 2620A/B, ~~Psychology 3434E,~~ Psychology 2054A/B or Sociology 2142A/B.
1.5 courses from: Foods and Nutrition 2140A/B, Foods and Nutrition 3400A/B, Foods and Nutrition 2266F/G~~, the former Foods and Nutrition 2130~~.
2.5 courses from: Foods and Nutrition 3310A/B, Foods and Nutrition 3361F/G, Foods and Nutrition 3380A/B, Foods and Nutrition 3450F/G, Human Ecology

2222A/B.
1.5 courses: Family Studies and Human Development 3230A/B, Family Studies and Human Development 3325A/B, Family Studies and Human Development 4220A/B.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN NUTRITION AND FAMILIES – BA (HUMAN ECOLOGY)

This module, appropriate for (but not exclusive to) those wishing to go on to a **degree within the** Faculty of Education, combines coursework from Food and Nutritional Sciences and Family Studies and Human Development. This program may qualify graduates for the designation of Professional Home Economist (P.H.Ec.) post-graduation.

Admission Requirements

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

Foods and Nutrition 1070A/B and Foods and Nutrition 1241A/B, ~~the former Foods and Nutrition 1021 or the former Foods and Nutrition 1030E,~~ 1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses, ~~and~~ 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B~~ **and 1.0 from Psychology 1000-level courses**.

Module
9.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G,~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during the 1st or 2nd year~~.
2.5 courses: Family Studies and Human Development 2300F/G; Psychology 2850A/B or Sociology 2205A/B; Family Studies and Human Development 3230A/B; Family Studies and Human Development 3325A/B, Family Studies and Human Development 3352A/B.
0.5 course from: Family Studies and Human Development 2245A/B, Family Studies and Human Development 2260A/B, or Family Studies and Human Development 2265A/B.
0.5 course from: any Family Studies and Human Development course at the 2000-, 3000-, or 4000-level.
2.5 courses from: Foods and Nutrition 3310A/B, Foods and Nutrition 3361F/G, Foods and Nutrition 3380A/B, Foods and Nutrition 3450F/G, Human Ecology 2222A/B.
1.0 course~~s~~ from: Human Ecology 3033A/B, Human Ecology 3343A/B, Human Ecology 3338A/B, **Psychology 2042A/B, Psychology 2043A/B,** ~~Psychology 2041,~~ Psychology 2620A/B, ~~Psychology 3434E,~~ Psychology 2054A/B or Sociology 2142A/B.

1.5 courses ~~from~~: Foods and Nutrition 2140A/B, Foods and Nutrition 3400A/B, Foods and Nutrition 2266F/G~~, the former Foods and Nutrition 2130~~.

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN NUTRITION AND FAMILIES – BA (HUMAN ECOLOGY)

This module, appropriate for (but not exclusive to) those wishing to go on to a **degree within the** Faculty of Education, combines coursework from Food and Nutritional Sciences and Family Studies and Human Development. This program may qualify graduates for the designation of Professional Home Economist (P.H.Ec.) post-graduation.

Admission Requirements

Completion of first-year requirements including Foods and Nutrition 1070A/B and Foods and Nutrition 1241A/B ~~or the former Foods and Nutrition 1021 or the former Foods and Nutrition 1030E,~~ or 1.0 from Family Studies and Human Development ~~(formerly Family Studies)~~ 1000-level courses, ~~and~~ 1.0 from Sociology 1000-level courses, ~~Psychology 1000, or Psychology 1010A/B and Psychology 1015A/B~~ **and 1.0 from Psychology 1000-level courses,** with a mark of at least 60% in each of these courses.

Module
6.0 courses:

0.5 course ~~from~~: ~~Writing 1020F/G, Writing 2101F/G~~ **Family Studies and Human Development 3310F/G** to be taken no later than the 3rd year~~, and preferably during the 1st or 2nd year~~.
1.5 courses: Family Studies and Human Development 2300F/G, Family Studies and Human Development 3325A/B, Family Studies and Human Development 3352A/B.
0.5 course from: Family Studies and Human Development 2245A/B, Family Studies and Human Development 2260A/B, or Family Studies and Human Development 2265A/B.
0.5 course from: any Family Studies and Human Development course at the 2000, 3000, or 4000-level.
1.5 courses ~~from~~: Foods and Nutrition 2140A/B, Foods and Nutrition 3400A/B, Foods and Nutrition 2266F/G~~, the former Foods and Nutrition 2130~~.
1.0 course~~s~~ from: Foods and Nutrition 3310A/B, Foods and Nutrition 3361F/G, Foods and Nutrition 3380A/B, Foods and Nutrition 3450F/G, Human Ecology 2222A/B.
0.5 course from: ~~Psychology 2041,~~ **Psychology 2042A/B, Psychology 2043A/B,** Psychology 2620A/B, ~~Psychology 3434E,~~ Human Ecology 3033A/B, Human Ecology 3343A/B, Human Ecology 3338A/B, Psychology 2054A/B or Sociology 2142A/B, Sociology 3341F/G, or any Family Studies and Human Development course at the 2000, 3000, or 4000-level (not previously selected).

Related Information

Prior to May 1, 2024, this module was offered by Brescia University College.

SCHOOL OF COMMUNICATION SCIENCES AND DISORDERS

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMMUNICATION SCIENCES AND DISORDERS 4417A/B
HEARING SCIENCE AND AUDIOLOGY

Course Description
The study of human hearing from acoustics to the physiological and psychological correlates of sound. Course topics and activities include physical acoustics, auditory system anatomy and physiology, the perception of sound, and an introduction to audiology, in particular, hearing disorders, assessments, and remedial technologies.

Prerequisite(s): Completion of two years of an undergraduate degree.

Extra Information: 3 lecture hours~~, 1 laboratory/tutorial hour~~.
Course Weight: 0.50

SCHOOL OF HEALTH STUDIES

Course Introduction – Effective September 1, 2025, the following course be introduced:

HEALTH SCIENCES 3255F/G
THE COLOUR(S) OF WELL-BEING: BLACK, IMMIGRANT, AND REFUGEE HEALTH IN CANADA

(Short Title: Black & Immigrant Health)

Course Description
This course focuses on cultural conceptions of health, and the structural underpinnings of Black, immigrant, and refugee health in Canada. Topics include: the meaning of holistic health to Black and other ethnoracial people; historical, political, and economic structures contributing to health; the convergence of these experiences to produce health disparities.

Antirequisite(s): Health Sciences 4093F/G, if taken in 2022-23; Health Sciences 4093G section 001, if taken in 2023-24.

Prerequisite(s): Registration in third or fourth year in any module or program in the Faculty of Health Sciences; or permission of the School.

Extra Information: 2 lecture hours.
Course Weight: 0.50

SCHOOL OF KINESIOLOGY

Course Revision – Effective September 1, 2025, the following change(s) be made:

KINESIOLOGY 4241A/B
BIOMECHANICS OF INJURY

Course Description
This course provides an in-depth exploration of the mechanical principles underlying human injury, with a focus on the musculoskeletal system. Students will examine tissue tolerance, risk factors, and injury prevention strategies in sports, automotive, and occupational settings. Case studies and guest lectures from injury biomechanics experts will supplement content.

Antirequisite(s): Kinesiology 4473A/B (if taken in 2024-25).

Prerequisite(s): Kinesiology 2241A/B, registered in 3rd or 4th year Kinesiology.

Extra Information: 3 lecture/tutorial hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

KINESIOLOGY 4464A/B
DIS/ABILITY AND THE MOVING BODY: A SOCIAL-CULTURAL UNDERSTANDING

Course Description
This course challenges normative social and cultural understandings of the body, movement cultures and disability. The goal is to understand how these norms have shaped movement-related professional fields such as rehabilitation sciences, sport, physical activity, and the performing arts as well as their own perceptions around movement and disability.

Antirequisite(s): Kinesiology 4472A/B (if taken in 2021-22, 2023-24, 2024-25), Health Sciences 4090B (if taken in if taken in 2021-22, 2023-24, 2024-25).

Prerequisite(s): Registered in 3rd or 4th year Kinesiology.

Extra Information: 3 lecture/tutorial hours.
Course Weight: 0.50

SCHULICH SCHOOL OF MEDICINE & DENTISTRY

DEPARTMENT OF ANATOMY AND CELL BIOLOGY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

ANATOMY AND CELL BIOLOGY 4480E
RESEARCH PROJECT AND SEMINAR

Course Description
The course consists of: lectures on laboratory safety, biosafety, use of animals in research, scientific integrity; an independent research project (topic and advisor chosen by consultation between student and faculty); scientific communication.

Antirequisite(s): Biochemistry 4483E, Microbiology and Immunology 4970E.

Prerequisite(s): Anatomy and Cell Biology 3329A/B; Biochemistry 3381A and Biochemistry 3382A with marks in each of at least 70%; one of Anatomy and Cell Biology 3700F/G, Biochemistry 3380G, Biochemistry 3390B or Biology 3326F/G with a mark of at least 70%. Enrolment is limited and available only to students in the Year 4 of either an Honours Specialization in Biochemistry and Cell Biology or an Honours Specialization in Medical Cell Biology.

Extra Information: 15 hours per week.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ANATOMY AND CELL BIOLOGY 4985E
RESEARCH PROJECT AND SEMINAR

Course Description
Students conduct independent research projects under direct supervision of a faculty member, while also receiving support from other members of the research team. Designed to immerse students in authentic scientific inquiry, it fosters hands-on learning, critical thinking, and collaboration while developing essential research skills in a real-world laboratory setting.

Antirequisite(s): Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Anatomy and Cell Biology 3329A/B; Biochemistry 3381A and Biochemistry 3382A with marks in each of at least 70%; one of Anatomy and Cell Biology 3700F/G, Biochemistry 3380G, Biochemistry 3390B or Biology 3326F/G, with a mark of at least 70%. Enrolment is limited and available only to students in Year 4 of the Honours Specialization in Medical Cell Biology and the Honours Specialization in Biochemistry and Cell Biology. **Corequisite(s):** Anatomy and Cell Biology 4986Y.

Extra Information: 15 laboratory hours per week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

ANATOMY AND CELL BIOLOGY 4986Y
BEYOND THE BENCH: BUILDING SKILLS FOR SCIENTIFIC AND PROFESSIONAL SUCCESS

(Short Title: Scientific/Professional Skills)

Course Description
Success in biomedical research requires more than technical expertise – it demands strong ethical foundations, effective communication, and resilience in the face of challenges. This course equips students with essential skills for thriving in academic and professional research environments.

Antirequisite(s): Biochemistry 4986Y and Microbiology and Immunology 4986Y.

Prerequisite(s): Registration in Year 4 of the Honours Specialization in Biochemistry and Cell Biology or Honours Specialization in Medical Cell Biology.
Corequisite(s): Anatomy and Cell Biology 4985E.

Extra Information: 2 hours. Cross-listed with Biochemistry 4986Y and Microbiology and Immunology 4986Y.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN MEDICAL CELL BIOLOGY

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

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

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: Biology 2244A/B or Statistical Sciences 2244A/B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.

Module
11.0 courses:

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

0.5 course from: Chemistry 2213A/B, Chemistry 2273A.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
1.5 courses: Anatomy and Cell Biology 3309 with a mark of at least 70%, Anatomy and Cell Biology 3329A/B.
1.0 course from: (Anatomy and Cell Biology 2200A/B and either Anatomy and Cell Biology 3200A/B or Anatomy and Cell Biology 3201A/B), Physiology 3120.
1.0 course from: Anatomy and Cell Biology 3700F/G, Biochemistry 3381A, Biochemistry 3382A with marks of at least 70% in the two taken.
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.
0.5 course: Medical Sciences 3391A/B.
1.0 course: Anatomy and Cell Biology 4410A, Anatomy and Cell Biology 4411B.
0.5 course from: Anatomy and Cell Biology 4200A, Anatomy and Cell Biology 4201B, Anatomy and Cell Biology 4425A/B, Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Anatomy and Cell Biology 4461B.
1.5 courses: **Anatomy and Cell Biology 4985E and Anatomy and Cell Biology 4986Y; or the former** Anatomy and Cell Biology 4480E ~~(Research Project = 1.5 courses)~~.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 6.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A (minimum mark of 65%);
- Chemistry 2213A/B or Chemistry 2273A;
- Biology 2244A/B or Statistical Sciences 2244A/B;
- Biology 2290F/G, Biology 2382A/B and Biology 2581A/B;
- Anatomy and Cell Biology 3309 (minimum mark of 70%) and Anatomy and Cell Biology 3329A/B;
- 1.0 course from: Anatomy and Cell Biology 3700F/G, Biochemistry 3381A, Biochemistry 3382A (minimum marks of 70% in the two courses taken);
- Biochemistry 3380G or Biology 3326F/G (minimum mark of 70% in the course taken); and

- Biology 3316A/B or Physiology 3140A (minimum mark of 70% in the course taken).

It is recommended that students complete Medical Sciences 3391A/B prior to Year 4.

Students registered in Year 3 of the Honours Specialization in Medical Cell Biology in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Medical Cell Biology.

BMSc students who are not registered in Year 3 of the Honours Specialization in Medical Cell Biology in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

DEPARTMENT OF BIOCHEMISTRY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

BIOCHEMISTRY 4483E
RESEARCH PROJECT AND SEMINAR

Course Description
The major laboratory course for the Honours Specialization in Biochemistry and Honours Specialization modules combined with Biochemistry. Lectures on laboratory safety, biosafety, use of animals in research, scientific integrity; an independent research project (topic and advisor chosen by consultation between student and faculty); scientific communication (two seminars and a written report).

Antirequisite(s): Anatomy and Cell Biology 4480E, Chemical Biology 4500E, Medical Biophysics 4970E, Microbiology and Immunology 4970E, Pathology 4980E, the former Medical Sciences 4900F/G/Z.

Prerequisite(s): Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A, with marks in each of at least 70%. Enrolment is limited, and is available only to students in Year 4 of Honours Specialization modules in Biochemistry, Biochemistry and Cell Biology, Biochemistry and Pathology of Human Disease, Biochemistry and Chemistry, Biochemistry of Infection and Immunity, Computational Biochemistry, and Medical Biophysics and Biochemistry. Students in the Honours Specialization in Biochemistry of Infection and Immunity may substitute one of Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, with a minimum mark of 70% in lieu of Biochemistry 3380G as a prerequisite. Students in the Honours Specialization in Computational Biochemistry may substitute Biochemistry 3383F/G with a minimum mark of 70% in lieu of Biochemistry 3380G as a prerequisite.

Extra Information: 15 hours per week. Enrolment in this course is limited.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

BIOCHEMISTRY 4985E
RESEARCH PROJECT AND SEMINAR

Course Description
Students conduct independent research projects under direct supervision of a faculty member, while also receiving support from other members of the research team. Designed to immerse students in authentic scientific inquiry, it fosters hands-on learning, critical thinking, and collaboration while developing essential research skills in a real-world laboratory setting.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A, with marks in each of at least 70%. Enrolment is limited and is available only to students in Year 4 of the Honours Specialization in Biochemistry, Honours Specialization in Biochemistry and Cell Biology, Honours Specialization in Biochemistry of Infection and Immunity, Honours Specialization in Biochemistry and Pathology of Human Disease, and Honours Specialization in Biochemistry and Chemistry. **Corequisite(s):** Biochemistry 4986Y.

Extra Information: 15 hours.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

BIOCHEMISTRY 4986Y
BEYOND THE BENCH: BUILDING SKILLS FOR SCIENTIFIC AND PROFESSIONAL SUCCESS

(Short Title: Scientific/Professional Skills)

Course Description
Success in biomedical research requires more than technical expertise – it demands strong ethical foundations, effective communication, and resilience in the face of challenges. This course equips students with essential skills for thriving in academic and professional research environments.

Antirequisite(s): Anatomy and Cell Biology 4986Y, Microbiology and Immunology 4986Y.

Prerequisite(s): Registration in Year 4 of an Honours Specialization in Biochemistry, Honours Specialization in Biochemistry and Cell Biology, Honours Specialization in Biochemistry of Infection and Immunity, Honours Specialization in Biochemistry and Pathology of Human Disease, or Honours Specialization in Biochemistry and Chemistry. **Corequisite(s):** Biochemistry 4985E.

Extra Information: 2 hours. Cross-listed with Anatomy and Cell Biology 4986Y, Microbiology and Immunology 4986Y.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN BIOCHEMISTRY

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each (unless otherwise indicated) prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor Of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc.

0.5 course: Biochemistry 2280A with a mark of at least 65%.
0.5 course: Biology 2581A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
0.5 course from: Chemistry 2213A/B or Chemistry 2273A.
0.5 course from: Chemistry 2223B or Chemistry 2283G.
1.0 course from: Biology 2290F/G, Biology 2382A/B, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2274A, Chemistry 2284B, the former Chemistry 2374A, the former Chemistry 2384B.

Module
10.0 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.
0.5 course: Biology 2581A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
0.5 course from: Chemistry 2213A/B or Chemistry 2273A.
0.5 course from: Chemistry 2223B or Chemistry 2283G.
1.0 course from: Biology 2290F/G, Biology 2382A/B, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2274A, Chemistry 2284B, the former Chemistry 2374A, the former Chemistry 2384B.
1.5 courses: Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A with marks of at least 70% in each.
0.5 course: Biochemistry 3390B.
0.5 course: Medical Sciences 3391A/B.
1.0 course from: Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.
1.5 additional courses from: Biochemistry 3385B, Biochemistry 3392F/G, Biochemistry 4320F/G, Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B, Biochemistry 4450A, the former Biochemistry 4455G, the former Biochemistry 4463B.
1.5 course from: ~~Biochemistry 4483E or~~ Biochemistry 4484E**; Biochemistry 4985E and Biochemistry 4986Y; or the former Biochemistry 4483E**.

Note:

1. It is recommended that students include at least one of Biology 2290F/G, Chemistry 2214A/B, Chemistry 2274A or the former Chemistry 2374A in the module.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 5.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A (minimum mark of 65%);
- Biology 2581A/B;

- Biology 2244A/B or Statistical Sciences 2244A/B;
- Chemistry 2213A/B or Chemistry 2273A;
- Chemistry 2223B or Chemistry 2283G;
- 1.0 course from Biology 2382A/B, Biology 2290F/G, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2274A, Chemistry 2284B, the former Chemistry 2374A, the former Chemistry 2384B;
- Biochemistry 3380G, Biochemistry 3381A and Biochemistry 3382A (minimum marks of 70% in each); and
- Biochemistry 3390B.

Students registered in Year 3 of the Honours Specialization in Biochemistry in 2025-26 and onward who satisfy these Progression Requirements are assured progression to Year 4 of the Honours Specialization in Biochemistry.

BMSc students who are not registered in Year 3 of the Honours Specialization in Biochemistry in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN BIOCHEMISTRY AND CELL BIOLOGY – ADMISSION DISCONTINUED

Admission to this module is discontinued, effective September 1, 2025. Students currently enrolled in the module will be permitted to graduate upon fulfillment of the module requirements by August 31, 2028.

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/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 Honours 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 Honours Specialization modules, including the Weighted Average Chart.

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.

Module
10.5 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.
0.5 course: Biochemistry 3380G.
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%.
0.5 course from: Anatomy and Cell Biology 3700F/G, Biochemistry 3390B, Biology 3326F/G.
1.5 courses: Anatomy and Cell Biology 3309, Anatomy and Cell Biology 3329A/B or the former Anatomy and Cell Biology 4429A.
1.0 course from: Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.
0.5 additional course from: ~~:~~ Anatomy and Cell Biology 4425A/B, Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4461B, Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.
1.5 courses from: ~~Biochemistry 4483E,~~ **Anatomy and Cell Biology 4985E and Anatomy and Cell Biology 4986Y;** Biochemistry 4484E ~~or~~**; Biochemistry 4985E and Biochemistry 4986Y; the former** Anatomy and Cell Biology 4480E **or the former Biochemistry 4483E**.

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. The prerequisite for Anatomy and Cell Biology 4480E includes a mark of at least 70% in one of Anatomy and Cell Biology 3700F/G, Biochemistry 3380G, Biochemistry 3390B or Biology 3326F/G. The prerequisite for Biochemistry 4483E includes a mark of at least 70% in Biochemistry 3380G.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN BIOCHEMISTRY AND PATHOLOGY OF HUMAN DISEASE – ADMISSION DISCONTINUED

Admission to this module is discontinued, effective September 1, 2025. Students currently enrolled in the module will be permitted to graduate upon fulfillment of the module requirements by August 31, 2028.

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/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 Honours 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 Honours Specialization modules, including the Weighted Average Chart.

0.5 course: Biochemistry 2280A with a mark of at least 65%.
1.0 course: Biology 2382A/B, Biology 2581A/B.
0.5 course from: Chemistry 2213A/B or Chemistry 2273A.
0.5 course from: Chemistry 2223B or Chemistry 2283G.
0.5 course from: Biology 2290F/G, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2374A, Chemistry 2384B, Microbiology and Immunology 2500A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

Module
10.5 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.
1.0 course: Biology 2382A/B, Biology 2581A/B.
0.5 course from: Chemistry 2213A/B, Chemistry 2273A.
0.5 course from: Chemistry 2223B, Chemistry 2283G.
0.5 course from: Biology 2290F/G, Chemistry 2211A/B, Chemistry 2214A/B, Chemistry 2374A, Chemistry 2384B, Microbiology and Immunology 2500A/B, Biochemistry 3390B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
1.0 course: Pathology 3500 with a mark of at least 70%.
1.5 courses: Biochemistry 3381A, Biochemistry 3382A and Biochemistry 3380G, with marks of at least 70% in each.
2.0 courses from: Biochemistry 3385B, Biochemistry 3386B, Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.
0.5 course from: Biochemistry 4450A, the former Biochemistry 4463B, the former Pathology 4450A.
0.5 course from: Pathology 4200A/B, Pathology 4400A/B.
1.5 courses from: **Biochemistry 4985E and Biochemistry 4986Y; Pathology 4985E and Pathology 4986Y; the former** Biochemistry 4483E ~~or~~**; the former** Pathology 4980E ~~(Research Project = 1.5 courses)~~.

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. A course in Physiology (e.g. one of Physiology 2130, Physiology and Pharmacology 2000 or Physiology 3120) is recommended.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN BIOCHEMISTRY OF INFECTION AND IMMUNITY – ADMISSION DISCONTINUED

Admission to this module is discontinued, effective September 1, 2025. Students currently enrolled in the module will be permitted to graduate upon fulfillment of the module requirements by August 31, 2028.

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/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 listed below must be completed with a minimum mark of 60% in each (unless otherwise indicated) prior to admission to the Honours 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 Honours Specialization modules, including the Weighted Average Chart.

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.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
0.5 course: Microbiology and Immunology 2500A/B with a mark of at least 70%.

Module
10.5 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.
0.5 course from: Chemistry 2213A/B, Chemistry 2273A.
0.5 course from: Chemistry 2223B, Chemistry 2283G.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
1.5 courses: Microbiology and Immunology 2500A/B, Microbiology and Immunology 3300B, and Microbiology and Immunology 3400A or the former Microbiology and Immunology 3100A, with marks of at least 70% in each.
1.0 course: Biochemistry 3381A, Biochemistry 3382A with marks of at least 70% in each.
0.5 course from: Biochemistry 3380G, Microbiology and Immunology 3610F, with a mark of at least 70%.
0.5 course from: Anatomy and Cell Biology 3700F/G, Biochemistry 3390B.
1.0 course from: Microbiology and Immunology 4100A, Microbiology and Immunology 4200B (see note), Microbiology and Immunology 4310A or the former Microbiology and Immunology 4300A.
1.0 course from: Biochemistry 3385B, Biochemistry 4410A, Biochemistry 4415B, Biochemistry 4420A, Biochemistry 4425B.
1.5 courses from: ~~Biochemistry 4483E, ~~Biochemistry 4484E~~ or~~**; Biochemistry 4985E and Biochemistry 4986Y; Microbiology and Immunology 4985E and Microbiology and Immunology 4986Y; the former Biochemistry 4483E; the former** Microbiology and Immunology 4970E.

Notes:

1. The prerequisite for Microbiology and Immunology 4200B is a mark of at least 70% in Microbiology and Immunology 3200B or the former Microbiology and Immunology 3100A.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

Course Introduction – Effective September 1, 2025, the following course be introduced:

EPIDEMIOLOGY AND BIOSTATISTICS 4985E
RESEARCH PROJECT AND SEMINAR

Course Description
An applied research course in which students use skills in identifying and clarifying a research question, methodologically critical review of literature, identifying data sources, conducting appropriate statistical analyses, interpreting results, and presenting findings orally and in written technical reports or journal manuscripts.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Biostatistics 3110B and Epidemiology 3210B, with marks of at least 70% in each; and registration in the Honours Specialization in Epidemiology and Biostatistics.

Extra Information: 10 hours per week.
Course Weight: 1.00

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN EPIDEMIOLOGY AND BIOSTATISTICS

This module is intended primarily for students who wish to pursue graduate training in Epidemiology and Biostatistics and want to include applied human health research-intensive preparation in their undergraduate program. This module leads to a Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each (unless otherwise indicated) prior to admission to the Honours Specialization module in Year 3. These 2000- level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc.

0.5 course: Biochemistry 2280A.
0.5 course: Chemistry 2213A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course: Epidemiology 2200A/B with a mark of at least 70%.

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.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course: Epidemiology 2200A/B with a mark of at least 70%.
1.0 course from the Social Science Subject List (see below).
1.0 course: Biostatistics 3100A, Biostatistics 3110B with a mark of at least 70% in each.
1.0 course: Epidemiology 3200A Epidemiology 3210B, with a mark of at least 70% in each.
1.5 courses: Epidemiology 3330F/G, Epidemiology 4310A/B, Epidemiology 4320A/B.
0.5 course or 1.0 course from: Biostatistics 3400A, Epidemiology 4600A. **See notes below.**
1.0 course from: Epidemiology 3315B, Epidemiology 4600A (if not used above), Epidemiology 4615B, Epidemiology 4715A/B.
1.5 or 1.0 courses: Epidemiology and Biostatistics 4900E ~~(Research Project = 1.5 courses)~~ **or Epidemiology and Biostatistics 4985E (1.0 course). See notes below**.

Social Science Subject List:
Students must complete 1.0 senior course from one of the subject areas below (e.g. 1.0 course – one full course or two half courses in Economics). Note that (i) two half courses from two different subject areas will not satisfy this requirement, and (ii) some courses may require a prerequisite.

Anthropology, Economics, Geography, History, Indigenous Studies, Political Science, Psychology, or Sociology.

Notes:
1. **Epidemiology and Biostatistics 4900E (1.5 course) will be offered for the last time in 2025/26. Students registered in Year 3 of the module in 2025/26 will require both Biostatistics 3400A and Epidemiology 4600A, and Epidemiology and Biostatistics 4985E in Year 4.**
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.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences*

(BMSc) Program (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 5.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Chemistry 2213A/B;
- Biology 2244A/B or Statistical Sciences 2244A/B;
- Biology 2581A/B, Biology 2382A/B and Biology 2290F/G;
- Epidemiology 2200A/B with a mark of at least 70%;
- Biostatistics 3100A and Biostatistics 3110B with marks of at least 70% in each; and
- Epidemiology 3200A and Epidemiology 3210B with marks of at least 70% in each.

Students registered in Year 3 of the Honours Specialization in Epidemiology and Biostatistics in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Epidemiology and Biostatistics.

BMSc students who are not registered in Year 3 of the Honours Specialization in Epidemiology and Biostatistics in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

DEPARTMENT OF MEDICAL BIOPHYSICS

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MEDICAL BIOPHYSICS 4970E
RESEARCH PROJECT IN BIOPHYSICS

Course Description
Major laboratory course in experimental biophysics for Honours Specialization modules offered by the Department of Medical Biophysics. Three components are: a major experimental project (topic and advisor chosen in consultation with the student), scientific communication (student presentation and reports), and electronic information processing (data capture, computer analysis of biophysical signals).

Antirequisite(s): Medical Biophysics 4971E.

Prerequisite(s): Medical Biophysics 3980E or the former Medical Biophysics 3970Z and registration in Year 4 of one of the following Honours Specialization modules: Medical Biophysics (Medical Science Concentration), Medical Biophysics (Physical Science Concentration), or Medical Biophysics (Biological Science Concentration); or registration in Year 4 of an Honours Specialization in Medical Biophysics and Biochemistry plus either Medical Biophysics 3980E or the former Medical Biophysics 3970Z or Biochemistry 3380G.

Extra Information: 15 hours weekly on average.
Course Weight: 1.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MEDICAL BIOPHYSICS 4971E
CLINICAL RESEARCH PROJECT IN BIOPHYSICS

Course Description
Major laboratory course in experimental biophysics for Honours Specialization modules in Medical Biophysics with three components: a major experimental project related to clinical physics (topic and advisor chosen in consultation with the student), scientific communication (student presentation and reports), and electronic information processing (data capture, computer analysis of biophysical signals).

Antirequisite(s): Medical Biophysics 4970E.

Prerequisite(s): Medical Biophysics 3980E or the former Medical Biophysics 3970Z; and registration in Year 4 of an Honours Specialization in Medical Biophysics.

Extra Information: 15 hours weekly on average.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

MEDICAL BIOPHYSICS 4985E
RESEARCH PROJECT AND SEMINAR

Course Description
Major laboratory course for Honours Specialization modules offered by the Department of Medical Biophysics. Three components are: a major research project (topic and advisor chosen in consultation with the student), scientific communication (student presentation and reports), and electronic information processing (data capture, computer analysis of biophysical signals).

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Medical Biophysics 3980E or the former Medical Biophysics 3970Z, and registration in Year 4 of an Honours Specialization module offered by the Department of Medical Biophysics. **Corequisite(s):** Medical Biophysics 4986Y.

Extra Information: 3 hours.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

MEDICAL BIOPHYSICS 4986Y
PROFESSIONAL DEVELOPMENT IN MEDICAL BIOPHYSICS

(Short Title: Professional Skills in Med Bio)

Course Description
In this course, students learn about professional development skills in research. Students develop research literacy, critical thinking, and communication skills. Students will develop skills in writing a curriculum vitae, interviewing skills, and reflective writing.

Prerequisite(s): Registration in Year 4 of an Honours Specialization offered by the Department of Medical Biophysics. **Corequisite(s):** Medical Biophysics 4985E.

Extra Information: 2 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (MEDICAL SCIENCE CONCENTRATION)

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc.

0.5 course: Biochemistry 2280A.
0.5 course: Chemistry 2213A/B.
0.5 course from: Biology 2382A/B, Biology 2581A/B, Chemistry 2214A/B, Computer Science 2035A/B, Data Science 2000A/B, Data Science 2100A.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.

Notes:

1. It is recommended that 1.0 of the following modular courses be completed prior to Year 3: (Physics 2101A/B and Physics 2102A/B) or Physiology 2130 or Physiology and Pharmacology 2000.

2. Students are encouraged to take Medical Biophysics 2500A/B in second year if they want an introduction to the discipline of Medical Biophysics or are interested in learning how biophysics concepts are applied in translational health research.

Module
11.5 courses:

0.5 course: Biochemistry 2280A.
0.5 course: Chemistry 2213A/B.
0.5 course from: Biology 2382A/B, Biology 2581A/B, Chemistry 2214A/B, Computer Science 2035A/B, Data Science 2000A/B, Data Science 2100A.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
1.0 course from: Physics 2101A/B and Physics 2102A/B, or Physiology 2130 or Physiology and Pharmacology 2000 (see notes).
3.0 courses: Medical Biophysics 3330F, Medical Biophysics 3467B, Medical Biophysics 3501A, Medical Biophysics 3518B, Medical Biophysics 3720A, Medical Biophysics 3820B.
1.0 course: Medical Biophysics 3980E.
0.5 course: Medical Biophysics 4700B.
1.5 courses from: (Medical Biophysics 3503G or Medical Biophysics 4445A/B), Medical Biophysics 4330A, Medical Biophysics 4501A, Medical Biophysics 4730A/B.
1.0 course from: Medical Biophysics 4467B, Medical Biophysics 4518B, Medical Biophysics 4720B.
1.5 courses: **Medical Biophysics 4985E and Medical Biophysics 4986Y; or the former** Medical Biophysics 4970E ~~(Research Project = 1.5 courses) or~~**; or the former** Medical Biophysics 4971E.

Notes:

1. Physics 2101A/B and Physics 2102A/B include the following courses in their prerequisites, with marks of at least 60%: one of Physics 1202A/B, Physics 1402A/B or Physics 1502A/B, and one of Calculus 1301A/B or Calculus 1501A/B.

2. Physiology 3120 may be substituted for Physiology 2130.

3. Students registered in the module prior to September 2024~~,~~ will follow the modular requirements of the 2023-24 Academic Calendar.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 7.0 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Chemistry 2213A/B;
- One of Biology 2382A/B, Biology 2581A/B, Chemistry 2214A/B, Computer Science 2035A/B, Data Science 2000A/B, Data Science 2100A;
- Biology 2244A/B or Statistical Sciences 2244A/B;
- 1.0 course from: (Physics 2101A/B and **Physics** 2102A/B), Physiology 2130, or Physiology and Pharmacology 2000;
- Medical Biophysics 3330F, Medical Biophysics 3467B, Medical Biophysics 3501A, Medical Biophysics 3518B, Medical Biophysics 3720A and Medical Biophysics 3820B; and
- Medical Biophysics 3980E.

Students registered in Year 3 of the Honours Specialization in Medical Biophysics (Medical Science Concentration) in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Medical Biophysics (Medical Science Concentration).

BMSc Students who are not registered in Year 3 of the Honours Specialization in Medical Biophysics (Medical Science Concentration) in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MICROBIOLOGY AND IMMUNOLOGY 4970E
RESEARCH PROJECT AND SEMINAR

Course Description
The major laboratory course for students in Honours Specialization modules offered by the Department of Microbiology and Immunology. Includes an independent research project supervised by a faculty member; lectures on laboratory safety, biosafety, use of animals in research, scientific integrity; scientific communication (two seminars and a written report).

Antirequisite(s): Biochemistry 4483E, Anatomy and Cell Biology 4480E.

Prerequisite(s): Microbiology and Immunology 3610F and Microbiology and Immunology 3620G with a mark in each of at least 70%. Enrolment is limited, and is available only to students in Year 4 of the Honours Specializations in Microbiology and Immunology, Microbiology and Immunology with Pathology and Biochemistry of Infection and Immunity. Students in the Honours Specialization in Biochemistry of Infection and Immunity require only one of the following half courses with a mark of at least 70% as the prerequisite: Biochemistry 3380G, Microbiology and Immunology 3610F or Microbiology and Immunology 3620G (or the former Microbiology and Immunology 3600G).

Extra Information: 15 hours per week.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

MICROBIOLOGY AND IMMUNOLOGY 4985E
RESEARCH PROJECT AND SEMINAR

Course Description
Students conduct independent research projects under direct supervision of a faculty member, while also receiving support from other members of the research team. Designed to immerse students in authentic scientific inquiry, it fosters hands-on learning, critical thinking, and collaboration while developing essential research skills in a real-world laboratory setting.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Microbiology and Immunology 3610F and Microbiology and Immunology 3620G, with a mark in each of at least 70%. Enrolment is limited and is available only to students in Year 4 of an Honours Specialization in Biochemistry of Infection and Immunity, Microbiology and Immunology, or Microbiology and Immunology with Pathology. **Corequisite(s):** Microbiology and Immunology 4986Y.

Extra Information: 15 laboratory hours per week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

MICROBIOLOGY AND IMMUNOLOGY 4986Y
BEYOND THE BENCH: BUILDING SKILLS FOR SCIENTIFIC AND PROFESSIONAL SUCCESS

(Short Title: Scientific/Professional Skills)

Course Description
Success in biomedical research requires more than technical expertise – it demands strong ethical foundations, effective communication, and resilience in the face of challenges. This course equips students with essential skills for thriving in academic and professional research environments.

Antirequisite(s): Anatomy and Cell Biology 4986Y, Biochemistry 4986Y.

Prerequisite(s): Registration in Year 4 of an Honours Specialization in Biochemistry of Infection and Immunity, Microbiology and Immunology, or Microbiology and Immunology with Pathology. **Corequisite(s):** Microbiology and Immunology 4985E.

Extra Information: 2 lecture hours per week. Cross-listed with Anatomy and Cell Biology 4986Y, Biochemistry 4986Y.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN MICROBIOLOGY AND IMMUNOLOGY

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each (unless otherwise indicated) prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc.

0.5 course: Biochemistry 2280A with a mark of at least 65%.
1.0 course: Chemistry 2213A/B and Chemistry 2223B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B or Statistical Sciences 2244A/B.
0.5 course: Microbiology and Immunology 2500A/B with a mark of at least 70%.

Module
10.0* or 10.5 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.
1.0 course: Chemistry 2213A/B, Chemistry 2223B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
0.5 course: Biochemistry 3381A with a mark of at least 70%.
2.0 courses: Microbiology and Immunology 2500A/B, Microbiology and Immunology 3300B, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, with marks of at least 70% in each.
0.5 or 1.0 course from: (Microbiology and Immunology 3200B and Microbiology and Immunology 3400A with marks of at least 70% in each) or the former Microbiology and Immunology 3100A with a mark of at least 70%
1.5 courses: Microbiology and Immunology 4100A, Microbiology and Immunology 4200B, Microbiology and Immunology 4310A or the former Microbiology and Immunology 4300A.
0.5 course from: Medical Sciences 3391A/B, Microbiology and Immunology 3500B, Microbiology and Immunology 4400B, Microbiology and Immunology 4750F/G.
1.5 courses: **Microbiology and Immunology 4985E and Microbiology and Immunology 4986Y; or the former** Microbiology and Immunology 4970E ~~(Research Project = 1.5 courses)~~.

10.0* courses if the former Microbiology and Immunology 3100A was completed.

Students registered in Year 4 of this module in 2025-26 will satisfy the requirements as stated in the 2024-25 Academic Calendar.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 7.0 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A (minimum mark of 65%);
- Chemistry 2213A/B and Chemistry 2223B;
- Biology 2290F/G, Biology 2382A/B and **Biology** 2581A/B;

- Biology 2244A/B or Statistical Sciences 2244A/B;
- Biochemistry 3381A (minimum mark of 70%); and
- Microbiology and Immunology 2500A/B, Microbiology and Immunology 3200B, Microbiology and Immunology 3300B, Microbiology and Immunology 3400A, Microbiology and Immunology 3610F and Microbiology and Immunology 3620G, with marks of at least 70% in each.

Students registered in Year 3 of the Honours Specialization in Microbiology and Immunology in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Microbiology and Immunology.

BMSc students who are not registered in Year 3 of the Honours Specialization in Microbiology and Immunology in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN MICROBIOLOGY AND IMMUNOLOGY WITH PATHOLOGY – ADMISSION DISCONTINUED

Admission to this module is discontinued, effective September 1, 2025. Students currently enrolled in the module will be permitted to graduate upon fulfillment of the module requirements by August 31, 2028.

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 courses: Biology 1001A~~*~~ and Biology 1002B~~*~~.
1.0 courses: 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/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 Honours 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 Honours Specialization modules, including the Weighted Average Chart.

> **0.5 course**: Biochemistry 2280A with a mark of at least 65%.
> **1.0 courses**: Chemistry 2213A/B and Chemistry 2223B.
> **0.5 course** from: Biology 2244A/B or Statistical Sciences 2244A/B.
> **1.5 courses**: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
> **0.5 course**: Microbiology and Immunology 2500A/B with a mark of at least 70%.

Module
11.0 courses:

0.5 course: Biochemistry 2280A with a mark of at least 65%.
1.0 course: Chemistry 2213A/B, Chemistry 2223B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
1.5 courses: Biology 2290F/G, Biology 2382A/B, Biology 2581A/B.
0.5 course: Biochemistry 3381A.
2.5 courses: Microbiology and Immunology 2500A/B, Microbiology and Immunology 3300B, Microbiology and Immunology 3400A or the former Microbiology and Immunology 3100A, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, with marks of at least 70% in each.
1.0 course: Pathology 3500 with a mark of at least 70%.
0.5 course from: Microbiology and Immunology 4100A, Microbiology and Immunology 4200B (see notes).
0.5 course: Microbiology and Immunology 4310A, the former Microbiology and Immunology 4300A.
0.5 course: Pathology 4200A/B.
0.5 course from: Anatomy and Cell Biology 4461B, Pathology 4400A/B.
1.5 courses from: **Microbiology and Immunology 4985E and Microbiology and Immunology 4986Y; Pathology 4985E and Pathology 4986Y; the former** Pathology 4980E ~~(Seminar and Research Project),~~ **; the former** Microbiology and Immunology 4970E ~~(Research Project and Seminar)~~.

Notes:

1. The prerequisite for Microbiology and Immunology 4200B is a mark of at least 70% in either Microbiology and Immunology 3200B or the former Microbiology and Immunology 3100A.
2. A course in physiology (e.g. Physiology 2130, Physiology 3120 or Physiology and Pharmacology 2000) is highly recommended.
3. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).

DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MEDICAL BIOINFORMATICS 4980E
SEMINAR AND RESEARCH PROJECT

Course Description
Major research project and weekly seminar course for the Honours Specialization in Medical Bioinformatics. Includes: i) theory and practice of research methodology and critical appraisal of research literature, ii) an independent research project supervised by faculty, and iii) preparation of a research proposal and final written research project report.

Prerequisite(s): Medical Bioinformatics 3100A/B and registration in Year 4 of an Honours Specialization in Medical Bioinformatics. **Pre-or Corequisite(s):** 1.0 course from: Medical Bioinformatics 4650F/G, Medical Bioinformatics 4750F/G or Microbiology and Immunology 4750F/G, Medical Bioinformatics 4850G.

Extra Information: 15 hours per week.
Course Weight: 1.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

ONE HEALTH 4980E
SEMINAR & RESEARCH PROJECT

Course Description
Includes: i) theory and practice of research techniques and appropriate use of experimental models, ii) an independent research project supervised by faculty, iii) oral and written communication skills, including the preparation of a research proposal and final written research project report.

Antirequisite(s): Pathology 4980E.

Prerequisite(s): Pathology 3500 with a mark of at least 70%; and registration in Year 4 of the Honours Specialization in One Health.

Extra Information: 10-15 laboratory/research hours per week plus 3 seminar hours per week.
Course Weight: 1.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

PATHOLOGY 4980E
SEMINAR AND RESEARCH PROJECT

Course Description
Includes: i) theory and practice of laboratory techniques, laboratory safety, appropriate use of experimental models, ii) an independent research project supervised by faculty, iii) oral and written communication skills, including the preparation of a research proposal and final written research project report.

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

Prerequisite(s): Pathology 3500 with a mark of at least 70%; and one of the following: (Pharmacology 3620, Physiology 3120, and registration in Year 4 of the Honours 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 Honours Specialization in Microbiology and Immunology with Pathology), or (Biochemistry 3380G with a mark of at least 70% and registration in Year 4 of an Honours Specialization in Biochemistry and Pathology of Human Disease).

Extra Information: Minimum 11 laboratory hours per week plus 1 seminar hour per week.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

MEDICAL BIOINFORMATICS 4985E
APPLIED RESEARCH IN MEDICAL BIOINFORMATICS

(Short Title: MBI Research Project)

Course Description
A major research project in medical bioinformatics emphasizing study design, data collection and analyses, and interpretation of results. Students select a data analysis project from a list provided by the department and are matched with a computational supervisor to perform applied bioinformatics research.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Medical Bioinformatics 3100A/B; and registration in Year 4 of the Honours Specialization in Medical Bioinformatics. **Corequisite(s):** Medical Bioinformatics 4986Y.

Extra Information: 15 hours / week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

MEDICAL BIOINFORMATICS 4986Y
RESEARCH SKILLS IN MEDICAL BIOINFORMATICS

(Short Title: MBI Research Skills)

Course Description
This course explores the foundations of investigative research in Medical Bioinformatics, with emphasis on research integrity and responsible conduct, research methodology, emerging methods, and critical evaluation of scientific literature. Students will develop proficiency in communicating findings through academic formats, while fostering skills required for responsible research in Medical Bioinformatics.

Prerequisite(s): Registration in Year 4 of the Honours Specialization in Medical Bioinformatics. **Corequisite(s):** Medical Bioinformatics 4985E.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ONE HEALTH 4985E
THESIS PROJECT IN ONE HEALTH

Course Description
A major research project using a One Health approach which emphasizes study design, data collection and analyses, interpretation of results, and communication of results by written, oral, and poster presentations. Students will select a project from a list provided by the department and be matched to a supervisor.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, Pathology 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Pathology 3500 with a mark of at least 70% and registration in Year 4 of the Honours Specialization in One Health. **Corequisite(s):** One Health 4986Y.

Extra Information: 15 hours / week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

ONE HEALTH 4986Y
RESEARCH SKILLS AND PROFESSIONAL DEVELOPMENT IN ONE HEALTH

(Short Title: Scientific/Professional Skills)

Course Description
In this course, students will acquire fundamental knowledge about and develop skills related to the academic research process, scientific communication, and professional development, preparing them for success in their thesis project and next career steps.

Prerequisite(s): Registration in Year 4 of the Honours Specialization in One Health. **Corequisite(s):** One Health 4985E.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

PATHOLOGY 4985E
APPLIED PATHOLOGY RESEARCH

Course Description
A major research project in pathology emphasizing study design, data collection and analyses, and interpretation of results. Students select a project from a list provided by the department and are matched to a supervisor in a wet-, clinical-, or dry-laboratory, fostering a comprehensive understanding of investigative methods in pathology.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Physiology and Pharmacology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Pathology 3500 with a mark of at least 70% and registration in Year 4 of the Honours Specialization in Pathology, the Honours Specialization in Biochemistry and Pathology of Human Disease, or the Honours Specialization in Microbiology and Immunology with Pathology. **Corequisite(s):** Pathology 4986Y.

Extra Information: 15 hours / week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

PATHOLOGY 4986Y
THEORY, INQUIRY, AND DISCOURSE IN PATHOLOGY RESEARCH

(Short Title: Inquiry&Discourse in Pathology)

Course Description
This course explores the foundations of investigative research in Pathology, with emphasis on research integrity and responsible conduct, research methodology, and critical evaluation of scientific literature. Students will develop proficiency in communicating findings through academic formats, while fostering skills required for impactful research in Pathology.

Prerequisite(s): Pathology 3500 with a mark of at least 70% and registration in Year 4 of the Honours Specialization in Pathology, the Honours Specialization in Biochemistry and Pathology of Human Disease, or the Honours Specialization in Microbiology and Immunology with Pathology. **Corequisite(s):** Pathology 4985E.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

MEDICAL BIOINFORMATICS 4750F/G
BIOINFORMATICS OF INFECTIOUS DISEASE

Course Description
An overview of concepts and applications of techniques in bioinformatics for the study and clinical/public health management of infectious diseases. Students are introduced to the basic analysis of conventional and next-generation sequence data, principles of maximum likelihood and Bayesian inference, reconstructing epidemic and evolutionary histories, detecting adaptation, and molecular epidemiology.

Antirequisite(s): Microbiology and Immunology 4750F/G.

Prerequisite(s): Biology 2581A/B; and one of Biology 2244A/B, Statistical Sciences 2244A/B or Statistical Sciences 2858A/B. **Pre-or Corequisite(s): One of Medical Bioinformatics 3100A/B, Medical Sciences 3391A/B** or Microbiology and Immunology 2500A/B is recommended **but not required**.

Extra Information: 2 lecture hours, 2 laboratory hours. Cross-listed with Microbiology and Immunology 4750F/G.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN MEDICAL BIOINFORMATICS

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

1.0 course at the 1000-level from either Category A or B must be completed with a passing grade.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honours Specialization module in Year 3. These courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average and course load requirements, etc.

0.5 course: Biochemistry 2280A.
1.0 course: Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B.
0.5 course: Computer Science 2121A/B.

Notes:

1. Statistical Sciences 2857A/B with a mark of at least 60% is the prerequisite for Statistical Sciences 2858A/B.
2. Computer Science 2121A/B requires either (Computer Science 2120A/B) or (Computer Science 1026A/B with a minimum mark of 60% and registration in Medical Sciences First Entry) as the prerequisite.

Module
11.0 courses:

0.5 course: Biochemistry 2280A.
1.0 course: Biology 2382A/B, Biology 2581A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B.
0.5 course: Computer Science 2120A/B (see notes below).
0.5 course: Computer Science 2121A/B.
0.5 course from: Mathematics 1229A/B, Mathematics 1600A/B (see notes below).
0.5 course from: Data Science 2000A/B, Statistical Sciences 2857A/B.
0.5 course from: Computer Science 2210A/B, Computer Science 2211A/B, Computer Science 2212A/B/Y, Computer Science 2214A/B, Computer Science 3120A/B, Computer Science 3121A/B, Computer Science 3319A/B, Computer Science 3346A/B.
0.5 course: Medical Bioinformatics 3100A/B.
1.0 course: Pathology 3500.
1.0 course: Physiology 3120.
1.0 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3309, Biochemistry 3385B, Epidemiology 2200A/B, Medical Biophysics 3503G, Microbiology and Immunology 2500A/B, Pharmacology 3620, the former Medical Biophysics 3505F.
0.5 course from: Computer Science 4411A/B, Data Science 3000A/B, Biology 4289A/B, One Health 4100F/G, the former Computer Science 4414A/B.
1.0 course from: Medical Bioinformatics 4650F/G, Medical Bioinformatics 4750F/G, Medical Bioinformatics 4850G.
1.5 courses: **Medical Bioinformatics 4985E and Medical Bioinformatics 4986Y; or the former** Medical Bioinformatics 4980E ~~(Research Project = 1.5 courses)~~.

Notes:
1. If one of Physics 1202A/B or **Physics** 1502A/B was taken to satisfy the 1000-level Admission Requirements, then students will take Computer Science 2120A/B as a modular course. If Computer Science 1026A/B was used to satisfy the 1000-level Admission Requirements, then an additional half course must be taken from one of the picklists of modular courses numbered 2000 and above to replace Computer Science 2120A/B as a modular requirement. Students who

completed one of Physics 1202A/B or **Physics** 1502A/B (with a mark of at least 60%) and Computer Science 1026A/B, however, can use Computer Science 1026A/B with a mark of at least 60% in place of Computer Science 2120A/B as a modular course.

2. If Mathematics 1600A/B was taken to satisfy the 1000-level admission requirements, then an additional half course must be taken from one of the picklists of modular courses numbered 2000 and above to replace the modular requirement of 0.5 course from Mathematics 1229A/B or Mathematics 1600A/B.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 6.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Biology 2581A/B and Biology 2382A/B;
- 0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B, Statistical Sciences 2858A/B;
- 0.5 course from: Data Science 2000A/B, Statistical Sciences 2857A/B;
- Computer Science 2120A/B (see modular notes);
- Computer Science 2121A/B;
- 0.5 course from: Mathematics 1229A/B, Mathematics 1600A/B;
- 0.5 course from: Computer Science 2210A/B, Computer Science 2211A/B, Computer Science 2212A/B/Y, Computer Science 2214A/B, Computer Science 3120A/B, Computer Science 3121A/B, Computer Science 3319A/B, Computer Science 3346A/B;
- Medical Bioinformatics 3100A/B;
- Pathology 3500; and
- Physiology 3120.

Students registered in Year 3 of the Honours Specialization in Medical Bioinformatics in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Medical Bioinformatics.

BMSc Students who are not registered in Year 3 of the Honours Specialization in Medical Bioinformatics in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN ONE HEALTH

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

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 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 Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional requirements (average and course load), etc.

0.5 course: Biochemistry 2280A.
0.5 course: Biology 2382A/B.
0.5 course: Chemistry 2213A/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, Chemistry 2210A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
0.5 course: Biology 2483A/B.
0.5 course from: Environmental Science 2300F/G, the former Environmental Science 3300F/G.
0.5 course from: Geography 2133A/B, Geography 2153A/B, Geography 2156A/B, Geography 2160A/B, Geography 2320A/B, Geography 2411F/G, Geography 2430A/B, Geography 3431A/B, Geography 3432A/B, Geography 3445F/G, Indigenous Studies 2601F/G, Sociology 2179A/B, Sociology 2180A/B, Sociology 2246A/B, Sociology 2247A/B, Sociology 3308F/G.
0.5 course: Epidemiology 2200A/B.
0.5 course from: Anatomy and Cell Biology 2200A/B, Biology 2581A/B, Biology 3316A/B, Physiology 3140A, Microbiology and Immunology 2500A/B, Pharmacology 3620, Physiology 3120 (see note).
0.5 course from: Biostatistics 3100A, Epidemiology 3200A, Medical Sciences 3391A/B.
1.5 courses: Pathology 3500 with a minimum mark of 70%, Pathology 4400A/B.
0.5 course: One Health 3300A/B with a minimum mark of 70%.
1.5 courses: One Health 3600A/B, One Health 4100F/G, (One Health 4700A/B or the former One Health 4800A/B).
0.5 course from: Biology 4230A/B, Environmental Science 3350F/G, Microbiology and Immunology 3500B, Pathology 3700F/G, Pathology 4200A/B.
1.5 course: **One Health 4985E and One Health 4986Y; or the former** One Health 4980E ~~(Research Project = 1.5 courses)~~.

Note: Including Pharmacology 3620 or Physiology 3120 as a modular requirement will increase the module by 0.5 course.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year*

and Honours Programs, students must complete the following 6.0 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Biology 2382A/B;
- Chemistry 2213A/B;
- 0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B;
- Epidemiology 2200A/B;
- One Health 3300A/B with a mark of at least 70%;
- One Health 3600A/B;
- Pathology 3500 with a mark of at least 70%; and
- 1.5 additional modular courses.

Students registered in Year 3 of the Honours Specialization in One Health in 2025-26 and onward who satisfy these Progression Requirements are assured progression to Year 4 of the Honours Specialization in One Health.

BMSc students who are not registered in Year 3 of the Honours Specialization in One Health in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PATHOLOGY

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc.

0.5 course: Biochemistry 2280A.
1.0 course: Biology 2382A/B, Biology 2290F/G.
0.5 course: Chemistry 2213A/B.
0.5 course from: Biology 2244A/B**,** Statistical Sciences 2244A/B.
0.5 course from: Biology 2581A/B, Chemistry 2223B.

Module

11.0 courses:

0.5 course: Biochemistry 2280A.

1.0 course: Biology 2382A/B, Biology 2290F/G.
0.5 course: Chemistry 2213A/B.
0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.
0.5 course from: Biology 2581A/B, Chemistry 2223B.
1.0 course: Anatomy and Cell Biology 3309.
1.0 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Medical Sciences 3391A/B, Microbiology and Immunology 2500A/B, Pharmacology 3620.
1.0 course: Physiology 3120.
1.0 course: Pathology 3500 with a mark of at least 70%.
0.5 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 4200A, Anatomy and Cell Biology 4201B, Biology 3316A/B, Chemistry 2272F, Epidemiology 2200A/B, Microbiology and Immunology 3300B, Physiology 3140A, Pathology 4425A/B, the former Medical Health Informatics 4100F, the former Medical Health Informatics 4110G, the former Pathology 4450A.
1.0 course: Pathology 4400A/B, Pathology 4500B.
1.0 course from: One Health 4100F/G, Pathology 3700F/G, Pathology 4200A/B, Pathology 4425A/B, Pathology 4600B, the former Medical Sciences 4100F/G.
1.5 course: **Pathology 4985E and Pathology 4986Y; or the former** Pathology 4980E ~~(Research Project = 1.5 courses)~~.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 7.0 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Biology 2382A/B and Biology 2290F/G;
- Chemistry 2213A/B;
- 0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B;
- 0.5 course from: Biology 2581A/B, Chemistry 2223B;
- Anatomy and Cell Biology 3309;
- Pathology 3500 with a mark of at least 70%;
- Physiology 3120; and

- 1.0 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Medical Sciences 3391A/B, Microbiology and Immunology 2500A/B, Pharmacology 3620.

Students registered in Year 3 of the Honours Specialization in Pathology in 2025-26 and onward who satisfy the Progression Requirements are assured progression to Year 4 of the Honours Specialization in Pathology.

BMSc students who are not registered in Year 3 of the Honours Specialization in Pathology in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

PHARMACOLOGY 4620A/B
MOLECULAR AND STRUCTURAL BASIS OF DRUG ACTION

Course Description
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

Extra Information: 2 lecture hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

PHYSIOLOGY AND PHARMACOLOGY 4980E
SEMINAR AND RESEARCH PROJECT

Course Description
A major laboratory project in Physiology or Pharmacology, which emphasizes experimental design, instrumentation, collection and analysis of data and communication of experimental results by oral, poster and written presentations. Students will select the physiology or pharmacology project from a list provided by the department and be matched to a supervisor.

Prerequisite(s): Physiology and Pharmacology 3000E; Physiology 3120 and 3140A; and registration in Year 4 of one of the following Honours Specialization modules: Pharmacology, Physiology or Physiology and Pharmacology.

Extra Information: Minimum 15 laboratory hours per week plus 2 seminar hours in alternate weeks.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHYSIOLOGY AND PHARMACOLOGY 4760A/B
PRINCIPLES OF MODERN DRUG DISCOVERY

(Short Title: Modern Drug Discovery)

Course Description
This course explores modern drug discovery strategies that integrate cutting-edge molecular, structural, chemical, and computational biology approaches. Students will explore key drug targets and targeted therapeutic interventions across various diseases, tracing the transformative path from scientific idea to life-saving medical treatments.

Antirequisite(s): The former Pharmacology 4620A/B.

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

Extra Information: 2 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHYSIOLOGY AND PHARMACOLOGY 4985E
RESEARCH PROJECT

Course Description
A major research project in Physiology or Pharmacology which emphasizes experimental design, instrumentation, data collection and analyses, and communication of experimental results by written, oral, and poster presentations. Students will select a research project from options provided by the department and be matched to a supervisor.

Antirequisite(s): Anatomy and Cell Biology 4985E, Biochemistry 4484E, Biochemistry 4985E, Epidemiology and Biostatistics 4900E, Epidemiology and Biostatistics 4985E, Medical Bioinformatics 4985E, Medical Biophysics 4985E, Medical Sciences 4990E, Microbiology and Immunology 4985E, One Health 4985E, Pathology 4985E, the former Anatomy and Cell Biology 4480E, the former Biochemistry 4483E, the former Chemical Biology 4500E, the former Medical Bioinformatics 4980E, the former Medical Biophysics 4970E, the former Medical Biophysics 4971E, the former Microbiology and Immunology 4970E, the former One Health 4980E, the former Pathology 4980E, the former Physiology and Pharmacology 4980E.

Prerequisite(s): Physiology and Pharmacology 3000E, Physiology 3120, and Physiology 3140A; and registration in Year 4 of an Honours Specialization offered by the Department of Physiology and Pharmacology. **Corequisite(s):** Physiology and Pharmacology 4986Y.

Extra Information: 15 hours per week.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHYSIOLOGY AND PHARMACOLOGY 4986Y
SKILLS FOR RESEARCH SUCCESS: COMMUNICATION AND CRITICAL APPRAISAL

(Short Title: Skills for Research Success)

Course Description
A skills development course which emphasizes research literacy, professionalism and team building, research ethics, critical thinking, communication, data analysis, and dissemination. Attendance at Physiology and Pharmacology department seminars is expected.

Prerequisite(s): Registration in Year 4 of an Honours Specialization offered by the Department of Physiology and Pharmacology. **Corequisite(s):** Physiology and Pharmacology 4985E.

Extra Information: 3 hours per week.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PHYSIOLOGY

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours Specialization module is limited and meeting the minimum requirements does not guarantee admission. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for more information.

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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc. A minimum average of 75% in the Fall/Winter of the most recent academic year, e.g., Year 2, is required, as well, since this minimum average is included in the prerequisite for Physiology and Pharmacology 3000E.

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.

Module
10.5 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, Statistical Sciences 2244A/B.
1.5 courses: Physiology 3120, Physiology 3140A, with marks of at least 70% in each.
1.0 course: Physiology and Pharmacology 3000E with a mark of at least 70%.
0.5 course: Medical Sciences 3391A/B.
1.0 course from: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3200A/B, Anatomy and Cell Biology 3309, Biology 2471A/B, Biology 2601A/B, Biology 3338A/B, Biology 3592A/B, Biology 3595A/B, Chemistry 2223B, Medical Biophysics 3501A, Medical Biophysics 3503G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3200B, Microbiology and Immunology 3300B, Microbiology and Immunology 3400A, Pathology 3500, Pharmacology 3620, the former Medical Biophysics 3505F, the former Medical Biophysics 3507G, the former Microbiology and Immunology 3100A.
1.5 course: **Physiology and Pharmacology 4985E and Physiology and Pharmacology 4986Y; or the former** Physiology and Pharmacology 4980E ~~(Seminar and Research Project = 1.5 courses)~~.
2.0 additional courses in Physiology, Physiology and Pharmacology, at the 4000-level.

Students registered in Year 4 of this module in 2025-26 will satisfy the requirements as stated in the 2024-25 Academic Calendar.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 5.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Biology 2581A/B, Biology 2382A/B, Biology 2290F/G;
- Chemistry 2213A/B;
- Biology 2244A/B or Statistical Sciences 2244A/B;

- Physiology 3120 and **Physiology** 3140A with marks of at least 70% in each; and
- Physiology and Pharmacology 3000E with a mark of at least 70%.

It is recommended that students complete Medical Sciences 3391A/B prior to Year 4. Students registered in Year 3 of the Honours Specialization in Physiology in 2025-26 and onward who satisfy these Progression Requirements are assured progression to Year 4 of the Honours Specialization in Physiology.

BMSc students who are not registered in Year 3 of the Honours Specialization in Physiology in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PHARMACOLOGY – ADMISSION DISCONTINUED

Admission to this module is discontinued, effective September 1, 2025. Students currently enrolled in the module will be permitted to graduate upon fulfillment of the module requirements by August 31, 2028.

This module leads to an Honours Bachelor of Medical Sciences (BMSc) degree. See BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM for more information.

Admission Requirements

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 courses: Biology 1001A~~*~~ and Biology 1002B~~*~~.
1.0 courses: 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/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 prior to admission to the Honours 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 Honours Specialization modules, including the Weighted Average Chart.

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.

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).
1.5 courses: **Physiology and Pharmacology 4985E and Physiology and Pharmacology 4986Y; the former** Physiology and Pharmacology 4980E ~~(Seminar and Research Project = 1.5 courses)~~.
2.0 additional courses in Pharmacology, Physiology and Pharmacology, 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.
2. For the specific courses that must be completed before Year 4, see the Weighted Average Chart (MODULES OFFERED IN THE BMSc PROGRAM).
3. Students may not complete both an Honours Specialization in Pharmacology and a Major in Physiology since these two modules contain too many common courses.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PHYSIOLOGY AND PHARMACOLOGY

Admission to this Honours 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 Honours Specialization module. Enrolment in this Honours 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 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.
0.5 course from: Computer Science 1026A/B, Physics 1202A/B, Physics 1502A/B, the former Physics 1029A/B, the former Physics 1302A/B.

The 2000-level courses below must be completed with a minimum mark of 60% in each prior to admission to the Honours Specialization module in Year 3. These 2000-level courses will also be used towards the Module requirements. See the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* for additional average, course load requirements, etc. A minimum average of 75% in the Fall/Winter of the most recent academic year, e.g., Year 2, is required, as well, since this minimum average is included in the prerequisite for Physiology and Pharmacology 3000E.

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

Module
10.5 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, with marks of at least 70% in each.
1.0 course: Pharmacology 3620 with a mark of at least 70%.
1.0 course: Physiology and Pharmacology 3000E with a mark of at least 70%.
0.5 course: Medical Sciences 3391A/B.
1.5 courses: **Physiology and Pharmacology 4985E and Physiology and Pharmacology 4986Y; or the former** Physiology and Pharmacology 4980E ~~(Seminar and Research Project = 1.5 courses)~~.
1.0 additional course in Pharmacology, Physiology and Pharmacology, at the 4000-level.
1.0 additional course in Physiology, Physiology and Pharmacology, at the 4000-level.

Students registered in Year 4 of this module in 2025-26 will satisfy the requirements as stated in the 2024-25 Academic Calendar.

Progression Requirements *(for students registered in Year 3 of this module in 2025-26 and onward)*

Note: Students registered in Years 3 and 4 of this module in 2024-25 or earlier must consult the policy on *Admission to the Bachelor of Medical Sciences (BMSc) Program* (see Modules Offered in the BMSc Program – Honours Specialization Modules).

In addition to the progression requirements for Honours Specialization modules specified in the policy on *Registration and Progression in Three-Year, Four-Year and Honours Programs*, students must complete the following 6.5 modular courses by the end of Year 3 (note: some courses require marks greater than 60%):

- Biochemistry 2280A;
- Biology 2581A/B, Biology 2382A/B, Biology 2290F/G;
- Chemistry 2213A/B;
- Biology 2244A/B or Statistical Sciences 2244A/B;
- Pharmacology 3620 with a mark of at least 70%;
- Physiology 3120 and Physiology 3140A with marks of at least 70% in each; and
- Physiology and Pharmacology 3000E, with a mark of at least 70%.

It is recommended that students complete Medical Sciences 3391A/B prior to Year 4.

Students registered in Year 3 of the Honours Specialization in Physiology and Pharmacology in 2025-26 and onward who satisfy these Progression Requirements are assured progression to Year 4 of the Honours Specialization in Physiology and Pharmacology.

BMSc students who are not registered in Year 3 of the Honours Specialization in Physiology and Pharmacology in 2025-26 and onward may be considered for admission to Year 4 of the Honours Specialization if (i) the minimum Admission and Progression Requirements are satisfied, (ii) spaces are available, and (iii) permission is granted.

BASIC MEDICAL SCIENCES UNDERGRADUATE EDUCATION

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MEDICAL SCIENCES 3999A/B/Y
EXPERIENTIAL LEARNING

Course Description
Experiential--or service--learning (learning through practical experience) opportunities such as Western Heads East, which result in tangible and quantifiable academic value, may be recognized for course credit. Students must seek conditional approval. Detailed criteria for course credit will be determined by the Dean or designate, in consultation with appropriate department(s).

Antirequisite(s): Experiential Learning courses offered by any Faculty/School.

Prerequisite(s): Registration in the Schulich School of Medicine & Dentistry (BSc or BMSc Program) and permission of the Dean.

Extra Information: Pass/Fail. Note: Students must receive approval of the Dean (or designate) and reach mutual agreement on a detailed study/research/work plan, prior to the experiential or service learning opportunity. The Dean, in consultation with appropriate departmental advisors (if necessary) will provide the student with detailed criteria which must be fulfilled in order to gain credit for the course. No credit will be given without prior approval of the Dean and a failing grade will be assigned if students do not fulfill the pre-approved reporting arrangement.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

MEDICAL SCIENCES 3383F/G/Z
MEDICAL SCIENCES INDEPENDENT STUDY

(Short Title: Independent Study)

Course Description
Students carry out research under the direction of a faculty member, gaining practical experience in medical science. Experimental design, critical thinking, and scientific communication will be emphasized, and students will develop skills at reading and reviewing primary scientific literature.

Antirequisite(s): Biochemistry 3383F/G, Medical Biophysics 3980E, Neuroscience 3996F/G, Scholars Electives 2200E, Scholars Electives 3305E, the former Medical Sciences 3999A/B/Y.

Prerequisite(s): Registration in a BMSc degree and permission of the Associate Dean.

Extra Information: 5 hours per week.
Course Weight: 0.50

SCHULICH SCHOOL OF MEDICINE & DENTISTRY AND FACULTY OF SOCIAL SCIENCE

DEPARTMENTS OF ANATOMY AND CELL BIOLOGY, PHYSIOLOGY AND PHARMACOLOGY, AND PSYCHOLOGY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

NEUROSCIENCE 4000E
HONOURS THESIS

Course Description
An independent laboratory project in Neuroscience emphasizing experimental design, instrumentation, data collection and analysis, and communication of experimental results by oral, poster and written presentations. Topics covered in seminar time include animal and human research ethics and institutional approval of animal and human experimentation, laboratory safety, and scientific communication skills.

Prerequisite(s): Neuroscience 3000F/G with a minimum mark of 75%; one of Biology 2244A/B; Statistical Sciences 2244A/B; or Psychology 2811A/B and Psychology 2812A/B, or the former Psychology 2810; Pharmacology 3620; Physiology 3140A; one of Medical Sciences 3991F, Communication Sciences and Disorders 3317A/B, Psychology 3996F or Psychology 3997G, or the former Medical Sciences 3900F/G/Z; and registration in Year 4 of an Honours Specialization in Neuroscience.

Extra Information: Minimum 15 hours per week.
Course Weight: 1.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

NEUROSCIENCE 4985E
HONOURS PROJECT

Course Description
An independent laboratory project in Neuroscience emphasizing experimental design, instrumentation, data collection and analysis, and communication of experimental results by formal written work.

Antirequisite(s): The former Neuroscience 4000E.

Prerequisite(s): Neuroscience 3000F/G with a minimum mark of 75%; one of Biology 2244A/B or Statistical Sciences 2244A/B, or both Psychology 2811A/B and Psychology 2812A/B, or the former Psychology 2810; Pharmacology 3620; Physiology 3140A; one of Medical Sciences 3991F, Communication Sciences and Disorders 3317A/B, Neuroscience 3996F/G; and registration in Year 4 of the Honours Specialization in Neuroscience. **Corequisite(s):** Neuroscience 4986Y.

Extra Information: 15 hours.
Course Weight: 1.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

NEUROSCIENCE 4986Y
SCIENTIFIC SKILLS

Course Description
In this course, students develop research literacy, critical thinking, and communication skills. Topics include animal and human research ethics and institutional approval of animal and human experimentation, laboratory safety, equity and diversity in research conduct, time management, careers, and written and oral scientific communication skills.

Prerequisite(s): Registration in Year 4 of the Honours Specialization in Neuroscience. **Corequisite(s):** Neuroscience 4985E.

Extra Information: 3 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN NEUROSCIENCE

May be completed only within a BSc (Honours) degree offered by the Schulich School of Medicine & Dentistry.

This module is intended for students who wish to pursue postgraduate training in Neuroscience or related disciplines and want to include research-intensive preparation in their undergraduate program. Enrolment in this module is limited. Meeting the minimum requirements does not guarantee that students wishing to enter in this module will be offered enrollment.

Note: the Honours Specialization in Neuroscience is jointly offered by the Departments of Anatomy and Cell Biology and Physiology and Pharmacology in the Schulich School of Medicine & Dentistry, and the Department of Psychology in the Faculty of Social Science.

Admission Requirements

Completion of first-year requirements with no failures. Students must have a minimum average of 75% in the following 4.0 principal courses, with no mark below 60% in any of these (full or half) courses:

1.0 course from: Biology 1001A ~~or Biology 1201A~~ and Biology 1002B ~~or Biology 1202B~~.
1.0 course: Psychology 1000, or Psychology 1002A/B and Psychology 1003A/B.
1.0 course: Chemistry 1301A/B and Chemistry 1302A/B.
0.5 course from: Calculus 1000A/B, Calculus 1500A/B.
0.5 course: Data Science 1000A/B. Note: Computer Science 1026A/B may be used in place of Data Science 1000A/B only if Applied Mathematics 1201A/B is also taken and completed with a minimum grade of 60%.

0.5 course in physics with a minimum mark of 60% must be completed prior to Year 3 from: Physics 1201A/B, Physics 1501A/B, the former Physics 1028A/B, the former Physics 1301A/B.

Module

10.5 courses:

0.5 course: Biochemistry 2280A.
0.5 course: Biology 2382A/B.
1.0 course: Neuroscience 2000.

1.0 course from: Psychology 2801F/G and Psychology 2802F/G (see notes below), or the former Psychology 2800E.
1.0 course from: (Psychology 2811A/B and Psychology 2812A/B; or (one of Biology 2244A/B or Statistical Sciences 2244A/B and one of Computer Science 2120A/B or Data Science 2000A/B); or the former Psychology 2810 – see notes below.
0.5 course: Neuroscience 3000F/G.
1.0 course: Pharmacology 3620.
0.5 course: Physiology 3140A.
0.5 course from: Communication Sciences and Disorders 3317A/B, Medical Sciences 3991F, Neuroscience 3996F/G.
1.0 course from: Neuroscience 3997G, Psychology 3138F/G, Psychology 3139A/B, Psychology 3185F/G, Psychology 3209F/G, Psychology 3221F/G, Psychology 3224A/B, Psychology 3225A/B, Psychology 3226A/B, Psychology 3228A/B, Psychology 3230F/G, Psychology 3285F/G, Psychology 3312F/G, Psychology 3316F/G, Psychology 3440F/G, Psychology 3441F/G, Psychology 3442F/G, Psychology 3443F/G, Psychology 3444F/G, Psychology 3485F/G.
1.0 course from: Anatomy and Cell Biology 4451F/G, Anatomy and Cell Biology 4452A/B, Pharmacology 4370A/B, Pharmacology 4380A/B, Physiology 4630A/B, Physiology 4650A/B, Physiology 4680A/B, ~~Physiology 4710A/B,~~ Physiology and Pharmacology 4750A/B.
0.5 course from: Psychology 4115F/G, Psychology 4190F/G, Psychology 4195F/G, **Psychology 4225F/G,** Psychology 4222F/G, Psychology 4223F/G, Psychology 4224F/G, Psychology 4260F/G, Psychology 4290F/G, Psychology 4295F/G.
1.5 courses: **Neuroscience 4985E and Neuroscience 4986Y; the former** Neuroscience 4000E ~~(Research Project = 1.5 courses)~~.

Notes:

1. Psychology 2802F/G and Psychology 2812A/B require a minimum mark of 70% in their prerequisite courses, Psychology 2801F/G and Psychology 2811A/B, respectively.

2. Computer Science 2120A/B cannot be taken for credit if Computer Science 1026A/B has already been completed. Computer Science 1026A/B may be used in place of Computer Science 2120A/B only if it was not used to satisfy the admission requirements.

3. In order to satisfy graduation requirements for an Honours Bachelor of Science degree, students must also fulfil Science course requirements (see Graduation Requirements for Honours Degrees – additional requirements for the Honours Bachelor of Science). Psychology 2811A/B and Psychology 2812A/B or the former Psychology 2810 may be used to fulfil this Science course requirement.

Progression Requirements

Students who are enrolled in the Honours Specialization in Neuroscience must complete a minimum of 3.5 modular courses prior to Year 3 and a minimum of 7.0 modular courses prior to Year 4 (a half course in Psychology at the 3000-level may be deferred until Year 4), maintain a minimum cumulative modular average of 75%, achieve a mark of at least 75% in both Neuroscience 2000 and Neuroscience 3000F/G, achieve a mark of at least 60% in all other modular courses and a mark of at least 50% in all optional courses.

DON WRIGHT FACULTY OF MUSIC

DEPARTMENT OF MUSIC EDUCATION

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3854A/B
THE MADNESS OF CREATIVITY

Course Description
Students will discuss theories of madness and creativity through works of culture and criticism that are situated historically and culturally. Through examining accepted cultural, social, and ethical norms of thought and behavior, students will gain a deeper understanding of how madness and creativity are critical to our humanness.

Antirequisite(s): English 2097A/B, Music 3860A/B or English 2190F/G if taken in winter term of 2015-16, 2016-17 or 2017-18.

Extra Information: 3 hours, 0.5 course.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3855A/B
MUSIC, EDUCATION AND CULTURE

Course Description
The study of issues such as musical authenticity, ethnocentricity and appropriation as they relate to culture and diversity in the music classroom. Implications for pedagogy, implementation, and course design are considered.

Prerequisite(s): Music 1802A/B.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3870A/B
COMPUTER APPL.MUS.ED I

Course Description
An introduction to the use of computers and related technology, including digital music instruments, in classroom music teaching. Study of the MIDI (Musical Instrument Digital Interface) international communications protocol for electronic music equipment, and digital sound generation and manipulation. Applications of computer-based music sequencing and editing in music instruction.

Extra Information: 3 hours.
Course Weight: 0.50

DEPARTMENT OF MUSIC EDUCATION

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 2977
VOCAL ARTS INTENSIVE I

Course Description
An intensive course of applied vocal instruction and performance practice. Focus is on vocal technique in the bel canto tradition and performance practice of art song and operatic repertoire. The course includes studio instruction from voice faculty, coaching from a vocal coach (pianist), and participation in masterclasses. Participants present a final public concert.

Prerequisite(s): Music 1920 or Music 1925
Course Weight: 1.00

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3977
VOCAL ARTS INTENSIVE II

Course Description
An intensive course of applied vocal instruction and performance practice. Focus is on vocal technique in the bel canto tradition and performance practice of art song and operatic repertoire. The course includes studio instruction from voice faculty, coaching from a vocal coach (pianist), and participation in masterclasses. Participants present a final public concert.

Prerequisite(s): Music 1920 or Music 1925
Course Weight: 1.00

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 4964A/B
BRASS PEDAGOGY

Course Description
Available to brass students registered in a Performance program in the fourth year.

Extra Information: 3 hours.
Course Weight: 0.50

DEPARTMENT OF MUSIC RESEARCH AND COMPOSITION

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 1170A/B/Y
INTRODUCTION TO MUSICS OF THE WORLD

Course Description
A survey of music cultures from across the world, including Indigenous musics. The course explores both the organization of musical sound and uses of music in social life. Lecture format, audio and video examples, guest presentations, and hands-on experience.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 2171A/B/Y
INTRO TO ETHNOMUSICOLOGY

Course Description
Examines the history, principles, and methods of Ethnomusicology. Coursework may include transcription, ethnography, and fieldwork.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3611A/B
MODAL COUNTERPOINT II

Course Description
Continued study of the practice of modal counterpoint in sixteenth century style, culminating in the composition of motets and/or mass movements.

Prerequisite(s): Music 3610A/B

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3621A/B
TONAL COUNTERPOINT II

Course Description
Continued study of the practice of tonal counterpoint through the composition of fugue and other polyphonic forms.

Prerequisite(s): Music 3620A/B

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3705A/B
TOPICS IN EARLY TWENTIETH CENTURY MUSIC

Course Description
Selected topics in the historical, cultural, and analytical study of music c. 1900 to 1950.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3710A/B/Y
ISSUES IN PERFORMANCE PRACTICES I

Course Description
A consideration of issues bearing on the performance of music composed before c. 1750.

Prerequisite(s): Music 1750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3711A/B/Y
ISSUES IN PERFORMING PRACTICES II

Course Description
A consideration of issues bearing on the performance of music composed after c. 1750.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3712A/B
BEL CANTO FROM HANDEL TO ROSSINI

Course Description
A practical study of the principles of bel canto between c. 1750 and c. 1830 in the music of Handel, Mozart, Rossini, and others. Topics include phrasing, ornamentation, register, legato, staccato, messa di voce, tempo rubato, accent and emphasis, recitative and air.

Prerequisite(s): Music 2750F/G.

Extra Information: 1 lecture hour, 2 laboratory hours (practicum).
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3751A/B
TOPICS IN ROMANTIC OPERA

Course Description
Selected topics in the historical , cultural, and analytical study of Romantic opera.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3753A/B
THE SYMPHONY 1750-1850

Course Description
A study of symphonic music from the emergence of the genre to the middle of the 19th century.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3754A/B
THE SYMPHONY 1850 TO PRESENT

Course Description
A study of symphonic music from the middle of the 19th century to the present.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3755A/B
CHAMBER MUSIC

Course Description
A study of the music written for small ensembles from the seventeenth to twentieth centuries.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

MUSIC 3760A/B
TOPICS IN CANADIAN MUSIC

Course Description
An examination of various aspects of the history of music in Canada.

Prerequisite(s): Music 2750F/G.

Extra Information: 3 hours.
Course Weight: 0.50

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 1027A/B
COMPUTER SCIENCE FUNDAMENTALS II

Course Description
A continuation for both Computer Science 1025A/B and Computer Science 1026A/B. Data organization and manipulation; abstract data types and their implementations in a modern programming language; lists, stacks, queues, trees; recursion; file handling and storage.

Antirequisite(s): Computer Science 1037A/B, Computer Science 2121A/B, Digital Humanities 2221A/B.

Prerequisite(s): Computer Science 1025A/B, Computer Science 1026A/B, Data Science 1200A/B, or Engineering Science 1036A/B~~,~~ (in each case with a mark of at least 65%).

Extra Information: 3 lecture hours, 1 laboratory/tutorial hours. **Cross-listed with Computer Science 2121A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2121A/B
MODERN SURVIVAL SKILLS II: PROBLEM SOLVING THROUGH PROGRAMMING

Course Description
An overview of core data structures and algorithms in computing, with a focus on applications to informatics and analytics in a variety of disciplines. Includes lists, stacks, queues, trees, graphs, and their associated algorithms; sorting, searching, and hashing techniques. ~~Suitable for~~ **Restricted to** non-Computer Science students.

Antirequisite(s): Computer Science 1027A/B, Computer Science 1037A/B, Digital Humanities 2221A/B.

Prerequisite(s): Computer Science 2120A/B, Digital Humanities 2220A/B, Computer Science 1026A/B with a mark of at least 60% and registration in Medical Sciences First Entry, ~~or Integrated Science 1001X with at least 60%~~ **and permission of the Computer Science Department**.

Extra Information: 3 lecture hours, 1 laboratory/tutorial hours. **Cross-listed with Computer Science 1027A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2208A/B
INTRODUCTION TO COMPUTER ORGANIZATION AND ARCHITECTURE

Course Description
This course gives an understanding of what a modern computer can do. It covers the internal representation of various data types and focuses on the architectural components of computers (how these components are interconnected and the nature of the information flow between them). Assembly language is used to reinforce these issues.

Prerequisite(s): ~~Either (1)~~ Computer Science 1027A/B~~,~~ **or** Computer Science 1037A/B, in each case with at least 65%; and Computer Science 1020A/B with at least 60%~~; or (2) Integrated Science 1001X and Computer Science 1020A/B with at least 60% for both~~.

Extra Information: 3 lecture hours, 1 laboratory hour, 1 tutorial hour.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2209A/B
APPLIED LOGIC FOR COMPUTER SCIENCE

Course Description
Propositional and predicate logic; representing static and dynamic properties of real-world systems; logic as a tool for representation, reasoning and calculation; logic and programming.

Prerequisite(s): ~~Either 1)~~ Computer Science 1027A/B, Computer Science 1037A/B, Computer Science 2121A/B or Digital Humanities 2221A/B in each case with at least 65%; ~~and~~ Computer Science 1020A/B with at least 60%~~,~~**;** and 1.0 course with at least 60% in each from: Applied Mathematics 1201A/B, Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Calculus 1000A/B, Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1600A/B, the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413~~; or 2) Integrated Science 1001X and Computer Science 1020A/B with at least 60% for both~~.

Extra Information: 3 lecture hours, 1 laboratory hour, 1 tutorial hour.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2210A/B
DATA STRUCTURES AND ALGORITHMS

Course Description
Lists, stacks, queues, priority queues, trees, graphs, and their associated algorithms; file structures; sorting, searching, and hashing techniques; time and space complexity.

Antirequisite(s): Software Engineering 2205A/B.

Prerequisite(s): ~~Either 1)~~ Computer Science 1027A/B, Computer Science 1037A/B, the former Computer Science 2101A/B, Computer Science 2121A/B or Digital Humanities 2221A/B in each case with at least 65%~~,~~; and 1.0 course with at least 60% in each from: Applied Mathematics 1201A/B, Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Calculus 1000A/B, Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1600A/B, the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413~~; or 2) Integrated Science 1001X with at least 60%~~.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2211A/B
SOFTWARE TOOLS AND SYSTEMS PROGRAMMING

Course Description
An introduction to software tools and systems programming. Topics include: understanding how programs execute (compilation, linking and loading); an introduction to a complex operating system (UNIX); scripting languages; the C programming language; system calls; memory management; libraries; multi-component program organization and builds; version control; debuggers and profilers.

Prerequisite(s): ~~Either 1)~~ Computer Science 1027A/B, Computer Science 1037A/B, or the former Computer Science 2101A/B, in each case with a mark of at least 65%~~ or 2) Integrated Science 1001X with at least 60%~~.

Extra Information: 3 lecture hours, 1 laboratory/tutorial hour.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 2214A/B
DISCRETE STRUCTURES FOR COMPUTING

Course Description
This course presents an introduction to the mathematical foundations of computer science, with an emphasis on mathematical reasoning, combinatorial analysis, discrete structures, applications and modeling, and algorithmic thinking. Topics include sets, functions, relations, algorithms, number theory, matrices, mathematical reasoning, counting, graphs and trees.

Antirequisite(s): Mathematics 2151A/B, Mathematics 2155F/G.

Prerequisite(s): ~~Either 1)~~ Computer Science 1027A/B, Computer Science 1037A/B, Computer Science 2121A/B or Digital Humanities 2221A/B in each case with at least 65%; ~~and~~ Computer Science 1020A/B with at least 60%~~,~~**;** and 1.0 course with at least 60% in each from: Applied Mathematics 1201A/B, Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Calculus 1000A/B, Calculus 1301A/B, Calculus 1500A/B, Calculus 1501A/B, Mathematics 1600A/B, the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413~~; or 2) Integrated Science 1001X and Computer Science 1020A/B with at least 60% for both~~.

Extra Information: 3 lecture hours, 1 laboratory/tutorial hour.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 4471A/B
SOFTWARE ~~DESIGN AND~~ ARCHITECTURE

Course Description
~~Introduction to advanced software design concepts; architectures of complex software systems; domain-independent design patterns; creation of a functional partitioning for a novel domain; recognition of common architectural idioms.~~
Introduction to: advanced system structuring concepts, system qualities, achieving qualities through tactics and architecture patterns, the role of architecturally significant requirements, and documenting and evaluating architectures.

Prerequisite(s): Computer Science 3307A/B/Y **with a minimum grade of 70%.**

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

COMPUTER SCIENCE 4478A/B/Y
~~MASTER THE MAINFRAME~~ **IBM Z XPLORE**

Course Description
The mainframe remains a critical piece of infrastructure for enterprise computing, with experts highly sought after by industry. This course studies ~~the~~ mainframe **technology** through ~~IBM's annual Master the Mainframe~~ **the IBM Z Xplore** program. Students are exposed to real-world development through hands-on projects, gaining valuable experience and skills for working with modern mainframe systems.

~~Antirequisite(s): Computer Science 4434A/B/Y if taken during Fall/Winter 2014.~~

Prerequisite(s): Computer Science 3307A/B/Y **with at least 70% or (Computer Science 2212A/B/Y and Computer Science 3305A/B with a minimum grade of 70% in each)** ~~or permission of the Department~~.

Extra Information: 3 lecture hours. ~~Note: Registration in the course is conditional upon acceptance into the IBM Master the Mainframe program. Students are advised that the timeline for this program varies from year to year and it is their responsibility to ensure that they can participate in the program according to their schedule and needs; consultation with the Department prior to registration is highly recommended.~~ **Students are advised that IBM can make changes to this program at any time. Any changes impacting this course would be communicated by the instructor and/or Department.**
Course Weight: 0.50

DEPARTMENT OF EARTH SCIENCES

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN ENVIRONMENTAL SCIENCE

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.5 principal courses, with no mark in these principal courses below 60%, including:

1.0 course: Biology 1001A and Biology 1002B ~~or Biology 1201A and Biology 1202B~~.

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

0.5 course from: Environmental Science 1021F/G; a 1000-level 0.5 course in Geography; Earth Sciences 1022A/B, Earth Sciences 1023A/B, Earth Sciences 1070A/B, Earth Sciences 1081A/B; Physics 1101A/B, Physics 1102A/B, Physics 1201A/B, Physics 1202A/B, Physics 1401A/B, Physics 1402A/B, Physics 1501A/B, Physics 1502A/B, the former Physics 1028A/B, the former Physics 1029A/B, the former Physics 1301A/B, the former Physics 1302A/B.

1.0 course from: Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B or Mathematics 1225A/B; Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B; Mathematics 1228A/B, Mathematics 1229A/B or Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B; Data Science 1000A/B; Applied Mathematics 1201A/B; or the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413, the former Statistical Sciences 1024A/B.

Module:
9.0 courses:

~~0.5 course: Biology 2483A/B.~~
~~0.5 course: Chemistry 2210A/B.~~
~~0.5 course from: Environmental Science 2300F/G, the former Environmental Science 3300F/G.~~
~~0.5 course: Environmental Science 3350F/G.~~
~~0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.~~
~~0.5 course from: Geography 2220A/B (strongly recommended) or a Geography half-course from the Environmental Science Course List.~~
~~0.5 course at the 2000-level from Earth Sciences courses in the Environmental~~

~~Physical Sciences Subject Courses List.~~
~~1.5 course: Environmental Science 4999E.~~
~~0.5 course from: Environmental Science 4949F/G, Biology 4230A/B, Biology 4405A/B, Biology 4410F/G, Biology 4412F/G, Earth Sciences 4431A/B, Earth Sciences 4440A/B.~~
~~2.5 additional courses from the Environmental Science Course List, including at least 0.5 course from each of the 3 subject areas.~~
~~1.0 additional course at the 3000 level or above from the Environmental Science Course List.~~
3.0 courses: Biology 2483A/B, Earth Sciences 2200A/B, Earth Sciences 3240F/G,
Environmental Science 2300F/G, Environmental Science 2400A/B, Environmental Science 3350F/G.
0.5 course from: Chemistry 2210A/B or Earth Sciences 2230A/B.
0.5 course from: Biology 2244A/B, Earth Sciences 2222A/B or Statistical Sciences 2244A/B.
0.5 course from: Earth Sciences 4606A/B/Y, Geography 2220A/B or Geography 2230A/B.
1.5 courses from Earth Sciences 3341A/B, Earth Sciences 3369A/B, Earth Sciences 4431A/B, Earth Sciences 4461A/B, Earth Sciences 4462A/B, Environmental Science 4949F/G.
2.0 additional courses from the Environmental Science Course List.
1.0 course: Environmental Science 4999E.

Notes: Students should plan the modules taking into account prerequisites of senior courses. **Of the 20.0 courses required for the Honours Bachelor of Science degree, at least 11.0 must be from the offerings of the Faculty of Science or approved courses from the Schulich School of Medicine & Dentistry. Approved courses are those listed under Medical Sciences in Category C.**

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN ENVIRONMENTAL SCIENCE

Admission Requirements

Completion of first-year requirements~~, with no mark in these principal courses below 60%, including~~:

1.0 course: Biology 1001A and Biology 1002B~~ or Biology 1201A and Biology 1202B~~**, with a minimum mark of 60% in each 0.5 course**.

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

0.5 course from: Environmental Science 1021F/G; a 1000-level 0.5 course in Geography; Earth Sciences 1022A/B, Earth Sciences 1023A/B, Earth Sciences 1070A/B, Earth Sciences 1081A/B; Physics 1101A/B, Physics 1102A/B, Physics 1201A/B, Physics 1202A/B, Physics 1401A/B, Physics 1402A/B, Physics 1501A/B, Physics 1502A/B, the former Physics 1028A/B, the former Physics 1029A/B, the former Physics 1301A/B, the former Physics 1302A/B.

1.0 course from: Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B or Mathematics 1225A/B; Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B; Mathematics 1228A/B, Mathematics 1229A/B or Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B; Data Science 1000A/B; Applied Mathematics 1201A/B; or the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413, the former Statistical Sciences 1024A/B.

Module
9.0 courses:

~~0.5 course: Biology 2483A/B.~~
~~0.5 course: Chemistry 2210A/B.~~
~~0.5 course from: Environmental Science 2300F/G, the former Environmental Science 3300F/G.~~
~~0.5 course: Environmental Science 3350F/G.~~
~~0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.~~
~~0.5 course from: Geography 2220A/B (strongly recommended) or a Geography half-course from the Environmental Science Course List.~~
~~0.5 course at the 2000-level from Earth Sciences courses in the Environmental Physical Science Courses List.~~
~~0.5 course from: Environmental Science 4949F/G, Environmental Science 4970F/G, Biology 4230A/B, Biology 4405A/B, Biology 4410F/G, Biology~~

~~4412F/G, Earth Sciences 4431A/B, Earth Sciences 4440A/B.~~
~~2.5 additional courses from the Environmental Science Course List, including at least 0.5 course from each of the 3 subject areas.~~
~~2.5 additional courses at the 3000 level or above from: Environmental Science 4970F/G or the Environmental Science Course List.~~
3.0 courses: Biology 2483A/B, Earth Sciences 2200A/B, Earth Sciences 3240F/G,
Environmental Science 2300F/G, Environmental Science 2400A/B, Environmental Science 3350F/G.
0.5 course from: Chemistry 2210A/B or Earth Sciences 2230A/B.
0.5 course from: Biology 2244A/B, Earth Sciences 2222A/B or Statistical Sciences 2244A/B.
0.5 course from: Earth Sciences 4606A/B/Y, Geography 2220A/B or Geography 2230A/B.
1.5 courses from Earth Sciences 3341A/B, Earth Sciences 3369A/B, Earth Sciences 4431A/B, Earth Sciences 4461A/B, Earth Sciences 4462A/B, Environmental Science 4949F/G.
3.0 additional courses from the Environmental Science Course List.

Notes: Students should plan the module taking into account prerequisites of senior courses. **Of the 20.0 courses required for the Bachelor of Science (Four-Year) degree, at least 11.0 must be from the offerings of the Faculty of Science or approved courses from the Schulich School of Medicine & Dentistry. Approved courses are those listed under Medical Sciences in Category C.**

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN ENVIRONMENTAL SCIENCE

Admission Requirements

Completion of first-year requirements~~, with no mark in these principal courses below 60%, including~~:

1.0 course: Biology 1001A and Biology 1002B~~ or Biology 1201A and Biology 1202B~~**, with a minimum mark of 60% in each 0.5 course**.

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

0.5 course from: Environmental Science 1021F/G; a 1000-level 0.5 course in Geography; Earth Sciences 1022A/B, Earth Sciences 1023A/B, Earth Sciences 1070A/B, Earth Sciences 1081A/B; Physics 1101A/B, Physics 1102A/B, Physics 1201A/B, Physics 1202A/B, Physics 1401A/B, Physics 1402A/B, Physics 1501A/B, Physics 1502A/B, the former Physics 1028A/B, the former Physics 1029A/B, the former Physics 1301A/B, the former Physics 1302A/B.

1.0 course from: Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B or Mathematics 1225A/B; Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B; Mathematics 1228A/B, Mathematics 1229A/B or Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B; Data Science 1000A/B; Applied Mathematics 1201A/B; or the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413, the former Statistical Sciences 1024A/B.

Module
6.0 courses:

~~0.5 course: Biology 2483A/B.~~
~~0.5 course: Chemistry 2210A/B.~~
~~0.5 course from: Environmental Science 2300F/G, the former Environmental Science 3300F/G.~~
~~0.5 course: Environmental Science 3350F/G.~~
~~0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.~~
~~0.5 course from: Geography 2220A/B (strongly recommended) or a Geography half-course from the Environmental Science Course List.~~
~~0.5 course at the 2000-level from Earth Sciences courses in the Environmental Physical Science Courses List.~~
~~2.5 additional courses from Environmental Science 4970F/G or the~~

~~Environmental Science Course List, including at least 0.5 course from each of the 3 subject areas.~~

3.0 courses: Biology 2483A/B, Earth Sciences 2200A/B, Earth Sciences 3240F/G,
Environmental Science 2300F/G, Environmental Science 2400A/B, Environmental Science 3350F/G.
0.5 course from: Chemistry 2210A/B or Earth Sciences 2230A/B.
0.5 course from: Biology 2244A/B, Earth Sciences 2222A/B or Statistical Sciences 2244A/B.
0.5 course from: Earth Sciences 4606A/B/Y, Geography 2220A/B or Geography 2230A/B.

1.5 additional courses from the Environmental Science Course List.

Notes: Students should plan the modules taking into account prerequisites of senior courses. **Of the 20.0 courses required for the Bachelor of Science (Honours or Four-Year) degree, at least 11.0 must be from the offerings of the Faculty of Science or approved courses from the Schulich School of Medicine & Dentistry. Approved courses are those listed under Medical Sciences in Category C. Of the 15.0 courses required for the Bachelor of Science Degree (Three-Year), at least 8.0 must be from the offerings of the Faculty of Science or approved courses from the Schulich School of Medicine & Dentistry. Approved courses are those listed under Medical Sciences in Category C.**

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN ENVIRONMENTAL SCIENCE

Admission Requirements

Completion of first-year requirements~~, with no mark in these principal courses below 60%, including~~:

1.0 course: Biology 1001A and Biology 1002B~~ or Biology 1201A and Biology 1202B~~**, with a minimum mark of 60% in each 0.5 course**.

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

0.5 course from: Environmental Science 1021F/G; a 1000-level 0.5 course in Geography; Earth Sciences 1022A/B, Earth Sciences 1023A/B, Earth Sciences 1070A/B, Earth Sciences 1081A/B; Physics 1101A/B, Physics 1102A/B, Physics 1201A/B, Physics 1202A/B, Physics 1401A/B, Physics 1402A/B, Physics 1501A/B, Physics 1502A/B, the former Physics 1028A/B, the former Physics 1029A/B, the former Physics 1301A/B, the former Physics 1302A/B.

1.0 course from: Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B or Mathematics 1225A/B, Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B; Mathematics 1228A/B, Mathematics 1229A/B or Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B; Data Science 1000A/B Applied Mathematics 1201A/B; or the former Applied Mathematics 1411A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, the former Applied Mathematics 1413, the former Statistical Sciences 1024A/B.

Module
4.0 courses**:**

~~0.5 course: Biology 2483A/B.~~
~~0.5 course: Chemistry 2210A/B.~~
~~0.5 course from: Environmental Science 2300F/G, the former Environmental Science 3300F/G.~~
~~0.5 course: Environmental Science 3350F/G.~~
~~0.5 course from: Biology 2244A/B, Statistical Sciences 2244A/B.~~
~~0.5 course from: Geography 2220A/B (strongly recommended) or a Geography half-course from the Environmental Science Course List.~~
~~0.5 course at the 2000-level from Earth Sciences courses in the Environmental Physical Science Courses List.~~
~~0.5 additional course from the Environmental Science Course List.~~

2.5 courses: Biology 2483A/B, Earth Sciences 2200A/B, Earth Sciences 3240F/G, Environmental Science 2300F/G, Environmental Science 3350F/G.
0.5 course from: Earth Sciences 4606A/B/Y, Geography 2220A/B or Geography 2230A/B.
1.0 additional courses from the Environmental Science Course List.

Note: Students should plan the module taking into account prerequisites of senior courses.

Course List Revision – Effective September 1, 2025, the following changes be made:

ENVIRONMENTAL SCIENCE COURSE LIST

~~Environmental Life Sciences Courses~~

- ~~Anthropology 2264A/B, Anthropology 2265A/B, Anthropology 3334F/G; the former Anthropology 2264 F/G, the former Anthropology 2265F/G;~~
- ~~Biology 2217A/B, Biology 2485A/B, Biology 3220Z, Biology 3229F/G, Biology 3230F/G, Biology 3403A/B, Biology 3404F/G, Biology 3415F/G, Biology 3435F/G, Biology 3436F/G, Biology 3440A/B, Biology 3442F/G, Biology 3445F/G, Biology 3446A/B, Biology 3475A/B, Biology 3484A/B, Biology 4223F/G, Biology 4230A/B, Biology 4257Z, Biology 4258Z, Biology 4259F/G, Biology 4405A/B, Biology 4410F/G, Biology 4412F/G, Biology 4420A/B, Biology 4436F/G, the former Biology 4405F/G, the former Biology 4243F/G;~~
- ~~Earth Sciences 2265A/B, Earth Sciences 3369A/B;~~
- ~~Geography 2320A/B, Geography 3224A/B, Geography 3343A/B;~~
- ~~Microbiology and Immunology 3100A, Microbiology and Immunology 3500B;~~
- ~~Pathology 3500;~~

  ~~Or a course approved for this category by an Environmental Science counsellor.~~

~~Environmental Physical Science Courses~~

- ~~Chemical and Biochemical Engineering 4409A/B;~~
- ~~Chemistry 2213A/B, Chemistry 2272F, Chemistry 3372F/G;~~
- ~~Civil and Environmental Engineering 3328A/B, Civil and Environmental Engineering 3362A/B, Civil and Environmental Engineering 4405A/B, Civil and Environmental Engineering 4465A/B, Civil and Environmental Engineering 4477A/B;~~
- ~~Earth Sciences 2200A/B, Earth Sciences 2220A/B, Earth Sciences 2222A/B, Earth Sciences 2230A/B, Earth Sciences 2240F/G, Earth Sciences 2260A/B, Earth Sciences 3240F/G, Earth Sciences 3320A/B, Earth Sciences 3321A/B, Earth Sciences 3340A/B, Earth Sciences 3341A/B, Earth Sciences 3370A/B, Earth Sciences 3372A/B, Earth Sciences 4431A/B, Earth Sciences 4440A/B, Earth Sciences 4451Z, Earth Sciences 4452Z;~~
- ~~Geography 2131A/B, Geography 2132A/B, Geography 2133A/B, Geography 2220A/B, Geography 2230A/B, Geography 2310A/B, Geography 2330A/B, Geography 3210A/B, Geography 3211A/B, Geography 3222A/B, Geography 3223A/B, Geography 3231A/B, Geography 3311A/B, Geography 3334A/B, Geography 3341A/B, Geography 3350A/B, Geography 3352A/B, the former Geography 2240A/B, the former Geography 3221A/B, the former Geography 3260A/B, the former Geography 3312A/B, the former Geography 3333A/B, the former Geography 3342A/B;~~
- ~~The former Medical Biophysics 3336F/G;~~

- ~~Physics 2070A/B;~~
  ~~Or a course approved for this category by an Environmental Science counsellor.~~

~~Environment and Society Courses~~

- ~~Anthropology 2203F/G, Anthropology 2237A/B, Anthropology 2240A/B, Anthropology 2262A/B, the former Anthropology 2262F/G, the former Anthropology 3369F/G;~~
- ~~Economics 2172A/B, Economics 3374A/B;~~
- ~~Indigenous Studies 2203F/G, Indigenous Studies 2218F/G, Indigenous Studies 2601F/G, Indigenous Studies 3140F/G, Indigenous Studies 3722F/G, Indigenous Studies 4023F/G, the former First Nations Studies 2111E, the former First Nations Studies 2132F/G, the former First Nations Studies 2203F/G, the former First Nations Studies 2218F/G, the former First Nations Studies 2601F/G, the former First Nations Studies 3140F/G, the former First Nations Studies 3722F/G;~~
- ~~Geography All courses in the 2010-2090 series, the 2151-2162 series, and the 2410-2460 series, Geography 3001F/G, Geography 3250A/B, Geography 3432A/B, Geography 3441F/G, Geography 3443A/B, Geography 3445F/G, Geography 3446F/G~~
- ~~Earth Sciences 2001F/G;~~
- ~~History 2123, History 2211E, History 3217E, History 3721F/G, History 3723F/G, History 4705E;~~
- ~~Political Science 2137, Political Science 3208F/G, Political Science 3379E, the former Political Science 2235E;~~
- ~~Philosophy 2033A/B, Philosophy 2035F/G, Philosophy 2355F/G, Philosophy 2356F/G;~~
- ~~Sociology 2151A/B, Sociology 2155A/B, Sociology 4471F/G;~~
  ~~Or a course approved for this category by an Environmental Science counsellor.~~

  ~~Note: Students should plan their course selection taking into account prerequisites for senior courses~~

Processes and Interactions in the Atmosphere

- **Earth Sciences 4462A/B**
- **Earth Sciences 4606A/B/Y**
- **Geography 2132A/B**
- **Geography 2220A/B**
- **Geography 2230A/B**
- **Geography 2310A/B**
- **Geography 3224A/B**
- **Geography 3311A/B**

- **Physics 2070A/B**

Processes and Interactions at the Surface and Near-Surface

- **Earth Sciences 2220A/B**
- **Earth Sciences 2222A/B**
- **Earth Sciences 2230A/B**
- **Earth Sciences 2240F/G**
- **Earth Sciences 3320A/B**
- **Earth Sciences 3321A/B**
- **Earth Sciences 3370A/B**
- **Earth Sciences 4431A/B**
- **Geography 3445F/G**

Processes and Interactions in Water

- **Biology 3415F/G**
- **Earth Sciences 3340A/B**
- **Earth Sciences 3341A/B**
- **Geography 3352A/B**
- **Geography 3354A/B**

Processes and Interactions in Life

- **Anthropology 2237A/B**
- **Anthropology 2240A/B**
- **Chemistry 2213A/B**
- **Biology 3440A/B**
- **Biology 3445F/G**
- **Biology 3446A/B**
- **Biology 3484A/B**
- **Biology 4405A/B**
- **Earth Sciences 2265A/B**
- **Earth Sciences 2266F/G**
- **Earth Sciences 3369A/B**
- **Earth Sciences 4461A/B**
- **Geography 2156A/B**
- **Geography 3432A/B**

Processes and Interactions in Society

- **Anthropology 2288A/B**
- **Biology 3442F/G**
- **Biology 4230A/B**
- **Earth Sciences 3023F/G**

- **Geography 2133A/B**
- **Geography 2162A/B**
- **Geography 3350A/B**
- **Geography 3441F/G**
- **Geography 3443F/G**
- **Geography 3446F/G**
- **History 3723F/G**
- **Indigenous Studies 2000A/B**
- **Indigenous Studies 2601F/G**
- **Philosophy 2033A/B**
- **Philosophy 2356F/G**
- **Sociology 2155A/B**

Note: Or any course approved by Department of Earth Sciences' Undergraduate Chair.

DEPARTMENT OF PHYSICS AND ASTRONOMY

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

PHYSICS 2102A/B
INTRODUCTION TO MODERN PHYSICS

Course Description
Introduction to quantum mechanics, wave-particle duality, atomic physics, nuclear physics, particle physics and the origins of the universe.

Prerequisite(s): Physics 1201A/B or Physics 1401A/B or Physics 1501A/B or the former Physics 1301A/B, each with a minimum mark of 60%, or the former Physics 1028A/B with a minimum mark of 80%; Physics 1202A/B or Physics 1402A/B or Physics 1502A/B or the former Physics 1302A/B, each with a minimum mark of 60%, or the former Physics 1029A/B with a minimum mark of 80%; a minimum mark of 60% in each of (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B or the former Applied Mathematics 1412A/B) and (Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B or the former Applied Mathematics 1414A/B), or in the former Applied Mathematics 1413. Integrated Science 1001X with a minimum mark of 60% can be used in place of Physics 1202A/B and Calculus 1301A/B.

Extra Information: 3 lecture hours, 1 tutorial hour.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

PHYSICS 4850A/B
NANOMATERIALS

Course Description
Synthesis, properties, characterization and application of materials structured on the nanometer scale. Fabrication methods including epitaxy, lithography, and self-assembly. Optical and electronic properties of nanomaterials including carbon nanotubes, quantum dots, nanoparticles. Interaction with electrons and photons. Characterization methods, including electron microscopy, scanning probe microscopy, X-ray photoelectron spectroscopy, plasmon resonance.

Prerequisite(s): 0.5 course from: Physics 2102A/B, Physics 2129A/B, Physics 2810A/B, the former Physics 2800, the former Materials Science 2800; Calculus 2302A/B or Calculus 2502A/B.

Extra Information: 3 lecture hours. Typically offered in alternate years only. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

PHYSICS 2104A/B
INTRODUCTION TO QUANTUM MECHANICS

(Short Title: Intro to Quantum Mechanics)

Course Description
An introduction to the fundamentals of quantum mechanics starting with a discussion of the physics of intrinsic spin. Quantum mechanics is presented through concrete examples such as Stern-Gerlach experiments, the connection between operators and measurement using matrix mechanics, time evolution, entanglement, wave mechanics in one-dimension, and angular momentum.

Antirequisite(s): The former Physics 2102A/B.

Prerequisite(s): A minimum mark of 60% in Physics 1202A/B or Physics 1402A/B or Physics 1502A/B or the former Physics 1302A/B; a minimum mark of 60% in Calculus 1301A/B or Calculus 1501A/B or Numerical and Mathematical Methods 1414A/B or the former Applied Mathematics 1414A/B; a minimum mark of 55% in Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B. Integrated Science 1001X with a minimum mark of 60% can be used in place of Physics 1202A/B and Calculus 1301A/B.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ASTRONOMY 3302A/B
ASTROPHYSICS INTERSTELLAR SPACE

Course Description
The physics of interstellar space – the gas, dust, electromagnetic radiation, cosmic rays, and magnetic fields – present between the stars in a galaxy and between galaxies. Star formation, the interaction of light and matter, and the physical processes that determine the properties, dynamics, and behavior of the interstellar medium.

Prerequisite(s): Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.

Extra Information: 3 lecture/tutorial hours. Typically offered in alternate years only.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ASTRONOMY 3303A/B
GALAXIES

Course Description
Introduction to galaxies, including the Milky Way. Galaxy components and their variation with galaxy location, shape, and age; the distribution of galaxies in space and time; interpretation of observational data to derive physical properties of galaxies.

Prerequisite(s): Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.

Extra Information: 3 lecture/tutorial hours. Typically offered in alternate years only.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ASTRONOMY 4101A/B
STELLAR ASTROPHYSICS

Course Description
Internal structure of stars; stellar evolution; stellar atmospheres; the formation of stars.

Prerequisite(s): Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)** ~~or the former Physics 2128A/B and the former Physics 2129A/B~~; Calculus 2503A/B.

Extra Information: 3 lecture hours. Typically offered in alternate years only.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ASTRONOMY 4602A/B
GRAVITATIONAL ASTROPHYSICS AND COSMOLOGY

Course Description
Introduction to gravity in astrophysics. Application of Newtonian gravitation to basic galactic dynamics and galactic structure. An introduction to general relativity with applications to black holes, cosmology, and the early universe.

Prerequisite(s): Physics 2101A/B and **(Physics 2104A/B or the former** Physics 2102A/B**)** ~~or the former Physics 2128A/B and the former Physics 2129A/B~~; Calculus 2503A/B.

Extra Information: 3 lecture hours. Typically offered in alternate years only.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 3200A/B
QUANTUM MECHANICS 1

Course Description
The Schrodinger equation in one dimension, wave packets, stationary states, the harmonic oscillator, the postulates of Quantum Mechanics, operators and eigenvalue equations, angular momentum, the hydrogen atom.

Antirequisite(s): Chemistry 3374A/B.

Prerequisite(s): Mathematics 1600A/B or Mathematics 1700A/B or Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B; Physics 2101A/B and **(Physics 2104A/B or the former** Physics 2102A/B**)**; Physics 2110A/B.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 3300A/B
ELECTROMAGNETIC THEORY I

Course Description
A study of static electric and magnetic fields using vector calculus; time varying electric and magnetic fields, Maxwell's equations, electric and magnetic fields in matter.

Prerequisite(s): Physics 2101A/B and **(Physics 2104A/B or the former** Physics 2102A/B**)**; Calculus 2302A/B or Calculus 2502A/B or Numerical and Mathematical Methods 2276A/B or Numerical and Mathematical Methods 2277A/B or the former Applied Mathematics 2276A/B or the former Applied Mathematics 2277A/B.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 3400A/B
INTRODUCTION TO THERMAL PHYSICS

Course Description
Thermodynamics applied to classical and quantum systems. Thermodynamic laws, interactions, engines, phase transformations of pure substances, Boltzmann statistics, simple quantum systems.

Prerequisite(s): Physics 2101A/B and **(Physics 2104A/B or the former** Physics 2102A/B**)**, ~~or Physics 2128A/B and Physics 2129A/B;~~ Physics 2110A/B ~~or the former Physics 2900E~~.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 4180A/B
PHYSICAL FLUID DYNAMICS

Course Description
Kinematics and conservation laws, ideal fluids, the Euler equations, irrotational flow, the Navier-Stokes equations, viscous flow, waves, instabilities.

Prerequisite(s): Physics 2101A/B and **(Physics 2104A/B or the former** Physics 2102A/B**)**, Physics 2110A/B; Applied Mathematics 2402A/B.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 4662A/B
MAGNETIC RESONANCE IMAGING

Course Description
Concepts from electromagnetic theory, quantum mechanics and statistical mechanics will be applied to illuminate the principles and techniques of nuclear magnetic resonance (NMR). Applications of NMR to materials science, chemistry, and medicine will be discussed.

Prerequisite(s): (Physics 2104A/B or the former Physics 2102A/B**)** ~~or Physics 2129A/B~~ or Medical Biophysics 2129A/B, or permission of the Department.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 4700A/B
ATMOSPHERES

Course Description
Physical principles are used to investigate the dynamics, thermodynamics and composition of atmospheres with primary focus on Earth. Planetary atmospheres will be discussed in relation to Earth's atmosphere.

Prerequisite(s): Physics 2101A/B ~~and Physics 2102A/B~~, Physics 2110A/B, Applied Mathematics 2402A/B. **Pre-or Corequisite(s):** Applied Mathematics 3815A/B.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

PHYSICS 4810A/B
ELECTRONIC MATERIALS AND DEVICES

Course Description
An introduction to the principles governing modern electronic devices. Topics include crystal structure (lattices, reciprocal lattices, X-ray diffraction), lattice vibrations (phonons, thermal properties), metals (free-electron model, energy bands), semiconductors (band gaps, mobility, doping), and semiconductor devices (diodes, transistors, device fabrication).

Prerequisite(s): 0.5 course from: **(Physics 2104A/B or the former** Physics 2102A/B**)**, ~~Physics 2129A/B,~~ Physics 2810A/B; Calculus 2302A/B or Calculus 2502A/B.

Extra Information: 3 lecture hours. Typically offered in alternate years only.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN ASTROPHYSICS

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.5 principal courses, with no mark in these principal courses below 60%:

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 85% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

0.5 course from: Mathematics 1700A/B, Mathematics 1600A/B, Numerical and Mathematical Methods 1411A/B, the former Applied Mathematics 1411A/B.

0.5 additional course from the Faculty of Science. It is highly recommended that students complete one of the following: Chemistry 1301A/B, Chemistry 1302A/B, Computer Science 1025A/B or Computer Science 1026A/B, Data Science 1000A/B or the former Statistical Sciences 1024A/B.

0.5 additional course.

Module
10.0 courses:

3.0 courses: Astronomy 2201A/B, Astronomy 2801A/B, Astronomy 3302A/B, Astronomy 3303A/B, Astronomy 4101A/B, Astronomy 4602A/B.
1.0 course: Calculus 2502A/B, Calculus 2503A/B.
1.0 course: Applied Mathematics 2402A/B or the former Differential Equations 2402A, Applied Mathematics 3815A/B.
2.0 courses: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**, Physics 2110A/B, and Physics 2910F/G (or the former Physics 2900E)**.**
2.0 courses: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, and Physics 3400A/B.
0.5 course from: Physics 3900F/G/Z, Physics 3926F/G.
0.5 course: Physics 4351A/B.

Students must also complete Physics 2950Y, Physics 3950Y and Physics 4950Y (non-credit seminar courses).

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN ASTROPHYSICS

Admission Requirements

Completion of first-year requirements including the following 3.5 courses, each with a mark of at least 60%:

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 70% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

0.5 course from: Mathematics 1700A/B, Mathematics 1600A/B, Numerical and Mathematical Methods 1411A/B, the former Applied Mathematics 1411A/B.

0.5 additional course from the Faculty of Science. It is highly recommended that students complete one of the following: Chemistry 1301A/B, Chemistry 1302A/B, Computer Science 1025A/B or Computer Science 1026A/B, Data Science 1000A/B or the former Statistical Sciences 1024A/B.

0.5 additional course.

Module~~.~~
10.0 courses:

3.0 courses: Astronomy 2201A/B, Astronomy 2801A/B, Astronomy 3302A/B, Astronomy 3303A/B, Astronomy 4101A/B, Astronomy 4602A/B.
0.5 course from: Calculus 2502A/B (preferred), Calculus 2302A/B.
0.5 course from: Calculus 2503A/B (preferred), Calculus 2303A/B.
1.0 course: Applied Mathematics 2402A/B or the former Differential Equations 2402A, Applied Mathematics 3815A/B.
2.0 courses: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**, Physics 2110A/B, and Physics 2910F/G (or the former Physics 2900E)**.**
2.0 courses: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, and Physics 3400A/B.
0.5 course from: Physics 3900F/G/Z, Physics 3926F/G.
0.5 course: Physics 4351A/B.

Students must also complete Physics 2950Y, Physics 3950Y, Physics 4950Y (non-credit seminar courses).

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN ASTROPHYSICS

Admission Requirements

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

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 70% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

Students must complete Mathematics 1700A/B or Mathematics 1600A/B or Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B with a minimum mark of 55% by the end of Term 1 in Year 2.

Module
6.0 courses:

1.5 courses: (Astronomy 2201A/B or Astronomy 2801A/B), Astronomy 3302A/B, Astronomy 3303A/B.
0.5 course from: Calculus 2502A/B (preferred), Calculus 2302A/B.
0.5 course from: Calculus 2503A/B (preferred), Calculus 2303A/B.
0.5 course: Applied Mathematics 2402A/B or the former Differential Equations 2402A.
2.0 courses: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**, Physics 2110A/B and Physics 2910F/G (or the former Physics 2900E).
~~**1.0 course** from: Applied Mathematics 2814F/G, Physics 3900F/G/Z, Physics 3926F/G.~~
0.5 course from: Physics 3900F/G/Z, Physics 3926F/G.
0.5 course from: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3400A/B.

Students must also complete Physics 2950Y, Physics 3950Y (non-credit seminar courses).

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN ASTROPHYSICS

Admission Requirements

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

1.0 course from: Physics 1201A/B, Physics 1401A/B, Physics 1501A/B or the former Physics 1301A/B or 80% in the former Physics 1028A/B and Physics 1202A/B, Physics 1402A/B, Physics 1502A/B or the former Physics 1302A/B or 80% in the former Physics 1029A/B.
1.0 course from: Calculus 1000A/B, Calculus 1500A/B, Calculus 1501A/B (recommended), Calculus 1301A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, the former Applied Mathematics 1412A/B, the former Applied Mathematics 1414A/B, or the former Applied Mathematics 1413.

Integrated Science 1001X with a minimum mark of 60% can be used in place of Physics 1202A/B and Calculus 1301A/B.

1.0 additional course, at least 0.5 of which must be from the Faculty of Science.

Module
4.0 courses:

0.5 course from: Calculus 2302A/B, Calculus 2502A/B, Applied Mathematics 2402A/B, Applied Mathematics 2814F/G, Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Numerical and Mathematical Methods 2277A/B, the former Applied Mathematics 2270A/B, the former Applied Mathematics 2276A/B, the former Applied Mathematics 2277A/B.
1.0 course: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.
1.0 course: Astronomy 2201A/B, Astronomy 2801A/B.
1.0 course from*: Astronomy 3302A/B, Astronomy 3303A/B, Astronomy 4101A/B, Astronomy 4602A/B.
0.5 course from: Earth Sciences 3001A/B, Earth Sciences 3312A/B, Earth Sciences 3321A/B, Earth Sciences 4435A/B, Earth Sciences 4606Y, or any Physics or Astronomy course numbered 2100 or above not already taken.

Students must also complete Physics 2950Y (non-credit seminar course).

*Note that these courses are generally offered only every other year.
Some courses may have pre-requisites not included in the module.

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN PHYSICS

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.5 principal courses, with no mark in these principal courses below 60%:

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 85% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

0.5 course from: Mathematics 1700A/B, Mathematics 1600A/B, Numerical and Mathematical Methods 1411A/B, the former Applied Mathematics 1411A/B.

0.5 additional course from the Faculty of Science. It is highly recommended that students complete one of the following: Chemistry 1301A/B, Chemistry 1302A/B, Computer Science 1025A/B or Computer Science 1026A/B, Data Science 1000A/B or the former Statistical Science 1024A/B.

0.5 additional course.

Module
10.0 courses:

1.0 course: Calculus 2502A/B, Calculus 2503A/B.
1.0 course: Applied Mathematics 2402A/B (or the former Differential Equations 2402A), Applied Mathematics 3815A/B.
1.0 course: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.
1.0 course: Physics 2110A/B, Physics 2910F/G (or the former Physics 2900E).
3.0 courses: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3400A/B, Physics 3900F/G/Z, Physics 3926F/G.
1.0 course: Physics 4251A/B, Physics 4351A/B.
1.5 course from: any Physics or Astronomy course not yet taken numbered 2100 or above, Chemistry 4424A/B.

0.5 course from: any Physics or Astronomy course not already taken at the 4000 level or above.

Students must also complete Physics 2950Y, Physics 3950Y, Physics 4950Y (non-credit seminar courses).

Program Revision – Effective September 1, 2025, the following changes be made:

SPECIALIZATION IN PHYSICS

Admission Requirements

Completion of first-year requirements including the following 3.5 courses, each with a mark of at least 60%:

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 70% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

0.5 course from: Mathematics 1700A/B, Mathematics 1600A/B, Numerical and Mathematical Methods 1411A/B, the former Applied Mathematics 1411A/B.

0.5 additional course from the Faculty of Science. It is highly recommended that students complete one of the following: Chemistry 1301A/B, Chemistry 1302A/B, Computer Science 1025A/B or Computer Science 1026A/B, Data Science 1000A/B or the former Statistical Sciences 1024A/B.

0.5 additional course.

Module
10.0 courses:

0.5 course from: Calculus 2502A/B (preferred), Calculus 2302A/B.
0.5 course from: Calculus 2503A/B (preferred), Calculus 2303A/B.
1.0 course: Applied Mathematics 2402A/B (or the former Differential Equations 2402A), Applied Mathematics 3815A/B.
1.0 course: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.
1.0 course: Physics 2110A/B, Physics 2910F/G (or the former Physics 2900E),
3.0 courses: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3400A/B, Physics 3900F/G/Z, Physics 3926F/G.
1.0 course: Physics 4251A/B, Physics 4351A/B.
1.5 courses from: Any courses not yet taken numbered 2100 or higher in Physics and Astronomy, Chemistry 4424A/B.

0.5 course from: any Physics or Astronomy course not already taken at the 4000-level or above.

Students must also complete Physics 2950Y, Physics 3950Y, Physics 4950Y (non-credit seminar courses).

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN PHYSICS

Admission Requirements

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

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 70% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

1.0 additional course, at least 0.5 of which must be from the Faculty of Science.

Students must complete Mathematics 1700A/B or Mathematics 1600A/B or Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B with a minimum mark of 55% by the end of Term 1 in Year 2.

Module
6.0 courses:

1.0 course: Calculus 2502A/B (preferred) or Calculus 2302A/B or Numerical and Mathematical Methods 2276A/B or Numerical and Mathematical Methods 2277A/B, Calculus 2503A/B (preferred) or Calculus 2303A/B or Numerical and Mathematical Methods 3415A/B.
0.5 course: Applied Mathematics 2402A/B (or the former Differential Equations 2402A) or Numerical and Mathematical Methods 2270A/B.
1.0 course: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.
1.0 course: Physics 2110A/B and Physics 2910F/G (or the former Physics 2900E).
~~1.0 course from: any Physics or Astronomy course not yet taken numbered 2100 or above, Chemistry 4424A/B.~~
0.5 course from: Physics 3900F/G/Z, Physics 3926F/G.
~~1.0~~**2.0 courses** ~~from~~: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3400A/B.

Students must also complete Physics 2950Y, Physics 3950Y (non-credit seminar courses).

Note: The above courses may have prerequisites not included in the module.

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN PHYSICS

Admission Requirements

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

1.0 course from: (Physics 1201A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1301A/B or 80% in the former Physics 1028A/B) and (Physics 1202A/B, Physics 1402A/B, Physics 1502A/B, the former Physics 1302A/B or 80% in the former Physics 1029A/B).

1.0 course: (Calculus 1000A/B or Calculus 1500A/B or Numerical and Mathematical Methods 1412A/B) and (Calculus 1501A/B (recommended) or Calculus 1301A/B with a minimum mark of 70% or Numerical and Mathematical Methods 1414A/B); or the former Applied Mathematics 1413 or the former Applied Mathematics 1412A/B and the former Applied Mathematics 1414A/B.

1.0 additional course, at least 0.5 of which must be from the Faculty of Science.

Students must complete Mathematics 1700A/B or Mathematics 1600A/B or Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B with a minimum mark of 55% by the end of Term 1 in Year 2.

Module
4.0 courses:

1.0 course from: Calculus 2302A/B, Calculus 2303A/B, Calculus 2502A/B, Calculus 2503A/B.
1.0 course: Physics 2101A/B, **(Physics 2104A/B or the former** Physics 2102A/B**)**.
1.0 course: Physics 2110A/B and Physics 2910F/G (or the former Physics 2900E).
1.0 course from: any Physics or Astronomy course not yet taken numbered 2100 or above.

Students must also complete Physics 2950Y (non-credit seminar course).

FACULTY OF SOCIAL SCIENCE

DAN DEPARTMENT OF MANAGEMENT & ORGANIZATIONAL STUDIES

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

MANAGEMENT AND ORGANIZATIONAL STUDIES 3490
INTERNSHIP: WORK TERM

Course Description
The activities, reports and other contractual obligations of a minimum 8 month internship work term recognized and approved by the Department of Management and Organizational Studies.

Prerequisite(s): Enrolment in MOS 3494. Approval of, and acceptance into, an Internship Work Term.

Extra Information: 3.0 course, Pass/Fail. Note: (1)This credit cannot be included in the number of courses counted toward any degree or program; (2) Successful completion of MOS 3490 and MOS 3494 will be recognized on the student's transcript.
Course Weight: 3.00

Administrative Note: Withdrawal applies only to the course offered at Main campus.

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

MANAGEMENT AND ORGANIZATIONAL STUDIES 3491
INTERNSHIP: WORK TERM

Course Description
The activities, reports and other contractual obligations of a 9-12 month internship work term recognized and approved by the Department of Management and Organizational Studies.

Prerequisite(s): Enrolment in MOS 3494. Approval of, and acceptance into, an Internship Work Term.

Extra Information: 3.0 course, Pass/Fail. Note: (1) This credit cannot be included in the number of courses counted toward any degree or program; (2) Successful completion of MOS 3491 and MOS 3494 will be recognized on the student's transcript.
Course Weight: 3.00

Administrative Note: Withdrawal applies only to the course offered at Main campus.

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

Management and Organizational Studies 3492
INTERNSHIP: WORK TERM

Course Description
The activities, reports and other contractual obligations of a 13-16 month internship work term recognized and approved by the Department of Management and Organizational Studies.

Prerequisite(s): Enrolment in MOS 3494. Approval of, and acceptance into, an Internship Work Term.

Extra Information: 3.0 course, Pass/Fail. Note: (1) This credit cannot be included in the number of courses counted toward any degree or program; (2) Successful completion of MOS 3492 and MOS 3494 will be recognized on the student's transcript.
Course Weight: 3.00

Administrative Note: Withdrawal applies only to the course offered at Main campus.

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

MANAGEMENT AND ORGANIZATIONAL STUDIES 3493
INTERNSHIP: WORK TERM

Course Description
Preparatory workshops and a new 8-month industry placement to acquire practical professional learning experience. The course will be taught as a series of workshops throughout the year. Following the industry placement, interns must complete a written report and oral presentation on work undertaken during the internship.

Prerequisite(s): Enrolment in MOS 3494. Approval of, and acceptance into, an Internship Work Term.

Extra Information: 3.0 course, Pass/Fail. Note: (1) This credit cannot be included in the number of courses counted toward any degree or program; (2) Successful completion of MOS 3493 and MOS 3494 will be recognized on the student's transcript.
Course Weight: 3.00

Administrative Note: Withdrawal applies only to the course offered at Main campus.

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

MANAGEMENT AND ORGANIZATIONAL STUDIES 3494
INTERNSHIP

Course Description
A series of preparatory workshops prepares students for a practical professional learning experience. Using an application/interview process, students are selected for an 8-16 month work term in a sponsoring agency approved by the Department of Management and Organizational Studies. During the work term, students will complete an interim report, and following the work term, interns must complete a written report and oral presentation on work undertaken during the internship.

Prerequisite(s): Business Administration 2257, or MOS 2227A/B and MOS 2228A/B, completion of 2nd year of BMOS Program with a minimum average of 70%, and participation in Preparation and Training Workshops. Approval of, and acceptance into, an internship work term.

Extra Information: Pass/Fail. Note: Credit for this course will not be given unless a minimum 8 month Internship and all other mandatory components have been completed. On successful completion, credit for the course will be given in the year in which initial registration in the course took place which is usually in Year 3.
Course Weight: 1.00

Administrative Note: Withdrawal applies only to the course offered at Main campus.

SOCIAL SCIENCE INTERNSHIP PROGRAM

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3990A/B/Y
INTERNSHIP WORK TERM

Course Description
Provides students with a 4-month supervised work term approved by the Faculty of Social Science. Students are required to submit a final assignment and presentation on the work performed.

Prerequisite(s): Permission of the Faculty of Social Science. Applicants must have an average of at least 70% in the most recent 5.0 credits completed and be enrolled in a Social Science Honours Specialization, Specialization or Major module and be registered in third or fourth year of a 15.0 credit or 20.0 credit degree program. Co-requisite(s): Registration in Social Science 3995A/B/Y.

Extra Information: Pass/Fail. Note: 1) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 2) Students may not take any academic courses during the internship work term. Course Weight: 0

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3991
INTERNSHIP WORK TERM

Course Description
Provides students with an 8-month supervised work term approved by the Faculty of Social Science. Students are required to submit a final assignment and provide a presentation on the work performed.

Pre-or Corequisite(s): Enrolment in or completion of Social Science 3994. Approval of, and acceptance into, an internship work term.

Extra Information: Pass/Fail. Note: 1) This credit cannot be included in the number of courses counted toward any degree or program; successful completion of Social Science 3991 and Social Science 3994 will be recognized on the student's transcript. 2) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 3) Students may not take any academic courses during the internship work term. Course Weight: 3.00

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3992
INTERNSHIP WORK TERM

Course Description
Provides students with a 9 to 12-month supervised work term approved by the Faculty of Social Science. Students are required to submit a final assignment and provide a presentation on the work performed.

Pre-or Corequisite(s): Enrolment in or completion of Social Science 3994. Approval of, and acceptance into, an internship work term.

Extra Information: Pass/Fail. Note: 1) This credit cannot be included in the number of courses counted toward any degree or program; successful completion of Social Science 3992 and Social Science 3994 will be recognized on the student's transcript. 2) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 3) Students may not take any academic courses during the internship work term. Course Weight: 3.00

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3993
INTERNSHIP WORK TERM

Course Description
Provides students with a 13 to 16-month supervised work term approved by the Faculty of Social Science. Students are required to submit a final assignment and provide a presentation on the work performed.

Pre-or Corequisite(s): Enrolment in or completion of Social Science 3994. Approval of, and acceptance into, an internship work term.

Extra Information: Pass/Fail. Note: 1) This credit cannot be included in the number of courses counted toward any degree or program; successful completion of Social Science 3993 and Social Science 3994 will be recognized on the student's transcript. 2) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 3) Students may not take any academic courses during the internship work term. Course Weight: 3.00

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3994
INTERNSHIP: PREPARATION AND SKILL DEVELOPMENT

Course Description
A series of workshops to prepare students for a practical professional learning experience. After enrolling in the course, students apply and may be selected for an 8-16-month supervised work term with an employer as approved by the Faculty of Social Science. Following the work term, students are required to submit a final assignment and presentation on the work performed.

Prerequisite(s): Permission of the Faculty of Social Science. Applicants must have an average of at least 70% in the most recent 5.0 credits completed and be enrolled in a Social Science Honours Specialization, Specialization or Major and be registered in their third year of a 20.0 credit degree program.

Extra Information: Pass/Fail. 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 Faculty of Social Science. On successful completion, credit for the course will be given in the year in which initial registration in the course took place which is usually in Year 3. Note: 1) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 2) Students may not take any academic courses during their internship work term course (Social Science 3991, Social Science 3992, or Social Science 3993).
Course Weight: 1.00

Course Withdrawal – Effective September 1, 2026, the following course be withdrawn:

SOCIAL SCIENCE 3995A/B/Y
INTERNSHIP: PREPARATION AND SKILL DEVELOPMENT

Course Description
A series of workshops to prepare students for a practical professional learning experience. After enrolling in the course, students apply and may be selected for a 4-month supervised work term with an employer as approved by the Faculty of Social Science. Following the work term, students must complete a final assignment and presentation on the work performed.

Prerequisite(s): Permission of the Faculty of Social Science. Applicants must have an average of at least 70% in the most recent 5.0 credits completed and be enrolled in a Social Science Honours Specialization, Specialization or Major module and be registered in third or fourth year of a 15.0 credit or 20.0 credit degree program.

Extra Information: Pass/Fail. Credit for this course will not be given unless an internship and all other mandatory components have been completed. This course may not be used as a substitute for any other course in the Faculty of Social Science. On successful completion, credit for the course will be given in the year in which initial registration in the course took place. Note: 1) International students should consult the Experiential Learning Coordinator, Social Science about their eligibility. 2) Students may not take any academic courses during their internship work term course (Social Science 3990A/B/Y). Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3910A/B/Y
SOCIAL SCIENCE CO-OP WORK TERM 1

(Short Title: Co-op 1)

Course Description
Provides Social Science undergraduates with a co-operative education work term that fosters a practical professional learning experience.

Prerequisite(s): Enrolment in Social Science 3996A/B/Y. Approval of, and acceptance into, a co-op work term.

Extra Information: Pass/Fail. Non-credit. Note: (1) This course cannot be included in the number of courses counted toward any module or program; (2) Successful completion of Social Science 3910A/B/Y and Social Science 3996A/B/Y will be recognized on a student's transcript.
Course Weight: 3.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3920A/B/Y
SOCIAL SCIENCE CO-OP WORK TERM 2

(Short Title: Co-op 2)

Course Description
Provides Social Science undergraduates with a co-operative education work term that fosters a practical professional learning experience.

Prerequisite(s): Social Science 3910A/B/Y. Enrolment in Social Science 3997A/B/Y. Approval of, and acceptance into, a co-op work term.

Extra Information: Pass/Fail. Non-credit. Note: (1) This course cannot be included in the number of courses counted toward any module or program; (2) Successful completion of Social Science 3920A/B/Y and Social Science 3997A/B/Y will be recognized on a student's transcript.
Course Weight: 3.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3930A/B/Y
SOCIAL SCIENCE CO-OP WORK TERM 3

(Short Title: Co-op 3)

Course Description
Provides Social Science undergraduates with a co-operative education work term that fosters a practical professional learning experience.

Prerequisite(s): Social Science 3920A/B/Y. Approval of, and acceptance into, a co-op work term.

Extra Information: Pass/Fail. Non-credit. Note: (1) This course cannot be included in the number of courses counted toward any module or program; (2) Successful completion of Social Science 3930A/B/Y will be recognized on a student's transcript.
Course Weight: 3.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3940A/B/Y
SOCIAL SCIENCE CO-OP WORK TERM 4

(Short Title: Co-op 4)

Course Description
Provides Social Science undergraduates with a co-operative education work term that fosters a practical professional learning experience.

Prerequisite(s): Social Science 3930A/B/Y. Approval of, and acceptance into, a co-op work term.

Extra Information: Pass/Fail. Non-credit. Note: (1) This course cannot be included in the number of courses counted toward any module or program; (2) Successful completion of Social Science 3940A/B/Y will be recognized on a student's transcript.
Course Weight: 3.00

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3996A/B/Y
CO-OP PREPARATION, EXPERIENCE AND REFLECTION 1

(Short Title: Co-op Prep 1)

Course Description
Prepares students for a practical professional learning experience. Through an application and interview process, students are hired for a four-month work term by employers approved by the Faculty of Social Science. Students will complete an interim report during the work term and a final report upon completion.

Extra Information: Pass/Fail. Credit for this course will not be given unless a minimum four months of co-op work experience and all other mandatory components have been completed. This course may not be used as a substitute for any other course in the Faculty of Social Science. On successful completion, credit for the course will be given in the year in which initial registration in the course took place.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL SCIENCE 3997A/B/Y
CO-OP PREPARATION, EXPERIENCE AND REFLECTION 2

(Short Title: Co-op Prep 2)

Course Description
Prepares students for a practical professional learning experience. Through an application and interview process, students are hired for one or multiple four-month work terms by employers approved by the Faculty of Social Science. Students will complete an interim report during the work term(s) and a final report upon completion.

Extra Information: Pass/Fail. Credit for this course will not be given unless a minimum four months of co-op work experience and all other ma ndatory components have been completed. This course may not be used as a substitute for any other course in the Faculty of Social Science. On successful completion, credit for the course will be given in the year in which initial registration in the course took place.
Course Weight: 0.50

HURON UNIVERSITY COLLEGE

FACULTY OF ARTS AND SOCIAL SCIENCE – HISTORY

Program Revision – Effective September 1, 2025, the following changes be made:

HONOURS SPECIALIZATION IN HISTORY

Admission Requirements

~~Completion of first-year requirements with no failures.~~ **Completion of first-year requirements, including at least 0.5 course in History, with a mark of at least 60%.** Students must have an average of at least 70% in 3.0 principal courses, including at least 0.5 course in History, with no mark in these principal courses below 60%.

Module
9.0 courses:

5.0 courses from: History 2200-2999, to be taken at Huron, as follows:
- **0.5 course** from: History 2200-2399.
- **0.5 course** from: History 2400-2499.
- **0.5 course** from: History 2600-2699.
- **1.0 course** from: History 2700-2899.
- **2.5 additional courses** from: History 2200-2999.

1.0 course: History 3801E.
1.0 additional course in History at the 3000 level.
2.0 courses in History at the 4000 level.

FACULTY OF ARTS AND SOCIAL SCIENCE – MANAGEMENT AND ORGANIZATIONAL STUDIES

Course Revision – Effective September 1, 2025, the following change(s) be made:

MANAGEMENT AND ORGANIZATIONAL STUDIES 2185A/B
ANIMALS, SUSTAINABILITY, AND BUSINESS

Course Description
An examination of animal welfare and sustainability challenges, strategies, and solutions in business sectors such as fashion, beauty, sports, entertainment, food, and animal care.

Prerequisite(s): Enrolment in year 2-4 of an Animal Ethics and Sustainability Leadership or MOS module, or permission of the instructor.

Extra Information: 3 lecture/tutorial hours.
Course Weight: 0.50

FACULTY OF THEOLOGY

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 1070A/B
QURANIC ARABIC FOR BEGINNERS

Course Description
An introduction to Quranic Arabic for beginners with no previous knowledge of the Arabic language. Learn the script of the Qur'an, acquire core vocabulary necessary to understand short Quranic chapters, and dive into basic grammar of classical Arabic.

Antirequisite(s): Arabic 1070A/B.

Extra Information: 3 hours. Note: Those with any Arabic language background must see Instructor to determine eligibility for course. Cross-listed with Arabic 1070A/B.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 2080A/B
INTERMEDIATE QURANIC ARABIC

Course Description
This course builds upon Quranic Arabic for Beginners 1070A/B. The focus is to expand Quranic vocabulary and to acquire a familiarity with more complex grammatical structures through studying Quranic texts. By the end of this course, students will have acquired the key principles of Quranic grammar.

Antirequisite(s): Arabic 2080A/B.

Prerequisite(s): Arabic 1070A/B or Islamic Studies 1070A/B or permission of instructor.

Extra Information: 3 hours. Cross-listed with Arabic 2080A/B.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 2310F/G
INTERPRETING THE QUR'AN (IN TRANSLATION)

(Short Title: Interpreting the Qur'an)

Course Description
This course explores passages in the Qur'an that have shaped classical and contemporary Islam, particularly regarding the tensions between text, context, and community. In addition to textual analysis, the course covers the history of reception and the influence these texts and their interpretations have on social relations and contemporary issues.

Antirequisite(s): Religious Studies 2310F/G.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 2310F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 2620F/G
ISLAMIC THOUGHT, CULTURE AND PRACTICES

(Short Title: Islamic Thought, Cltr & Prct)

Course Description
A survey of Islamic history, thought, culture and practices, this course considers the development of Islam, key historical events, the Qur'an and its interpretive traditions, Islamic philosophy, devotional and altruistic practices, Muslim identity in a variety of local and global settings, and contemporary issues.

Antirequisite(s): Religious Studies 2285F/G; Religious Studies 2503F/G; Religious Studies 2620F/G.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 2620F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3100F/G
STUDIES IN THE SUNNAH AND HADITH

(Short Title: Studies in the Sunnah & Hadith)

Course Description
An exploration of the meaning of the Sunnah (the normative example of the Prophet Mohammed) and the development of the corpus of Hadith (narrations of these reports) and their role in diverse schools of Islamic thought and in the lives of Muslims.

Antirequisite(s): Religious Studies 3100F/G.

Prerequisite(s): Religious Studies 2310F/G or Islamic Studies 2310F/G or Religious Studies 2500F/G or permission of the instructor.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3100F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3121F/G
INTRODUCTION TO ISLAMIC ETHICS

Course Description
An examination of principled reasoning in classical Islamic jurisprudence, the theological status of reason in Islam, principles and priorities of traditional ethical reasoning, arguments for a goal-oriented approach to ethics, contemporary emphasis on context of the ethicist and the construction of religious authority, and the importance of individual moral formation.

Antirequisite(s): Religious Studies 3121F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3121F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3130F/G
ISLAM AND POLITICS

Course Description
This course examines Islamic political thought and practice from the Medina Charter and the early Caliphate through to contemporary movements and developments. Central topics include: religion and the state, the main branches of Islam, religious tolerance, good governance, human rights, rule of law, and colonialism.

Antirequisite(s): Religious Studies 3130F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3130F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3131A/B
SPIRITUALITY OF MUSLIM WOMEN

Course Description
A study of the way in which Muslim women, past and present, have understood and expressed themselves as spiritual beings through their engagement with Islamic texts, traditions and practices.

Antirequisite(s): Religious Studies 3131A/B.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3131A/B. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3210F/G
ISLAM AND WELLNESS

Course Description
How do Islamic traditions and communities understand and promote wellness, especially mental health? This course explores historical and contemporary perceptions of mental health within an Islamic theological perspective, with a special focus on Islamic principles of holistic well-being and the mental health challenges facing Muslim communities today.

Antirequisite(s): Religious Studies 3210F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3210F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3211F/G
KEY ISSUES IN ISLAMIC THEOLOGY

Course Description
A study of the major theological issues addressed by traditional and modern Muslim theologians, such as the attributes of God, revelation and reason, moral epistemology, human freedom and responsibility, suffering and religious pluralism.

Antirequisite(s): Religious Studies 3211F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3211F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3260A/B
ADVANCED QURANIC ARABIC

Course Description
This course is a study in classical Arabic. Its main focus is the vocabulary frequently encountered in the Qur'an. The course objective is to equip the student with the skills necessary to understand the grammar, vocabulary, and syntactical and morphological structure of the Qur'an.

Antirequisite(s): Arabic 3260A/B.

Prerequisite(s): Arabic 2080A/B or Islamic Studies 2080A/B or permission of instructor.

Extra Information: 3 hours. Cross-listed with Arabic 3260A/B.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

ISLAMIC STUDIES 3212F/G
INTRODUCTION TO SUFI SPIRITUALITY

(Short Title: Intro to Sufi Spirituality)

Course Description
Introducing students to key Sufi texts in translation, this course explores major themes in the mystical teachings of eminent Sufi figures from different geographical and cultural regions of the Muslim world. Students will be exposed to and engage with the foundational teachings and variety of literary expressions of Sufi spirituality.

Antirequisite(s): Religious Studies 3212F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 3212F/G.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

JEWISH STUDIES 2720F/G
HEBREW BIBLE AS LITERATURE

Course Description
This course will introduce students to the literary study of the Hebrew Bible/Old Testament within its Ancient Near Eastern context.

Antirequisite(s): Religious Studies 2720F/G.

Extra Information: 3 lecture hours. Cross-listed with Religious Studies 2720F/G.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 2246F/G
REMIXING RELIGION AND CULTURE

Course Description
Both religion and culture create meaning through the art of the “remix,” from hip-hop sampling to sacred texts and artworks that creatively (mis)quote and re-interpret pre-existing traditions. This course explores intertextuality and creativity in religion alongside theory-driven investigation of global cultural expressions including DJ culture, comic books, and social media.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 2720F/G
HEBREW BIBLE AS LITERATURE

Course Description
This course will introduce students to the literary study of the Hebrew Bible/Old Testament within its Ancient Near Eastern context.

Antirequisite(s): Jewish Studies 2720F/G.

Extra Information: 3 lecture hours. Cross-listed with Jewish Studies 2720F/G.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 2355F/G
POSTCOLONIALISM, RELIGION, AND RESISTANCE

(Short Title: Postcolonialism & Religion)

Course Description
This course focuses on the positive and negative effects of religion in postcolonial contexts and beyond. The course begins with postcolonial scholarship that investigates the role of religion(s) in colonial constructions like race, capitalism etc. The course also examines past and present religious voices/movements challenging colonial tendencies and practices.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 3211F/G
KEY ISSUES IN ISLAMIC THEOLOGY

Course Description
A study of the major theological issues addressed by traditional and modern Muslim theologians, such as the attributes of God, revelation and reason, moral epistemology, human freedom and responsibility, suffering and religious pluralism.

Antirequisite(s): Islamic Studies 3211F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Islamic Studies 3211F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 3212F/G
INTRODUCTION TO SUFI SPIRITUALITY

(Short Title: Intro to Sufi Spirituality)

Course Description
Introducing students to key Sufi texts in translation, this course explores major themes in the mystical teachings of eminent Sufi figures from different geographical and cultural regions of the Muslim world. Students will be exposed to and engage with the foundational teachings and variety of literary expressions of Sufi spirituality.

Antirequisite(s): Islamic Studies 3212F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. Cross-listed with Islamic Studies 3212F/G. Course Weight: 0.50

Course Introduction – Effective September 1, 2025, the following course be introduced:

RELIGIOUS STUDIES 3213F/G
CHRISTIANITIES AND COLONIZATION

(Short Title: Christianities & Colonization)

Course Description
This course will examine in detail aspects of the various European Christian traditions and their active role in colonialization from the time of the Protestant Reformation until the mid-1960s through histories of missions, economic development, and social order.

Prerequisite(s): Any 0.5 course in Religious Studies.

Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ARABIC 1070A/B
QURANIC ARABIC FOR BEGINNERS

Course Description
An introduction to Quranic Arabic for beginners with no previous knowledge of the Arabic language. Learn the script of the Qur'an, acquire core vocabulary necessary to understand short Quranic chapters, and dive into basic grammar of classical Arabic.

Antirequisite(s): Islamic Studies 1070A/B.

Extra Information: 3 hours. Note: Those with any Arabic language background must see Instructor to determine eligibility for course. **Cross-listed with Islamic Studies 1070A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ARABIC 2080A/B
INTERMEDIATE QURANIC ARABIC

Course Description
This course builds upon Quranic Arabic for Beginners 1070A/B. The focus is to expand Quranic vocabulary and to acquire a familiarity with more complex grammatical structures through studying Quranic texts. By the end of this course, students will have acquired the key principles of Quranic grammar.

Antirequisite(s): Islamic Studies 2080A/B.

Prerequisite(s): Arabic 1070A/B **or Islamic Studies 1070A/B** or permission of instructor.

Extra Information: 3 hours. **Cross-listed with Islamic Studies 2080A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

ARABIC 3260A/B
ADVANCED QURANIC ARABIC

Course Description
This course is a study in classical Arabic. Its main focus is the vocabulary frequently encountered in the Qur'an. The course objective is to equip the student with the skills necessary to understand the grammar, vocabulary, and syntactical and morphological structure of the Qur'an.

Antirequisite(s): Islamic Studies 3260A/B.

Prerequisite(s): Arabic 2080A/B **or Islamic Studies 2080A/B** or permission of instructor.

Extra Information: 3 hours. **Cross-listed with Islamic Studies 3260A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

JEWISH STUDIES 2420A/B
~~GODS, EMPIRES, KINGS & REBELS: THE HEBREW BIBLE IN CONTEXT~~
INTRODUCTION TO THE HEBREW BIBLE

(Short Title: Intro Hebrew Bible)

Course Description
This course will introduce students to the texts of the Hebrew Bible/Old Testament, paying particular attention to the historical and cultural environment of the ancient Israelites. The course will cover major texts from the Torah, historical books, prophetic books, and wisdom literature.

Antirequisite(s): Religious Studies 2420A/B~~; Biblical Studies 5120A/B~~.

Extra Information: 3 hours. Cross-listed with Religious Studies 2420A/B.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 2310F/G
INTERPRETING THE QUR'AN (IN TRANSLATION)

Course Description
This course explores passages in the Qur'an that have shaped classical and contemporary Islam, particularly regarding the tensions between text, context, and community. In addition to textual analysis, the course covers the history of reception and the influence these texts and their interpretations have on social relations and contemporary issues.

Antirequisite(s): Islamic Studies 2310F/G.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 2310F/G.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 2420A/B
~~GODS, EMPIRES, KINGS & REBELS: THE HEBREW BIBLE IN CONTEXT~~
INTRODUCTION TO THE HEBREW BIBLE

(Short Title: Intro Hebrew Bible)

Course Description
This course will introduce students to the texts of the Hebrew Bible/Old Testament, paying particular attention to the historical and cultural environment of the ancient Israelites. The course will cover major texts from the Torah, historical books, prophetic books, and wisdom literature.

Antirequisite(s): Jewish Studies 2420A/B~~; Biblical Studies 5120A/B~~.

Extra Information: 3 hours. Cross-listed with Jewish Studies 2420A/B.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 2620F/G
ISLAMIC THOUGHT, CULTURE AND PRACTICES

Course Description
A survey of Islamic history, thought, culture and practices, this course considers the development of Islam, key historical events, the Qur'an and its interpretive traditions, Islamic philosophy, devotional and altruistic practices, Muslim identity in a variety of local and global settings, and contemporary issues.

Antirequisite(s): Islamic Studies 2620F/G; Religious Studies 2285F/G; Religious Studies 2503F/G.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 2620F/G.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 3100F/G
STUDIES IN THE SUNNAH AND HADITH

Course Description
An exploration of the meaning of the Sunnah (the normative example of the Prophet Mohammed) and the development of the corpus of Hadith (narrations of these reports) and their role in diverse schools of Islamic thought and in the lives of Muslims.

Antirequisite(s): Islamic Studies 3100F/G.

Prerequisite(s): Religious Studies 2310F/G **or Islamic Studies 2310F/G** or Religious Studies 2500F/G or permission of the instructor.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 3100F/G.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 3121F/G
INTRODUCTION TO ISLAMIC ETHICS

Course Description
An examination of principled reasoning in classical Islamic jurisprudence, the theological status of reason in Islam, ~~the~~ principles and priorities of traditional ethical reasoning, ~~the~~ arguments for a goal-oriented approach to ethics, ~~the~~ contemporary emphasis on ~~the~~ context of the ethicist and the construction of religious authority, and the importance of individual moral formation.

Antirequisite(s): Islamic Studies 3121F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 3121F/G.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 3130F/G
ISLAM AND POLITICS

Course Description
This course examines Islamic political thought and practice from the Medina Charter and the early Caliphate through to contemporary movements and developments. Central topics include: religion and the state, the main branches of Islam, religious tolerance, good governance, human rights, rule of law, and colonialism.

Antirequisite(s): Islamic Studies 3130F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 3130F/G.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 3131A/B
SPIRITUALITY OF MUSLIM WOMEN

Course Description
~~Explore the spirituality of Muslim women past and present including the female companions of the Prophet Muhammad, how they affected revelation and the development of Islam, medieval saints and scholars who played a central role in promoting charity and education, and contemporary activists who claim Islam against extremists and secularists.~~ **A study of the way in which Muslim women, past and present, have understood and expressed themselves as spiritual beings through their engagement with Islamic texts, traditions and practices.**

Antirequisite(s): Islamic Studies 3131A/B.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 3131A/B.**
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

RELIGIOUS STUDIES 3210F/G
ISLAM AND WELLNESS

Course Description
How do Islamic traditions and communities understand and promote wellness, especially mental health? This course explores historical and contemporary perceptions of mental health within an Islamic theological perspective, with a special focus on Islamic principles of holistic well-being and the mental health challenges facing Muslim communities today.

Antirequisite(s): Islamic Studies 3210F/G.

Prerequisite(s): Any 0.5 course in Religious Studies or Islamic Studies.

Extra Information: 3 lecture hours. **Cross-listed with Islamic Studies 3210F/G.**
Course Weight: 0.50

KING'S UNIVERSITY COLLEGE

DEPARTMENT OF INTERDISCIPLINARY PROGRAMS

Course Withdrawal – Effective September 1, 2025, the following course be withdrawn:

INTERDISCIPLINARY STUDIES 2277F/G
BORDERS, BODIES AND BOUNDARIES

Course Description
Students explore causes, consequences and experiences of borders and the bodies that cross them. Examining geographically diverse examples, across academic disciplines (i.e., anthropology, geography, sociology, history, politics, journalism, fiction), we investigate how borders and boundaries emerge and how related forms of circulation and suppression are lived and shape our world.

Extra Information: 3 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2025, the following changes be made:

MINOR IN MIGRATION AND BORDER STUDIES

Admission Requirements

Completion of first year requirements including 1.0 course from English 1027F/G, English 1028F/G, Philosophy 1050F/G, Philosophy 1120F/G, Social Justice and Peace Studies 1025F/G, or Social Justice and Peace Studies 1026F/G with a minimum grade of 60% in each course and 1.0 course from Political Science 1021F/G, Political Science 1022F/G, Sociology 1020~~/~~W/X, or Sociology 1021E with a minimum grade of 60% in each course. Other courses may be considered by the Department.

Module

4.0 courses:

0.5 course: **Political Science 2260F/G, or Social Justice and Peace Studies 2260F/G, or the former** Interdisciplinary Studies 2277F/G.
1.5 course numbered 2000 and above from Group A.
2.0 courses numbered 2000 and above from Group B.

GROUP A

Childhood and Youth Studies 2221A/B
English 2071F/G
English 2072F/G
English 2262F/G
English 3679F/G
English 3680F/G
English 3698F/G
English 3699F/G
History 2650E
History 4502F/G
Political Science 2218F/G
Political Science 3311F/G
Political Science 4407F/G
Social Justice and Peace Studies 2303F/G
Social Justice and Peace Studies 2304F/G
Social Justice and Peace Studies 3211F/G
Sociology 2270A/B
Sociology 2271A/B
Sociology 2281A/B
Sociology 3341F/G
Sociology 3344F/G
Sociology 3382F/G
Sociology 3371F/G
Sociology 3378F/G

Sociology 3387F/G
Sociology 4441A/B
Other courses may be considered by the Department.

GROUP B

Childhood and Youth Studies 3366F/G
Childhood and Youth Studies 3367F/G
Political Science 3301F/G
Political Science 3307F/G
Political Science 3302F/G
Social Justice and Peace Studies 2290A/B
Social Justice and Peace Studies 2302F/G
Social Justice and Peace Studies 3210F/G
Social Justice and Peace Studies 3367F/G
Social Justice and Peace Studies 3375F/G
Sociology 2281A/B
Sociology 3318F/G
Sociology 3342F/G
Sociology 3354F/G
Sociology 4416F/G
Other courses may be considered by the Department.

DEPARTMENT OF POLITICS AND INTERNATIONAL RELATIONS

Course Introduction – Effective September 1, 2025, the following course be introduced:

POLITICAL SCIENCE 2260F/G
BORDERS, BODIES AND BOUNDARIES

Course Description
Students explore causes, consequences and experiences of borders and the bodies that cross them. Examining geographically diverse examples, across academic disciplines (i.e., anthropology, geography, sociology, history, politics, journalism, fiction), we investigate how borders and boundaries emerge and how related forms of circulation and suppression are lived and shape our world.

Antirequisite(s): Social Justice and Peace Studies 2260F/G and the former Interdisciplinary Studies 2277F/G.

Extra Information: 3 hours. Cross-listed with Social Justice and Peace Studies 2260F/G.
Course Weight: 0.50

DEPARTMENT OF SOCIAL JUSTICE AND PEACE STUDIES

Course Introduction – Effective September 1, 2025, the following course be introduced:

SOCIAL JUSTICE AND PEACE STUDIES 2260F/G
BORDERS, BODIES AND BOUNDARIES

Course Description
Students explore causes, consequences and experiences of borders and the bodies that cross them. Examining geographically diverse examples, across academic disciplines (i.e., anthropology, geography, sociology, history, politics, journalism, fiction), we investigate how borders and boundaries emerge and how related forms of circulation and suppression are lived and shape our world.

Antirequisite(s): Political Science 2260F/G and the former Interdisciplinary Studies 2277F/G.

Extra Information: 3 hours. Cross-listed with Political Science 2260F/G.
Course Weight: 0.50

Course Revision – Effective September 1, 2025, the following change(s) be made:

SOCIAL JUSTICE AND PEACE STUDIES 3363F/G
CLIMATE JUSTICE AND SUSTAINABILITY

Course Description
This course explores the social impact of the climate crisis and considers alternatives and adaptations as responses. The course engages an intersectional and social justice-oriented lens to examine how the climate crisis, and responses to its effects, impact diverse communities depending on their position in society.

Antirequisite(s): Social Justice and Peace Studies 3377F/G if taken in Summer 2021 **or Summer 2025**.

Prerequisite(s): Social Justice and Peace Studies 1025F/G and Social Justice and Peace Studies 1026F/G, or permission of the Department.

Extra Information: 3 hours.
Course Weight: 0.50

DEPARTMENT OF SOCIOLOGY

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN CRIMINOLOGY

Admission Requirements

Completion of first-year requirements including Sociology 1020, Sociology 1020W/X or Sociology 1021E with a mark of at least 60%.

Module
6.0 courses:

2.0 courses: Sociology 2205A/B and Sociology 2206A/B, Sociology 2240E or Sociology 2270A/B and Sociology 2271A/B.
1.0 course(s) from: Childhood and Youth Studies 2212F/G, Disability Studies 2214F/G, English 2100F/G, Film Studies 2156F/G, History 2190A/B, History 3308E, Philosophy 2080, Philosophy 2270, Psychology 2031A/B, Religious Studies 2163A/B, Social Justice and Peace Studies 2302F/G.
0.5 course: Sociology 2266A/B.
1.5 courses from: Sociology 2200E, Sociology 2211F/G, Sociology 2223A/B, Sociology 2253A/B, Sociology 2256A/B, Sociology 2259, Sociology 2260A/B, Sociology 2267A/B**,** Sociology 2268F/G, Sociology 2291F/G, Sociology 2293F/G.
1.0 courses from: Sociology 3325F/G, Sociology 3327F/G**,** Sociology 3340F/G, Sociology 3345F/G, Sociology 3349F/G, Sociology 3356F/G, Sociology 3357F/G, Sociology 3358F/G, Sociology 3359F/G, Sociology 3361F/G, Sociology 3363F/G, Sociology 3366F/G, Sociology 3371F/G, Sociology 3375F/G, Sociology 3379F/G, Sociology 3382F/G, Sociology 3387F/G, Sociology 3390F/G, Sociology 3391F/G.

Note: Students registered in an Honours Double Major in Sociology AND Criminology must have at least 0.5 course at the 4000-level in Sociology at King's.

Program Revision – Effective September 1, 2025, the following changes be made:

MAJOR IN SOCIOLOGY

Admission Requirements

Completion of first-year requirements, including Sociology 1020, Sociology 1020W/X or Sociology 1021E with a mark of at least 60%.

Module
6.0 courses:

1.0 course: Sociology 2205A/B and Sociology 2206A/B.
1.0 course from: Sociology 2240E or Sociology 2270A/B and Sociology 2271A/B.
0.5 course: Sociology 2248A/B.
1.0 course in Sociology at the 2100 or 2200 level.
1.5 additional Sociology courses at the 2200 level.
1.0 Sociology courses at the 3000 level or above.

Note: Students registered in an Honours Double Major in Sociology AND Criminology must have at least 0.5 course at the 4000-level in Sociology at King's.