



The following proposals, received on DAP between the dates listed below have been approved.

**DAP Submission Period:** March 1-15, 2020

[For more information on the DAP process, see the Secretariat's website.](#)

Approval Route: DAP

---

## Faculty of Arts and Humanities

### ENGLISH AND WRITING STUDIES

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

#### HONOURS SPECIALIZATION IN CREATIVE WRITING AND ENGLISH LANGUAGE AND LITERATURE

##### Module

11.0 courses:

##### 4.0 Writing courses:

**0.5 course in Writing Genres** from: Writing 2204F/G, Writing 2214F/G, Writing 2218F/G, Writing 2220F/G.

**1.5 courses** from: Writing 2203F/G, Writing 2211F/G, Writing 4998F/G (or the former Writing 2299F/G).

**2.0 courses** from: Writing 2213F/G, Writing 2219F/G, Writing 2222F/G, Writing 2223F/G, Writing 2224F/G, Writing 2225F/G, Writing 2226F/G, Writing 2227F/G, Writing 3225F/G, Writing 3228F/G (or the former Writing 2217F/G). A 0.5 course in Special Topics in Writing may be substituted with permission of the Department. Note: Students may enroll in Creative Writing Genre courses not previously taken in order to fulfill this part of the module.

##### 6.0 English courses:

**1.0 course in a Survey of Literary Traditions** from: English 2301E, English 2401E, English 2501E, English 2601E; or the former English 2307E, the former English 2308E, the former English 2309E, the former English 2310E.

**1.0 course in Theory** from: English 2200-2260, English 3200-3210, **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; or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E, the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G (but not English 3333E (Huron), the former English 3444E, the former English 3446F/G).

**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; or the former English 3444E, the former English 3446F/G.

**1.5 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.

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

#### HONOURS SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE

##### Module

10.0 courses:

**1.0 course** in a Survey of Literary Traditions from: English 2301E, English 2401E, English 2501E, English 2601E; or the former English 2307E, the former English 2308E, the former English 2309E, the former English 2310E.

**1.0 course** in Theory from: English 2200-2260, English 3200-3210, **0.5 of this requirement may be substituted from** Theatre Studies 3205F/G, **Film Studies 3371F/G, or Writing 2215F/G.**

**1.0 course** from: English 2100-2999.

**1.0 course** in Language or Medieval Literature and Language from: English 3300-3319; or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E.

**1.0 course** in Renaissance or Eighteenth-Century Literature from: English 3320-3349, English 3440-3449, English 3540-3549, English 3640-3649; or the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G (but not English 3333E (Huron), the former English 3444E, the former English 3446F/G).

**1.0 course** in Post-1800 Literature from: English 3350-3399, English 3450-3499, English 3550-3599, English 3650-3699, English 3700-3799, English 3850-3899; or the former English 3444E, the former English 3446F/G, the former English 3554E.

**1.0 course** from: English 2000-3999; or, Medieval Studies, Theatre Studies, or Writing numbered 2200 to 3999; or Classical Studies 3100E.

**1.0 course** from: English 3000-3999.

**1.0 course** from: English 3000-4999.

**1.0 course** from: English 4000-4999.

***Effective, September 1, 2020, the following change be made: Module/Program Revision.***

## **MAJOR IN ENGLISH LANGUAGE AND LITERATURE**

### **Module**

6.0 courses:

**1.0 course in a Survey of Literary Traditions** from: English 2301E, English 2401E, English 2501E, English 2601E; or the former English 2307E, the former English 2308E, the former English 2309E, the former English 2310E.

**1.0 course in Theory** from: English 2200-2260, English 3200-3210, **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 3300-3349, English 3440-3449, English 3540-3549, English 3640-3649; or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E, the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G (but not English 3333E (Huron) the former English 3444E, the former English 3446F/G).

**1.0 course in Post-1800 Literature** from: English 3350-3399, English 3450-3499, English 3550-3599, English 3650-3699, English 3700-3799, English 3850-3899; or the former English 3444E, the former English 3446F/G, the former English 3554E.

**1.0 course** from: English 2000-3999; 0.5 of this requirement may be substituted from Medieval Studies, Theatre Studies or Writing numbered 2200 to 3999.

**1.0\* course** from: English 3000-4990.

\*Note: Students enrolled in a Major Module in English as part of an Honours Double Major must complete 0.5 course in English numbered English 4000-4990. It is strongly recommended that those students interested in applying to a Master's degree complete 1.0 courses numbered English 4000-4990.

***Effective, September 1, 2020, the following change be made: Module/Program Revision.***

## **SPECIALIZATION IN ENGLISH LANGUAGE AND LITERATURE**

### **Module**

9.0 courses:

**1.0 course in a Survey of Literary Traditions** from: English 2301E, English 2401E, English 2501E, English 2601E; or the former English 2307E, the former English 2308E, the former English 2309E, the former English 2310E.

**1.0 course in Theory** from: English 2200-2260, English 3200-3210, **0.5 of this requirement may be substituted from Theatre Studies 3205F/G, Film Studies 3371F/G, or Writing 2215F/G.**

**1.0 course** from: English 2100-2999.

**1.0 course in Language or Medieval Literature and Language** from: English 3300-3319; or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E.

**1.0 course in Renaissance or Eighteenth-Century Literature** from: English 3320-3349, English 3440-3449, English 3540-3549, English 3640-3649; or the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G (but not English 3333E (Huron), the former English 3444E, the former English 3446F/G).

**1.0 course in Post-1800 Literature** from: English 3350-3399, English 3450-3499, English 3550-3599, English 3650-3699, English 3700-3799, English 3850-3899; or the former English 3444E, the former English 3446F/G, the former English 3554E.

**1.0 course** from: English 2000-3999; or, Medieval Studies, Theatre Studies, or Writing numbered 2200 to 3999; or Classical Studies 3100E.

**1.0 course** from: English 3000-3999.

**1.0 course** from: English 3000-4999.

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

## **MINOR IN ENGLISH LANGUAGE AND LITERATURE**

### **Module**

4.5 courses:

**1.0 course in a Survey of Literary Traditions** from: English 2301E, English 2401E, English 2501E, English 2601E; or the former English 2307E, the former English 2308E, the former English 2309E, the former English 2310E.

**0.5 course in Theory** from: English 2200-2260, English 3200-3210, **Theatre Studies 3205F/G, Film 3371F/G, or Writing 2215F/G.**

**1.0 course in Pre-1800 Literature** from: English 3290-3349, English 3440-3449, English 3540-3549, English 3640-3649; or the former English 3001, the former English 3012, the former English 3115E, the former English 3116E, the former English 3224E, the former English 3226E, the former English 3227E, the former English 3228F/G (but not English 3333E (Huron), the former English 3444E, the former English 3446F/G).

**1.0 course in Post-1800 Literature** from: English 3350-3399, English 3450-3499, English 3550-3599, English 3650-3699, English 3700-3799, English 3850-3899; or the former English 3444E, the former English 3446F/G, the former English 3554E.

**1.0 course** from: English 2000-3999.

---

## **Faculty of Science**

### **INTERDISCIPLINARY MEDICAL SCIENCES**

*Effective, September 1, 2021, the following change be made: Other Change.*

## **COMBINED HONOURS BMSC INTERDISCIPLINARY MEDICAL SCIENCES (IMS)/HBA**

### **STRUCTURE OF THE COMBINED DEGREE**

...  
Students will usually complete MEDICAL SCIENCES FIRST ENTRY (Medical Sciences 1 and 2) prior to ADMISSION TO THE BACHELOR OF MEDICAL SCIENCES (BMSc) PROGRAM. Students **should are encouraged to** complete their BREADTH REQUIREMENT FOR BACHELOR DEGREES by the end of Year 2.  
...

#### **Admission Requirements**

It is recommended that students do not complete more than two years of course work prior to admission to HBA1. It is possible, however, to undertake the combined program with more than 10.0 courses prior to entry into the first year of the HBA but completion of the program may take more than five academic years. Students in this situation should contact both the BMSUE Coordinator and the Ivey School of Business.

Applications for the combined degrees must be made during HBA1 to the HBA program and the BMSUE Coordinator by the published deadlines for Ivey. The Ivey School's Advanced Entry Opportunity (AEO) students are also eligible to apply to the combined degrees. Entrance to the combined degrees is competitive and limited.

...

#### **Year 4**

2.0 courses from Group 1 – **see Note 1.**

1.0 course from: Group 1 or (0.5 from Group 1 and 0.5 from Group 2) – **see Note 1.**

0.5 course from: Group 3 or Physiology and Pharmacology 3000E - **see Note 2.**

**0.5 course from: Chemistry numbered 2100-3999 or 0.5 course from Group 1 or 2 – see Note 3**

**A maximum of 0.5 course from either Chemistry numbered 2100-3999 or Groups 1-3 that is completed prior to admission to the combined program course may be used toward the Year 4 BMSc (IMS) requirements. Any additional course(s) completed prior to admission to the combined program may be used toward the Year 4 BMSc (IMS) requirements only if an additional optional course(s) is completed. A maximum of 0.5 of the courses listed in Year 4 BMSc (IMS) requirements may be deferred until Year 5.**

Group 1: Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 3309, Biochemistry 3381A, Biochemistry 3382A, Biostatistics 3100A, Biostatistics 3110B, Epidemiology 2200A/B, Epidemiology 3200A, Medical Biophysics 3330F/G, Medical Biophysics 3336F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Microbiology and Immunology 2500A/B, Microbiology and Immunology 3100A, Microbiology and Immunology 3300B, Pathology 3500, Pharmacology 3620, Physiology 3120, Physiology 3140A, any of the former courses: the former Epidemiology and Biostatistics 2200A/B, the former Pathology 3240A, the former Pathology 3245B.

Group 2: Anatomy and Cell Biology 3200A/B, Biochemistry 3385A, Biochemistry 3386B, Biochemistry 3390B, Epidemiology 3210B, Epidemiology 3315B, Epidemiology 3330F/G, Microbiology and Immunology 3500B, Pharmacology 2060A/B, the former Anatomy and Cell Biology 3319.

Group 3: Biochemistry 3380G, Medical Biophysics 3970Z, Medical Sciences 3900F/G, Microbiology and Immunology 3610F, Microbiology and Immunology 3620G, Physiology and Pharmacology 3000E, one of the former Pharmacology 3580Z, the former Physiology 3130Z.

#### **Year 5**

1.0 course: Medical Sciences 4900F/G, Medical Sciences 4930F/G.  
 2.0 additional courses at the 4000-level from at least two of the following subject areas: Anatomy and Cell Biology, Biochemistry, Biostatistics, Epidemiology, Medical Biophysics, Medical Sciences, Microbiology and Immunology, Pathology, Pharmacology, Physiology.  
 Note: a maximum of 1.5 of these 4000-level courses can be selected from one subject area.

**Notes:**

1. Of these 3.0 specific courses from Groups 1-2, a maximum of 2.0 courses can be from one subject area (e.g. a maximum of 2.0 can be Biochemistry courses). It is not mandatory to complete any Group 2 courses. If the former Anatomy and Cell Biology 3319 was taken as a Group 2 course, then the total number of courses required for the module will increase by 0.5 course.

2. If Physiology and Pharmacology 3000E is selected to satisfy the Group 3 requirement, then the total number of courses required for the Honours Specialization in IMS will increase by 0.5 course.

3. Chemistry 2223B is a prerequisite for the following Group 1 and 3 courses: Biochemistry 3381A, Biochemistry 3382A and Microbiology and Immunology 3620G.

3. 4. See UNDERGRADUATE COURSE INFORMATION for the requisites for 3000- and 4000-level courses, and the BSc website for information about constraints (priority and restricted access) for all basic medical science courses.

4. 5. Both the breadth and essay requirements of a BSc degree must be satisfied. The essay requirement is satisfied with modular courses. See "Graduation Requirements for Honours Bachelor degrees".

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

For students who entered the HBA Program in September 2017, 2018 and 2019, please refer to the 2019/20 Academic Calendar.

## Faculty of Science/Schulich School of Medicine & Dentistry; including BSc and Neuroscience

### ANATOMY AND CELL BIOLOGY

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

#### HONOURS SPECIALIZATION IN NEUROSCIENCE

##### Module

11.0 10.5 courses:

**0.5 course:** Biochemistry 2280A.

**0.5 course:** Biology 2382A/B.

**1.0 course:** Neuroscience 2000.

**1.0 course:** Psychology 2800E.

**1.0 course** from: Psychology 2810 or the combination of Biology 2244A/B or Statistical Sciences 2244A/B and Computer Science 2120A/B.

**0.5 course:** Psychology 3224A/B.

**0.5 course:** Neuroscience 3000F/G.

**1.0 course:** Pharmacology 3620.

**DAP Submission Period:** March 1-15, 2020

**0.5 course:** Physiology 3140A.

**0.5 course from:** Communication Sciences and Disorders 3317A/B, or Medical Sciences 3900F/G, **Psychology 3996F, or Psychology 3997G** (see note below).

**1.0 course from:** 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.

**0.5 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.**

**0.5 course from:** Physiology 4630A/B, Physiology 4650A/B, Physiology 4680A/B, Physiology 4710A/B.

**0.5 course from:** Psychology 4190F/G, Psychology 4195F/G, Psychology 4222F/G, Psychology 4223F/G, Psychology 4224F/G, Psychology 4290F/G, Psychology 4295F/G.

1.5 courses: Neuroscience 4000E (Research Project = 1.5 courses).

**Note:** For students admitted to the Honours Specialization in Neuroscience in September 2018 and prior, please refer to the 2018-19 Academic Calendar.

### 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 **6.5 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.

## MEDICAL BIOPHYSICS

*Effective, September 1, 2020, the following change be made: Other Change.*

### HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Biological Science Concentration)

#### Admission Requirements

Completion of first-year requirements (5.0 courses) with no failures. Students must have an average of at least 70% in the following 4.0 principal courses, with no mark below 60% in any of these courses:

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

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

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

0.5 course from: Calculus 1301A/B, Calculus 1501A/B

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

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

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

#### Module

10.0 courses:

**0.5 course:** Biochemistry 2280A.

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

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

**DAP Submission Period:** March 1-15, 2020

**0.5 course:** Chemistry 2213A/B.

**0.5 course:** Computer Science 2035A/B.

**3.0 courses:** Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3970Z.

**1.0 course:** Physiology 2130.

**1.5 courses** from: Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B, Medical Biophysics 4700B.

**1.5 courses:** Medical Biophysics 4970E (Research Project = 1.5 courses).

**Note:** 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.

*Effective, September 1, 2020, the following change be made: Other Change.*

### **HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Clinical Physics Concentration)**

#### **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 or Calculus 1500A/B

0.5 course from: Calculus 1301A/B or Calculus 1501A/B

0.5 course from: Physics 1028A/B\*\*, Physics 1301A/B, Physics 1501A/B (one of Physics 1301A/B or Physics 1501A/B is preferred); **a minimum mark of 80% is required in Physics 1028A/B, if taken**

0.5 course from: Physics 1029A/B\*\*, Physics 1302A/B, Physics 1502A/B (one of Physics 1302A/B or Physics 1502A/B is preferred); **a minimum mark of 80% is required in Physics 1029A/B, if taken**

\* 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.

\*\*A minimum mark of 80% in each of Physics 1028A/B and Physics 1029A/B is required as a prerequisite for Physics 2101A/B, Physics 2102A/B and Physics 2110A/B.

The 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 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 from: Calculus 2302A/B, Calculus 2502A/B.

0.5 course from: Calculus 2303A/B, Calculus 2503A/B.

0.5 course: Mathematics 1600A/B.

1.5 courses: Physics 2101A/B, Physics 2102A/B, Physics 2110A/B.

**Note:** 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

**DAP Submission Period:** March 1-15, 2020

how biophysics concepts are applied in translational health research.

**Module**

11.5 courses:

**0.5 course** from: Calculus 2302A/B, Calculus 2502A/B.

**0.5 course** from: Calculus 2303A/B, Calculus 2503A/B.

**0.5 course:** Mathematics 1600A/B.

**1.5 courses:** Physics 2101A/B, Physics 2102A/B, Physics 2110A/B.

**1.0 course** from: Physiology 2130 or Physiology 3120.

**3.0 courses:** Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3970Z.

**2.0 courses** from: Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, Physics 3380A/B, Physics 3400A/B.

**1.0 course:** Medical Biophysics 4467A/B, Medical Biophysics 4475A/B.

**1.5 courses:** Medical Biophysics 4971E. (Research Project = 1.5 courses)

**Note:** see the Weighted Average Chart (MODULES OFFERED IN THE BSc PROGRAM) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

*Effective, September 1, 2020, the following change be made: Other Change.*

**HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Medical Science Concentration)**

**Admission Requirements**

Admission to this Honours Specialization module occurs in Year 3 and requires admission to Year 3 of the Bachelor of Medical Sciences (BSc) Program. Students will usually complete MEDICAL SCIENCES FIRST ENTRY (Medical Sciences 1 and 2) prior to admission to 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: Calculus 1301A/B, Calculus 1501A/B.

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B (one of Physics 1301A/B or Physics 1501A/B is preferred).

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B (one of Physics 1302A/B or Physics 1502A/B is preferred).

\* 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 (BSc) PROGRAM for additional average, course load requirements, etc. and MODULES OFFERED IN THE BSc PROGRAM for specific information about Honours Specialization modules, including the Weighted Average Chart.

0.5 course: Biochemistry 2280A.

0.5 course: Chemistry 2213A/B.

0.5 course: Computer Science 2035A/B.

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



**DAP Submission Period:** March 1-15, 2020

**Note:** 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.

*Effective, September 1, 2020, the following change be made: Admission Requirement Revision.*

### **HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS (Physical Science Concentration)**

#### **Admission Requirements**

Completion of first-year requirements with no failures. Students must have an average of at least 70% on the following 4.0 principal courses, with no mark below 60% in any of these (full or half) principal courses:

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1401A/B or Physics 1501A/B (one of Physics 1301A/B or Physics 1501A/B is preferred; a minimum mark of 80% is required in Physics 1028A/B, if taken).

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1402A/B or Physics 1502A/B (one of Physics 1302A/B or Physics 1502A/B is preferred; a minimum mark of 80% is required in Physics 1029A/B, if taken).

1.0 course from: Calculus 1000A/B or Calculus 1500A/B, and Calculus 1301A/B or Calculus 1501A/B, or Applied Mathematics 1413.

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

1.0 course: Biology 1001A and Biology 1002B (may be deferred until Year 2). Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

#### **Module**

10.0 courses:

**1.0 course** from: Physics 2101A/B and Physics 2102A/B.

**0.5 course** from: Calculus 2302A/B, Calculus 2502A/B.

**0.5 course** from: Calculus 2303A/B, Calculus 2503A/B.

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

**0.5 course:** Computer Science 2035A/B.

**3.5 courses:** Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G, Medical Biophysics 3645A/B and Medical Biophysics 3970Z.

**1.5 courses:** Medical Biophysics 4970E (Research Project = 1.5 courses).

**1.0 course** from: Medical Biophysics 4445A/B, Medical Biophysics 4455A/B, Medical Biophysics 4467A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B.

**1.0 course** from: Applied Mathematics 2402A, Applied Mathematics 2811B, Applied Mathematics 3615A/B, Chemistry 2213A/B, Chemistry 2214A/B, Chemistry 2223B, Engineering Science 1036A/B, Mathematics 1600A/B, Physics 2110A/B, **Physics 2600A/B**, an additional one or two half courses in Medical Biophysics at the 3000- or 4000-level, the former Applied Mathematics 2813B, **the former Physics 2600A/B**.

**Note:** 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.

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

**DAP Submission Period:** March 1-15, 2020

## **HONOURS SPECIALIZATION IN BIOCHEMISTRY AND CANCER BIOLOGY**

### **Module**

11.0 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: Biology 2244A/B, Statistical Sciences 2244A/B.
- 0.5 course from: Chemistry 2213A/B, Chemistry 2273A.
- 0.5 course from: Chemistry 2223B, Chemistry 2283G.
- 0.5 course: Microbiology and Immunology 2500A/B.
- 0.5 course: **Medical Biophysics 3518B or the former** Medical Biophysics 2582B.
- 1.5 courses: Biochemistry 3381A, Biochemistry 4450A, Biochemistry 4455G.
- 1.0 course: Pharmacology 3620.
- 0.5 course from: Biochemistry 3382A, Chemistry 3393A/B, Microbiology and Immunology 3300B (see note 1 below).
- 1.0 course from: Anatomy and Cell Biology 3309, Pathology 3500 (or the former Pathology 3240A and the former Pathology 3245B).
- 0.5 course from: Biochemistry 3380G, Microbiology and Immunology 3620G, Physiology and Pharmacology 3000E (see note 1 below), the former Pharmacology 3580Z. A mark of at least 70% is required in the course taken.
- 1.0 course from: Anatomy and Cell Biology 4461B, Microbiology and Immunology 4300A, Pharmacology 4360A/B.
- 1.5 courses: Biochemistry 4486E (Research Project = 1.5 courses).
- ...

**Revisions to the Weighted Average Chart on the MODULES OFFERED IN THE BMSc PROGRAM page:**

### **Honours Specialization**

Biochemistry and Cancer Biology

### **Modular courses responsible for 1/3 of the Weighted Average**

**3.5 or** 4.0 courses:  
Biochemistry 2280A; Biology 2382A/B and Biology 2581A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; Biology 2244A/B or Statistical Sciences 2244A/B; Microbiology and Immunology 2500A/B; **the former** Medical Biophysics 2582B.

### **Modular courses responsible for 2/3 of the Weighted Average**

3.5 or **4.0 or 4.5** courses:  
Biochemistry 3381A; Pharmacology 3620; Anatomy and Cell Biology 3309 or Pathology 3500 (or the former Pathology 3240A and the former Pathology 3245B); one of Biochemistry 3382A, Chemistry 3393A/B or Microbiology and Immunology 3300B; one of Biochemistry 3380G, Microbiology and Immunology 3620G, Physiology and Pharmacology 3000E, or the former Pharmacology 3580Z; **and Medical Biophysics 3518B if the former Medical Biophysics 2582B was not completed.**

**Effective, September 1, 2020, the following change be made: Other Change.**

## **HONOURS SPECIALIZATION IN MEDICAL BIOPHYSICS AND BIOCHEMISTRY**

### **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

**DAP Submission Period:** March 1-15, 2020

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, or the former Chemistry 1100A/B and the former Chemistry 1200B.
- 0.5 course from: Calculus 1000A/B, Calculus 1500A/B.
- 0.5 course from: Calculus 1301A/B, Calculus 1501A/B.
- 0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B.
- 0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B.

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

The 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 (BSc) PROGRAM** for additional average, course load requirements, etc. and **MODULES OFFERED IN THE BSc 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: 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.
- 0.5 course: Computer Science 2035A/B.
- 0.5 course: Medical Biophysics 2582B.

**Note:** 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**

10.5 courses:

- 0.5 course:** Biochemistry 2280A.
- 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.
- 0.5 course:** Computer Science 2035A/B.
- 0.5 course:** Medical Biophysics 3518B or the former Medical Biophysics 2582B.
- 1.0 course:** Physiology 2130.
- 1.0 course:** Biochemistry 3381A, Biochemistry 3382A.
- 1.0 course:** Medical Biophysics 3501A, Medical Biophysics 3507G.
- 0.5 course** from: Biochemistry 3380G or Medical Biophysics 3970Z.
- 1.0 course:** Biochemistry 4410A, Biochemistry 4420A.
- 0.5 course:** Medical Biophysics 4518B.
- 0.5 course** from: Medical Biophysics 3645A/B, Medical Biophysics 4467A/B.
- 1.5 courses** from: Biochemistry 4483E or Medical Biophysics 4970E.

**Note:** see the Weighted Average Chart (**MODULES OFFERED IN THE BSc PROGRAM**) for information about admission to the Honours Specialization modules in Year 4, including which modular courses must be completed prior to Year 4.

**Revisions to the Weighted Average Chart on the MODULES OFFERED IN THE BSc**

**DAP Submission Period:** March 1-15, 2020

**PROGRAM page:**

**Honours Specialization**

Medical Biophysics and Biochemistry

**Module Modular courses responsible for 1/3 of the Weighted Average**

3.0 or 3.5 courses:

Biochemistry 2280A; Biology 2581A/B; Biology 2244A/B or Statistical Sciences 2244A/B; Chemistry 2213A/B or Chemistry 2273A; Chemistry 2223B or Chemistry 2283G; Computer Science 2035A/B; **the former** Medical Biophysics 2582B

**Modular courses responsible for 2/3 of the Weighted Average**

2.5 or 3.0 courses:

Biochemistry 3381A and Biochemistry 3382A; Biochemistry 3380G or Medical Biophysics 3970Z; Medical Biophysics 3501A and Medical Biophysics 3507G; **and Medical Biophysics 3518B if the former Medical Biophysics 2582B was not taken**

*Effective, September 1, 2020, the following change be made: Other Change.*

**MAJOR IN MEDICAL BIOPHYSICS**

**Admission Requirements**

Both 1000- and 2000-level courses are included in the Admission Requirements for students pursuing the Major in Medical Biophysics in BSc degrees, since admission to the BSc Program does not occur until Year 3. The Admission Requirements for students pursuing the Major in other regular undergraduate degrees include only 1000-level courses, since students may register in the Major in Year 2 in non-BSc degrees. The Module requirements (below) are the same for all students completing the Major.

**Note:** 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.

Admission Requirements for students pursuing this Major module in a Bachelor of Medical Sciences (BSc) degree: NO CHANGE

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

Completion of first-year requirements, including a mark of at least 60% in each of the 4.0 (full or half) principal courses below:

1.0 course: Biology 1001A\* and Biology 1002B\* (may be deferred until Year 2).

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

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

0.5 course from: Calculus 1301A/B, Calculus 1501A/B.

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1501A/B (one of Physics 1301A/B or Physics 1501A/B is preferred).

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1502A/B (one of Physics 1302A/B or Physics 1502A/B is preferred).

\* 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.

*Effective, September 1, 2020, the following change be made: Other Change.*

**DAP Submission Period:** March 1-15, 2020

## MINOR IN MEDICAL BIOPHYSICS

### Admission Requirements

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

0.5 course from: Physics 1028A/B, Physics 1301A/B, Physics 1401A/B or Physics 1501A/B.

0.5 course from: Physics 1029A/B, Physics 1302A/B, Physics 1402A/B or Physics 1502A/B.

1.0 course from: Calculus 1000A/B or Calculus 1500A/B, and Calculus 1301A/B or Calculus 1501A/B, or Applied Mathematics 1413.

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

1.0 course: Biology 1001A and Biology 1002B (may be deferred until Year 2). Biology 1201A with a mark of at least 70% may be used in place of Biology 1001A, and Biology 1202B with a mark of at least 70% may be used in place of Biology 1002B.

### Module

4.0 courses:

**0.5 course:** Computer Science 2035A/B.

**2.5 courses:** Medical Biophysics 3330F/G, Medical Biophysics 3501A, Medical Biophysics 3503G, Medical Biophysics 3505F, Medical Biophysics 3507G.

**1.0 courses** from: Biochemistry 2280A, Biology 2382A/B, Biology 2581A/B, Calculus 2302A/B, Calculus 2303A/B, Chemistry 2214A/B, Computer Science 1025A/B or Computer Science 1026A/B or Engineering Science 1036A/B, Mathematics 1600A/B, additional courses in Medical Biophysics at the **2000- and/or** 3000-level, Physics 2101A/B, Physics 2102A/B.

**Note:** 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.

---

## Inter-Faculty Departments and Programs

### LINGUISTICS

*Effective, September 1, 2020, the following change be made: Module/Program Revision.*

#### HONOURS SPECIALIZATION IN LINGUISTICS

##### Module

9.0 courses:

**1.0 course:** Linguistics 2247A/B and Linguistics 2248A/B or the former Anthropology 2247A/B and the former Anthropology 2248A/B. At least 75% in each course is required for progression in the module.

**2.5 courses:** Anthropology 3339F/G, Linguistics 2242A/B, Linguistics 4247A/B, Linguistics 4248A/B, Linguistics 4490F/G.

**1.0 Language course(s)** to be selected in consultation with one of the Linguistics Co-directors.

**1.5 courses** from Formal approaches to language: Anthropology 3237A/B, Anthropology 3343A/B, Communication Sciences and Disorders 4411A/B, Communication Sciences and Disorders 4439A/B, French 2805A/B, French 2806A/B, French 3810A/B, French 3830A/B, French 4811F/G, French 4821F/G, French 4830F/G, French 4841F/G, French 4881F/G, Linguistics 2244A/B, Linguistics 3100A/B, Linguistics 3102A/B, Philosophy

**DAP Submission Period:** March 1-15, 2020

3260F/G, Philosophy 3270F/G, Philosophy 4210F/G, Psychology 2134A/B, Spanish 3303A/B, Spanish 3317A/B, Spanish 3318A/B, Spanish 3319A/B, Spanish 4415A/B. .

**1.5 courses** from Social aspects of language: Anthropology 2245F/G, Anthropology 2249F/G, Anthropology 2251F/G, Anthropology 2252F/G or the former Linguistics 2285F/G, Anthropology 3243F/G or the former Anthropology 2243F/G, French 3870A/B, French 4040A/B, French 4850F/G, Spanish 3314F/G, Spanish 4412F/G, Spanish 4413F/G and the former Linguistics 2286F/G.

**1.5 additional courses** from the following or any course from above not already taken: Anthropology 2246F/G, Anthropology 2250F/G, **Anthropology 2253A/B**, Anthropology 4412F/G, Classical Studies 2800A/B, English 3300, English 3310 (or the former English 3001, the former English 3012), French 4100F/G, **Indigenous Studies 2253A/B**, Linguistics 3340A/B, Linguistics 3390A/B, Philosophy 2250, Philosophy 2260F/G, Philosophy 3201A/B, Psychology 3140F/G, Psychology 3141F/G, Psychology 3184F/G, the former Psychology 3142E, Spanish 2121A/B, Spanish 2214A/B, Spanish 2956A/B-2960A/B, Spanish 3911A/B-3920A/B, Spanish 4921F/G-4925F/G, Spanish 4926A/B-4930A/B, or other courses by permission of the Program.

**Effective, September 1, 2020, the following change be made: Module/Program Revision.**

## **MAJOR IN LINGUISTICS**

### **Module**

6.0 courses:

**2.0 courses:** Anthropology 3339F/G, Linguistics 2242A/B, Linguistics 2247A/B (or the former Anthropology 2247A/B), Linguistics 2248A/B (or the former Anthropology 2248A/B).

**1.0 courses from "Formal approaches to language":** Anthropology 3237A/B, Anthropology 3343A/B, Communication Sciences and Disorders 4411A/B, Communication Sciences and Disorders 4439A/B, French 2805A/B, French 2806A/B, French 3810A/B, French 3830A/B, French 4811F/G, French 4821F/G, French 4830F/G, French 4841F/G, French 4881F/G, Linguistics 2244A/B, Linguistics 3100A/B, Linguistics 3102A/B, Philosophy 3260F/G, Philosophy 3270F/G, Philosophy 4210F/G, Psychology 2134A/B, Spanish 3303A/B, Spanish 3317A/B, Spanish 3318A/B, Spanish 3319A/B, Spanish 4415A/B.

**1.0 courses from Social aspects of language:** Anthropology 2245F/G, Anthropology 2249F/G, Anthropology 2251F/G, Anthropology 2252F/G or the former Linguistics 2285F/G, , Anthropology 3243F/G or the former Anthropology 2243F/G, French 3870A/B, French 4040A/B, French 4850F/G, Spanish 3314F/G, Spanish 4412F/G, Spanish 4413F/G and the former Linguistics 2286F/G.

**2.0 additional courses** from the following or any course from above not already taken: Anthropology 2246F/G, Anthropology 2250F/G, **Anthropology 2253A/B** Anthropology 4412F/G, Classical Studies 2800A/B, English 3300, English 3310 (or the former English 3001, the former English 3012), French 4100F/G, **Indigenous Studies 2253A/B**, Linguistics 3340A/B, Linguistics 3390A/B, Linguistics 4490F/G, Philosophy 2250, Philosophy 2260F/G, Philosophy 3201A/B, Psychology 3140F/G, Psychology 3141F/G, Psychology 3184F/G, the former Psychology 3142E, Spanish 2214A/B, Spanish 2956A/B-2960A/B, Spanish 3911A/B-3920A/B, Spanish 4921F/G-4925F/G, Spanish 4926A/B-4930A/B, or other courses by permission of the Program.

Note: Some courses are offered only in alternate years. Students are advised to consult one of the Co-Directors of the Inter-Faculty Program in Linguistics when planning their module.

**Effective, September 1, 2020, the following change be made: Module/Program Revision.**

## **MINOR IN LINGUISTICS**

### **Module**

4.0 courses:

**1.0 courses:** Linguistics 2247A/B (or the former Anthropology 2247A/B), Linguistics 2248A/B (or the former Anthropology 2248A/B).

**0.5 course:** Anthropology 3339F/G or any 3000-level course from the categories "Formal approaches to language" or "Social aspects of language" not already taken.

**0.5 course** from "Formal approaches to language": Anthropology 3237A/B, Anthropology 3343A/B, Communication Sciences and Disorders 4411A/B, Communication Sciences and Disorders 4439A/B, French 2805A/B, French 2806A/B, French 3810A/B, French 3830A/B, French 4811F/G, French 4821F/G, French 4830F/G, French 4841F/G, French 4881F/G, Linguistics 2242A/B, Linguistics 2244A/B, Linguistics 3100A/B, Linguistics 3102A/B, Philosophy 3260F/G, Philosophy 3270F/G, Philosophy 4210F/G, Psychology 2134A/B, Spanish 3303A/B, Spanish 3317A/B, Spanish 3318A/B, Spanish 3319A/B, Spanish 4415A/B.

**0.5 courses** from **Social aspects of language:** Anthropology 2245F/G, Anthropology 2249F/G, Anthropology 2251F/G, Anthropology 2252F/G or the former Linguistics 2285F/G, Anthropology 3243F/G or the former Anthropology 2243F/G, French 3870A/B, French 4040A/B, French 4850F/G, Spanish 3314F/G, Spanish 4412F/G, Spanish 4413F/G and the former Linguistics 2286F/G.

**1.5 additional courses** from the following or any course from above not already taken: Anthropology 2246F/G, Anthropology 2250F/G, **Anthropology 2253A/B**, Anthropology 4412F/G, Classical Studies 2800A/B, English 3300, English 3310 (or the former English 3001, the former English 3012), French 4100F/G, **Indigenous Studies 2253A/B**, Linguistics 3340A/B, Linguistics 3390A/B, Linguistics 4490F/G Philosophy 2250, Philosophy 2260F/G, Philosophy 3201A/B, Psychology 3140F/G, Psychology 3141F/G, Psychology 3184F/G, the former Psychology 3142E, Spanish 2121A/B, Spanish 2214A/B, Spanish 2956A/B-2960A/B, Spanish 3911A/B-3920A/B, Spanish 4921F/G-4925F/G, Spanish 4926A/B-4930A/B or other courses by permission of the Program.

Note: Some courses are offered only in alternate years. Students are advised to consult one of the Co-Directors of the Inter-Faculty Program in Linguistics when planning their module.