



---

## **2002-2003 Program Information**

# Programs

Architectural Studies  
Art and Culture  
Art History  
Biochemistry  
Biology  
Biotechnology  
Business  
Canadian Studies  
Chemistry  
Child Studies  
Classics and Religion  
Cognitive Science  
Computational Science  
Computer Science  
Criminology and Criminal Justice  
Directed Interdisciplinary Studies  
Economics  
Engineering:  
    Aerospace  
    Civil  
    Communications  
    Computer Systems  
    Electrical  
    Engineering Physics  
    Environmental  
    Mechanical  
    Software  
English  
Environmental Science  
Environmental Studies  
European and Russian Studies  
Film Studies  
French  
Geography  
Geographic Information Processing  
Geology  
History  
Human Rights  
Humanities  
Industrial Design  
Integrated Science  
Journalism  
Law  
Linguistics and Applied Language Studies  
Mass Communication  
Mathematics and Statistics  
Music  
Philosophy  
Physics  
Political Science  
Psychology  
Public Affairs and Policy Management  
Public Service Studies Certificate  
Social Work  
Sociology and Anthropology  
Technology, Society and Environment Studies  
Undeclared (Guide for registration)  
Women's Studies

---

## Architectural Studies

School of Architecture  
Faculty of Engineering and Design

This section presents the requirements for:

- **Bachelor of Architectural Studies (B.A.S.)**

The Co-operative Education Option is available with the Bachelor of Architectural Studies.

The School of Architecture cooperates with the School for Studies in Art and Culture in offering the B.A. Honours and B.A. General programs in History and Theory of Architecture (see the Art History program section of this Calendar for details).

In addition to the requirements listed below, students must satisfy the University regulations (see the *Academic Regulations of the University* section of this Calendar).

Students should consult the School when planning their program and selecting courses.

### Academic Performance Evaluation for Bachelor of Architectural Studies

1. The B.A.S. degree follows the regulations for Academic Performance evaluation for Engineering and Design Programs. The B.A.S. program does not distinguish a set of courses forming a Major. Academic Performance Evaluation is made using the Overall CGPA and the Core CGPA.
2. The Architecture Core consists of the following courses: ARCS 1005, ARCS 1105 [1.0], ARCS 2105 [1.5], ARCS 2106 [1.5], ARCS 3105 [1.5], ARCS 3106 [1.5], ARCS 4105 [1.5], ARCS 4106 [1.5].
3. Good Standing requires that the CGPA over courses in the Architecture Core, the Core CGPA, be at least 4.00.
4. Students wishing to continue into the professional M.Arch. degree program must have successfully completed the B.A.S. degree program with an Overall CGPA of 7.00 or better.

### Architectural Studies – B.A.S. (20.0 credits)

#### Requirements

1. 10.5 credits in the Architecture Core: ARCS 1005, ARCS 1105 [1.0], ARCS 2105 [1.5], ARCS 2106 [1.5], ARCS 3105 [1.5], ARCS 3106 [1.5], ARCS 4105 [1.5], ARCS 4106 [1.5];
2. 3.5 credits in ARCH 1000, ARCN 2105, ARCC 2202, ARCH 2300, ARCC 2203, ARCC 3202, ARCC 4500;
3. 1.0 credit from: ARCH 3208, ARCH 3902, ARCH 4205, ARCC 3004, ARCC 3305, ARCC 3902, ARCU 3203, ARCU 3405, ARCU 3409, ARCU 3902, ARCN 3003, ARCN 3206, ARCN 3302, ARCN 3303, ARCN 3400, ARCN 3402, ARCN 3902;
4. 1.5 credits in the Theory and History of Architecture (ARCH) or in ARTH 3002, ARTH 3005, ARTH 3609, or ARTH 4800;
5. 2.0 credits in IDES 2106, CIVE 1005, ARTH 1100, ARTH 110;
6. 1.5 credit in free electives.

#### Retention of Work

Keeping a good portfolio is a most important part of architectural education. A portfolio represents a record of the student's progress and design experience over the years. It is an indispensable requirement for any job application in the future. A portfolio is started in first year and continues to expand until graduation. The School, therefore, requires that each student produce reductions (normally 8 1/2 x 11 inch reproductions,

colour or black and white, slides, and/or digital format CD) of their work at the end of each term. One copy of the work should be put in the student's portfolio and the other turned in to the instructor for retention in the School's archives. (This facilitates retrospective exhibitions of work, accreditation, publications and any future references for pedagogic purposes.) Original work is the property of the students, but the School retains the right to keep work of merit for up to two years after the date of submission. The School will make every effort to preserve the work in good condition, and will give authorship credit and take care of its proper use.

---

## Art and Culture

School for Studies in Art and Culture  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Art and Culture - B.A. Honours**

In addition to the requirements listed here, students must satisfy:

- i) the University regulations (see *Academic Regulations of the University* in this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *The Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the School when planning their program and selecting courses.

### Art and Culture – B.A. Honours (20 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 2.0 credits from: FYSM 1001[1.0], ARTH 1100, ARTH 1101, ARTH 1200, ARTH 1201, FILM 1000, MUSI 1001, MUSI 1002;
2. 1.0 credit in ACUL 2000 [1.0];
3. 2.0 credits at the 2000-level from at least two of Art and Culture, Art History, Film Studies, or Music;
4. 1.0 credit from: ARTH 3106[1.0], FILM 3001, FILM 3501;
5. 2.0 credits from: ACUL 3905[1.0]; FILM 3105, FILM 3209, FILM 3301, FILM 3303[1.0], FILM 3402, FILM 3701, FILM 3801; MUSI 3103, MUSI 3104, MUSI 3302, MUSI 3402, MUSI 3403, MUSI 3404, MUSI 3800; SOAN 3803, SOAN 3805 or any course in Art History at the 3000-level;
6. 1.0 credit from: ACUL 4000, ACUL 4001, ACUL 4002, ACUL 4003;
7. 1.0 credit from: ARTH 4000, ARTH 4004, ARTH 4005, ARTH 4305, ARTH 4602, ARTH 4800, ARTH 4807, ARTH 4909[1.0]; FILM 4000[1.0], FILM 4201, FILM 4209, FILM 4401, FILM 4501, FILM 4800, FILM 4805, FILM 4901, FILM 4905[1.0]; MUSI 4006, MUSI 4300, MUSI 4303, MUSI 4703, MUSI 4800, MUSI 4801, MUSI 4908[1.0];

*Credits Not included in the Major CGPA (10.0 credits):*

8. 8.0 credits in electives not in Art and Culture, Art History, Film Studies or Music;
9. 2.0 credits in free electives.

---

## Art History

School for Studies in Art and Culture  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Art History – B.A. Honours**
- **Art History – B.A. Combined Honours**
- **Art History – B.A. General**
- **Minor in Art History**

and, offered in cooperation with the School of Architecture:

- **History and Theory of Architecture – B.A. Honours**
- **History and Theory of Architecture – B.A. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* in this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *The Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the School when planning their program and selecting courses.

### Course Categories for the Art History Programs

The program descriptions below make use of the following course categories.

#### *Period Studies*

*Before 1750:* ARTH 2100, ARTH 2202, ARTH 2300, ARTH 2403, ARTH 3101, ARTH 4202

*After 1750:* ARTH 2502, ARTH 2600, ARTH 2601, ARTH 3006, ARTH 4505

#### *Canadian and Aboriginal Art*

ARTH 2002, ARTH 2003, ARTH 2005, ARTH 2006, ARTH 3000, ARTH 3001, ARTH 3002, ARTH 3104, ARTH 3602, ARTH 4000, ARTH 4001, ARTH 4005

#### *Methodology, Theory and Criticism*

ARTH 2608, ARTH 2806, ARTH 2807, ARTH 3103, ARTH 3106[1.0], ARTH 3506, ARTH 3609, ARTH 4602, ARTH 4604, ARTH 4700, ARTH 4800, ARTH 4807

#### *Art, Institutions and Society*

ARTH 3005, ARTH 3301, ARTH 3505, ARTH 3507, ARTH 3600, ARTH 3601, ARTH 3603, ARTH 3705, ARTH 3900/ ARTH 3901/ ARTH 3902, ARTH 4305, ARTH 4600, ARTH 4603, ARTH 4705

#### *Aboriginal/Non-Western Art*

ARTH 2005, ARTH 2006, ARTH 3103, ARTH 3104, ARTH 4005

### Art History - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in ARTH 1100 and ARTH 1101 (to be completed by the end of second year, that is, normally within the first ten credits);
2. 1.0 credit in Period Studies Before 1750;
3. 1.0 credit in Period Studies After 1750;
4. 0.5 credit at the 2000-level in Canadian and Aboriginal Art;
5. 1.0 credit in ARTH 3106 [1.0];
6. 5.5 credits in Art History collectively satisfying:
  - a) 2.0 credits at the 3000-level;
  - b) 1.5 credits at the 4000-level excluding ARTH 4900, ARTH 4901, ARTH 4902, ARTH 4909[1.0];
  - c) 1.0 credit in Art History at the 4000-level;

- d) 1.0 credit in Art History;
- and
- e) 0.5 credit in Canadian and Aboriginal Art;
- f) 1.0 credit in Art, Institutions and Society;
- g) 0.5 credit in Aboriginal/Non-Western Art.

*Credits Not Included in the Major CGPA (10.0 credits)*

- 7. 8.0 credits in electives not in Art History;
- 8. 2.0 credits in free electives.

### **Art History – B.A. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (6.5 credits)*

- 1. 1.0 credit in ARTH 1100 and ARTH 110;
- 2. 5.5 credits in Art History collectively satisfying:
  - a) 4.0 credits at the 2000-level or above;
  - b) 0.5 credits at the 4000-level excluding ARTH 4900, ARTH 4901, ARTH 4902, ARTH 4909[1.0];
  - c) 1.0 credit at the 4000-level;
  - and
  - d) 0.5 credit in Period Studies Before 1750;
  - e) 0.5 credit in Period Studies After 1750;
  - f) 0.5 credit in Canadian and Aboriginal Art;
  - g) 0.5 credit in Methodology, Theory and Criticism;
  - h) 0.5 credit in Art, Institutions and Society;

*Additional Requirements*

- 3. The requirements of the other discipline must be satisfied;
- 4. 5.0 credits in electives not in Art History or the other discipline;
- 5. Sufficient free electives to make 20.0 credits in total for the program.

### **Art History – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.5 credits)*

- 1. 1.0 credit in ARTH 1100 and ARTH 1101;
- 2. 1.0 credit in Period Studies Before 1750;
- 3. 1.0 credit in Period Studies After 1750;
- 4. 0.5 credit at the 2000-level in Canadian and Aboriginal Art;
- 5. 3.0 credits in Art History collectively satisfying:
  - a) 2.0 credits at the 3000- or 4000-level;
  - b) 1.0 credit in Art History;
  - and
  - c) 0.5 credit in Methodology, Theory and Criticism;
  - d) 0.5 credit in Art, Institutions and Society;

*Credits Not Included in the Major CGPA (8.5 credits)*

- 6. 7.0 credits in electives not in Art History;
- 7. 1.5 credits in free electives.

### **Minor in Art History**

This minor is open to all undergraduate degree students not in Art History programs.

*Requirements (4.0 credits)*

- 1. 1.0 credit in ARTH 1100 and ARTH 1101;
- 2. 1.5 credits in Art History at the 2000-level;

- 3. 1.5 credits in Art History at the 3000- or 4000-level;
- 4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **History and Theory of Architecture – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

- 1. 2.0 credits in ARTH 1100, ARTH 1101, ARTH 1200, ARTH 2608;
- 2. 8.0 credits collectively satisfying:
  - a) at least 2.0 credits at the 2000-level or above;
  - b) at least 1.0 credit at the 4000-level;
  - c) 3.0 credits in Art History including at least 2.0 credits from the following list:
    - ARTH 2005, ARTH 2006, ARTH 2202, ARTH 2300, ARTH 2403, ARTH 2806, ARTH 2807, ARTH 3002, ARTH 3005, ARTH 3101, ARTH 3201, ARTH 3207, ARTH 3609, ARTH 3900, ARTH 3901, ARTH 3902, ARTH 3903, ARTH 4202, ARTH 4203, ARTH 4601, ARTH 4603, ARTH 4800, ARTH 4900, ARTH 4901, ARTH 4902, ARTH 4909 [1.0];
  - d) 3.0 credits in Art History or Architecture;
  - e) 2.0 credits in Architecture and/or from the following list: FYSM 1504, CLCV 3300 [1.0], CLCV 4300 [1.0], SOCI 2504, SOAN 3102, COMP 1001, COMP 1004;

*Credits Not Included in the Major CGPA (10.0 credits)*

- 7. 8.0 credits in electives not in Art History or Architecture;
- 8. 2.0 credits in free electives.

### **History and Theory of Architecture – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (7.0 credits)*

- 1. 2.0 credits in ARTH 1100, ARTH 1101, ARTH 1200, ARTH 2608;
- 2. 5.0 credits collectively satisfying:
  - a) at least 1.0 credit at the 3000- or 4000-level;
  - b) 2.0 credits in Art History including at least 1.0 credit from the following list:
    - ARTH 2005, ARTH 2006, ARTH 2100, ARTH 2202, ARTH 2300, ARTH 2403, ARTH 2806, ARTH 2807, ARTH 3002, ARTH 3005, ARTH 3101, ARTH 3201, ARTH 3207, ARTH 3609, ARTH 3900, ARTH 3901, ARTH 3902, ARTH 3903, ARTH 4202, ARTH 4203, ARTH 4305, ARTH 4601, ARTH 4603, ARTH 4800, ARTH 4900, ARTH 4901, ARTH 4902, ARTH 4909 [1.0]
  - c) 2.0 credits in Art History or Architecture;
  - d) 1.0 credit in Architecture and/or from the following list: FYSM 1504, CLCV 3300 [1.0], CLCV 4300 [1.0], SOCI 2504, SOAN 3102, COMP 1001, COMP 1004;

*Credits Not Included in the Major CGPA (8.0 credits)*

- 3. 7.0 credits in electives not in Art History or Architecture;
- 4. 1.0 credits in free electives.

### **Notes for programs in History and Theory of Architecture:**

- 1. No more than 1.5 credits may be taken as directed readings and/or the Honours Research essay.
- 2. Architecture courses which are workshops or studio-based may not be taken for credit in these programs.
- 3. Architecture courses taken to fulfil the requirements of these programs are not transferable to other programs in the Faculty of Arts and Social Sciences.

## Biochemistry

Institute of Biochemistry  
Faculty of Science

### Programs in Biochemistry

This section presents the requirements for the B.Sc. programs in:

- **Biochemistry – B.Sc. Honours**
- **Computational Biochemistry – B.Sc. Honours**
- **Biochemistry – B.Sc. General**

Requirements for the program Biochemistry and Biotechnology are presented in the Biotechnology program section of this Calendar.

Co-operative Education Option is available.

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University for the Bachelor of Arts Degree*),
- ii) the Faculty regulations applying to all B.Sc. students including those relating to Science Continuation and Breadth requirements (see *The Academic Regulations for the Bachelor of Science*).

Students should consult with the Institute when planning their program and selecting courses.

### Course Categories for Biochemistry

The program descriptions below make use of the following course categories that are defined in the Faculty of Science Regulations section of this Calendar.

#### Approved Arts or Social Science

##### Free Elective

#### Biochemistry – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (13.0 credits)*

1. 1.5 credits in BIOL 1003, BIOL 2104, BIOL 3104;
2. 0.5 credit in either BIOL 2001 or BIOL 2002;
3. 0.5 credit in either BIOL 3205 or BIOL 3305;
4. 1.0 credit from: BIOL 3201, BIOL 3205, BIOL 3301, BIOL 3303, BIOL 3305, BIOL 3501, BIOL 3505, BIOL 4008, BIOL 4009, BIOL 4103, BIOL 4104, BIOL 4106, BIOL 4109, BIOL 4201, BIOL 4206, BIOL 4209, BIOL 4300, BIOL 4301, BIOL 4302, BIOL 4303, BIOL 4305, BIOL 4505;
5. 5.0 credits in: CHEM 1000 [1.0], CHEM 2101 CHEM 3503, CHEM 2203, CHEM 2204, CHEM 2303, CHEM 3201, CHEM 3202, CHEM 3205;
6. 2.5 credits in: BIOC 2200, BIOC 3005, BIOC 3100[1.0], BIOC 4001;
7. 1.0 credit from: BIOC 4002, BIOC 4004, BIOC 4005, BIOC 4006, BIOC 4007, BIOC 4202, BIOC 4302, BIOC 4400, BIOC 4708;
8. 1.0 credit in either BIOC 4907 [1.0] or BIOC 4908 [1.0];

*Credits Not Included in the Major CGPA (7.0 credits)*

9. 1.0 credit in either (PHYS 1007 and PHYS 1008) or (PHYS 1003 and PHYS 1004);
10. 1.5 credits in MATH 1007, MATH 1107, and STAT 2507;
11. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
12. 1.5 credits in Approved Arts or Social Science;
13. 1.5 credits from the following: Biochemistry courses listed in but not used to fulfil Item 7 above, BIOC 4901; Biology courses listed in but not used to fulfil Item 4 above; CHEM 2102, CHEM 3101, CHEM 3102, CHEM 3503, CHEM 3504, CHEM 3700, CHEM 3800, CHEM 4202, CHEM 4203; PHYS 2305, PHYS 2306; MATH 2007, MATH 2008, MATH 2107; COMP 1002;

14. 1.0 credit in Free Electives.

#### Computational Biochemistry – B.Sc. Honours (20.0 credits)

*Credits Included in the Major (14.0 credits)*

1. 1.5 credits in BIOL 1003, BIOL 2104, BIOL 3104;
2. 1.0 credit in Biology at the 1000-level or higher;
3. 3.0 credits in CHEM 1000 [1.0], CHEM 2203, CHEM 2101, CHEM 2303, CHEM 3503;
4. 0.5 credit in CHEM 2204 or CHEM 2206;
5. 2.5 credits in Biochemistry: BIOC 2200, BIOC 3005, BIOC 3100 [1.0], BIOC 4006;
6. 0.5 credit in Biochemistry at the 4000-level or CHEM 4406;
7. 0.5 credit in Biochemistry at the 4000-level;
8. 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
9. 0.5 credits in Computer Science at the 2000-level or above;
10. 2.5 credits in CMPS 2800, CMPS 3604, CMPS 3800, CMPS 4909 [1.0];

*Credits Not Included in the Major (6.0 credits)*

11. 1.0 credit in PHYS 1007 and PHYS 1008; or PHYS 1003 and PHYS 1004;
12. 1.5 credits in MATH 1007, MATH 1107, and STAT 2507;
13. 2.0 credits in Approved Arts or Social Science;
14. 1.5 credits in Free Electives.

#### Biochemistry – B.Sc. General (20.0 credits)

*Credits Included in the Major CGPA (11.5 credits)*

1. 1.5 credits in BIOL 1003, BIOL 2104, BIOL 3104;
2. 0.5 credit in either BIOL 2001 or BIOL 2002;
3. 0.5 credit in either BIOL 3205 or BIOL 3305;
4. 1.0 credit from: BIOL 3201, BIOL 3205, BIOL 3301, BIOL 3303, BIOL 3305, BIOL 3501, BIOL 3505, BIOL 4008, BIOL 4009, BIOL 4103, BIOL 4104, BIOL 4106, BIOL 4109, BIOL 4201, BIOL 4206, BIOL 4209, BIOL 4300, BIOL 4301, BIOL 4302, BIOL 4303, BIOL 4305 [1.0], BIOL 4505 [1.0];
5. 2.5 credits in: BIOC 2200, BIOC 3005, BIOC 3100 [1.0], BIOC 4001;
6. 1.0 credit from: BIOC 4002, BIOC 4004, BIOC 4005, BIOC 4006, BIOC 4007, BIOC 4202, BIOC 4302, BIOC 4708;
7. 4.0 credits from: CHEM 1000[1.0], CHEM 2101, CHEM 2203, CHEM 2204, CHEM 2303, CHEM 3201, CHEM 3503;
8. 0.5 credit in CHEM 3202 or CHEM 3205;

*Credits Not Included in the Major CGPA (8.5 credits)*

9. 1.0 credit in either (PHYS 1007 and PHYS 1008) or (PHYS 1003 and PHYS 1004);
10. 1.5 credits in MATH 1007, MATH 1107, and STAT 2507;
11. 0.5 credits in NSCI 1000 or an Approved Arts or Social Science;
12. 1.5 credits in Approved Arts or Social Science;
13. 3.0 credits chosen from the following: Biochemistry courses listed in but not used to fulfil Item 6 above; BIOC 4901; Biology courses listed in but not used to fulfil Item 4 above; CHEM 2102, CHEM 3101, CHEM 3102, CHEM 3202, CHEM 3205, CHEM 3503, CHEM 3504, CHEM 3700, CHEM 3800, CHEM 4202, CHEM 4203; PHYS 2305, PHYS 2306; MATH 2007, MATH 2008, MATH 2107, MATH 2507; COMP 1007;
14. 1.0 credit in Free Electives.

## Biology

Department of Biology  
Faculty of Science

This section presents the requirements for the B.Sc. programs in:

- **Biology – B.Sc. Honours**
- **Computational Biology with Specialization in Molecular Bioinformatics – B.Sc. Honours**
- **Computational Biology with Specialization in Biodiversity – B.Sc. Honours**
- **Biology – B.Sc. General**
- **Biology and Physical Geography – B.Sc. Combined Honours**
- **Biology and Geology – B.Sc. Combined Honours**
- **Biology and Physics – B.Sc. Combined Honours**
- **Neuroscience – B.Sc. Combined Honours**
- **Biology – B.A. Honours**
- **Biology – B.A. General**
- **Biology – B.A. Combined Honours**

Requirements for the program Biology and Biotechnology are presented in the Biotechnology program section of this Calendar.

Co-operative Education Option is available (see the Co-operative Education section of this Calendar).

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* in this Calendar),
- ii) for B.Sc. programs, the common regulations applying to all B.Sc. programs including those relating to Science Continuation and Breadth requirements (see the *Academic Regulations for the Bachelor of Science Degree*),
- (iii) for B.A. programs, the common regulations applying to all B.A. programs including those relating to First-Year Seminars and Breadth requirements (see *The Academic Regulations of the University* in this Calendar).

Students should consult with the Department when planning their program and selecting courses.

### Course Categories for Biology Programs

The program descriptions below make use of the following course categories that are defined in the Bachelor of Science Regulations in this Calendar.

#### Science Faculty Electives

#### Advanced Science Faculty Electives

#### Science Continuation

#### Science Geography

#### Science Psychology

#### Approved Arts or Social Science

#### Free Elective

#### Restricted Courses

Biology General and Honours students (except students in the B.A. General, B.A. Honours and Combined Honours programs) may use Technology, Society, Environment courses TSES 3001, TSES 3002, TSES 3500, TSES 4001, TSES 4002, TSES 4003, TSES 4005, TSES 4006, TSES 4007 in fulfilling the degree requirements, but only as free electives.

#### General Note on Programs

If the Department of Biology cannot find a supervisor for a student who has applied to register for BIOL 4908, then BIOL 4907 will be accepted as a replacement. Under such an exceptional circumstance the Department Chair will direct the student to replace BIOL 4908 with BIOL 4907.

### Biology – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 5.0 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2600, BIOL 4901, BIOL 4908 [1.0];
  2. 0.5 credit in either BIOL 3205 or BIOL 3305;
  3. 1.5 credits selected from BIOL 2303 and Biology at the 3000-level or above;
  4. 2.0 credits in Advanced Science Faculty Electives;
- Credits Not Included in the Major CGPA (13.0 credits)*
5. 1.0 credit in Science Faculty Electives;
  6. 2.0 credits in Advanced Science Faculty Electives;
  7. 1.5 credit in CHEM 1000 [1.0], MATH 1007;
  8. 0.5 credit in either MATH 1107 or STAT 2507;
  9. 1.0 credit in either (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
  10. 2.0 credits in Science Continuation credits (not in Biology);
  11. 0.5 credit in NSCI 1000 or Approved Arts or Social Sciences;
  12. 1.5 credits in Approved Arts or Social Sciences;
  13. 1.0 credit in Free Electives.

#### Note:

Students should choose the courses for items 3, 4 and 5 above so that they can develop an area of specialization according to their preferred area of biology. Possible areas of specialization include molecular and cellular biology, genetics, microbiology, plant and animal physiology, animal behaviour, ecology, and systematics. These courses should be chosen in consultation with the Undergraduate Adviser or a faculty member working in an area close to the interest of the student.

### Biology – B.Sc. General (15.0 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 3.5 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2600;
2. 0.5 credit in either BIOL 3205 or BIOL 3305;
3. 2.0 credits selected from BIOL 2303 and Biology at the 3000-level or above;

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 1.5 credit in CHEM 1000 [1.0], MATH 1007;
5. 0.5 credit in either MATH 1107 or STAT 2507;
6. 1.0 credit in either (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
7. 2.0 credits in Science Continuation not in Biology;
8. 1.0 credit in Science;
9. 0.5 credits in NSCI 1000 or Approved Arts or Social Sciences;
10. 1.5 credits in Approved Arts or Social Sciences;
11. 1.0 credit in Free Electives.

### Computational Biology with Specialization in Molecular Bioinformatics – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (12.0 credits)*

1. 4.0 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200 BIOL 2600, BIOL 4901;
2. 0.5 credit in either BIOL 3205 or BIOL 3305;

## Program Information

3. 2.5 credits in CMPS 2800, CMPS 3604, CPMS 3800, CMPS 4909 [1.0];
4. 4.0 credits in CHEM 2203, CHEM 2204, BIOL 3104, BIOC 3100 [1.0], BIOC 4002, BIOC 4006, BIOL 4106;
5. 1.0 credit in Biology or Biochemistry at the 3000-level or above;

*Credits Not Included in the Major CGPA (8.0 credits)*

6. 1.0 credit in CHEM 1000 [1.0];
7. 1.0 credit in PHYS 1007 and PHYS 1008, or PHYS 1003 and PHYS 1004;
8. 1.5 credits in MATH 1007, MATH 1107 and MATH 2507;
9. 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
10. 0.5 credit in Computer Science at the 2000-level or above;
11. 0.5 credits in NSCI 1000 or Approved Arts or Social Sciences;
12. 1.5 credits in Approved Arts or Social Sciences;
13. 0.5 credit in Free Elective.

### **Computational Biology with Specialization in Biodiversity– B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (11.0 credits)*

1. 4.0 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200 BIOL 2600, BIOL 4901;
2. 0.5 credit in either BIOL 3205 or BIOL 3305;
3. 1.5 credits in CMPS 2800, CMPS 4909 [1.0];
4. 0.5 credit in either CMPS 3604 or CMPS 3800;
5. 2.0 credits in BIOL 3601, BIOL 3602, BIOL 3604, BIOL 4103;
6. 0.5 credit in either BIOL 4104 or BIOL 4609;
7. 2.0 credits in Biology at the 3000-level or above;

*Credits Not Included in the Major CGPA (9.0 credits)*

8. 1.0 credit in CHEM 1000 [1.0];
9. 1.0 credit in Physics: PHYS 1007 and PHYS 1008, or PHYS 1003 and PHYS 1004;
10. 1.5 credits in MATH 1007, MATH 1107 and MATH 2507;
11. 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
12. 0.5 credit in Computer Science at the 2000-level or above;
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Sciences;
14. 1.5 credits in Approved Arts or Social Sciences;
15. 1.5 credit in Free Elective.

### **Biology and Physical Geography – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.0 credits)*

1. 2.0 credit in BIOL 1003, BIOL 1004, GEOG 1005 [1.0];
2. 10.0 credits in Biology (or Biochemistry) and Science Geography at the 2000-level or above satisfying collectively:
  - a) 0.5 credits chosen from BIOL 3605, BIOL 3606, GEOG 3000, GEOG 4000;
  - b) at least 4.0 credits in Biology or Biochemistry;
  - c) at least 4.0 credits in Geography;
  - d) at least 4.0 credits are at the 3000-level or above;
3. 1.0 credit in BIOL 4908 [1.0] or GEOG 4906 [1.0];

*Credits Not Included in the Major CGPA (7.0 credits)*

4. 1.5 credits in CHEM 1000 [1.0], MATH 1007;
5. 0.5 credit in either MATH 1107 or STAT 2507;
6. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
7. 1.5 credits in Approved Arts or Social Science;
8. 1.0 credit in Science Faculty Electives;
9. 1.0 credit in Science Faculty Electives or Computer Science (COMP), not in Biology or Geography, at the 2000-level or above;
10. 1.0 credit in Free Electives.

#### **Notes**

1. Courses in Physical Geography are listed in the *Academic Regulations for the Bachelor of Science Degree* section of this Calendar as Science Geography courses.
2. For item 7 above, 1.0 credit in Geography, other than the Physical Geography, is recommended;
3. For item 8 above, either (PHYS 1003 and PHYS 1004), or (PHYS 1007 and PHYS 1008) is required unless OAC Physics is presented on admission.

### **Biology and Geology – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.0 credits)*

1. 1.0 credit in BIOL 1003 and BIOL 1004;
2. 1.0 credit in GEOL 1008 and either GEOL 1006 or GEOL 1007;
3. 10.0 credits in Biology (or Biochemistry) and Geology at the 2000-level or above collectively satisfying:
  - a) 0.5 credit from BIOL 3605, BIOL 3606, GEOL 2801, GEOL 4807;
  - b) at least 4.0 credits in Biology or Biochemistry;
  - c) at least 4.0 credits in Geology;
  - d) at least 4.0 credits are at the 3000-level or above;
4. 1.0 credit in BIOL 4908 or GEOL 4908;

*Credits Not Included in the Major CGPA (7.0 credits)*

5. 1.0 credit in MATH 1007 and MATH 1107;
6. 1.0 credit in CHEM 1000 [1.0], PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008 (The omitted subject, i.e) Chemistry or Physics, must have been taken at the OAC level);
7. 0.5 credit in Statistics (STAT 2507 is recommended);
8. 0.5 credit in Computer Science (COMP 1004 is recommended);
9. 1.0 credit in Science Faculty Electives;
10. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
11. 1.5 credits in Approved Arts or Social Science;
12. 1.0 credit in Free Electives.

*Additional Non-credit Requirement*

13. The Earth Sciences Departmental Language Requirement must be satisfied. (See the Earth Sciences program entry for more information.)

### **Biology and Physics – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.0 credits)*

1. 1.0 credit in (PHYS 1001 and PHYS 1002), or (PHYS 1003 and PHYS 1004), or (PHYS 1007 and PHYS 1008);



2. 2.5 credits in PHYS 2604, PHYS 2202, PHYS 4409, ECOR 2606, ELEC 3105;
3. 2.0 credits in PHYS 3007, PHYS 3207, PHYS 3606, PHYS 3701;
4. 1.0 credit from PHYS 3802, PHYS 4007, PHYS 4203, PHYS 4508, PHYS 4707, ELEC 3909;
5. 4.0 credits in BIOL 1003, BIOL 1004, BIOL 2200, BIOL 2104, BIOL 2001, BIOL 3201, BIOL 3104, BIOL 3305;
6. 1.0 credit from BIOL 4106, BIOL 4109, BIOL 4202, BIOL 4301, BIOL 4302, BIOL 4306;
7. 1.5 credits in BIOL 4901 and BIOL 4908 [1.0], or PHYS 4909 [1.0] and 0.5 credit in free elective;

*Credits Not Included in the Major CGPA (7.0 credits)*

8. 1.0 credit in CHEM 1000 [1.0];
9. 0.5 credit in MATH 1004 or MATH 1007;
10. 0.5 credit in MATH 1104 or MATH 1107;
11. 2.0 credit in STAT 2507, MATH 1005, MATH 2004, MATH 3705;
12. 0.5 credit in COMP 1005 or COMP 1007;
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
14. 1.5 credits in Approved Arts or Social Science;
15. 0.5 credit in Free Elective.

#### **Note**

1. In items 3 and 4 above, PHYS 3008 may replace PHYS 3007; PHYS 4008 may replace PHYS 4007.

#### **Neuroscience –**

#### **B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (11.0 credits)*

1. 3.5 credit in BIOL 1003, BIOL 1004; BIOL 2001, BIOL 2200, BIOL 2104, BIOL 3305, BIOL 4306;
2. 1.0 credit in Biology or Biochemistry;
3. 1.5 credit in Biology or Biochemistry at the 3000-level or above;
4. 1.0 credit in either PSYC 1001 and PSYC 1002, or PSYC 1000 [1.0];
5. 2.0 credit in PSYC 2000 [1.0], PSYC 2200 and PSYC 2700;
6. 1.0 credit in PSYC 3200 [1.0] or PSYC 3700 [1.0];
7. 1.0 credit in PSYC 4907 [1.0] or BIOL 4908 [1.0];

*Credits Not Included in the Major CGPA (9.0 credits)*

8. 1.0 credit in MATH 1007, MATH 1107;
9. 1.0 credit in either STAT 2507 and STAT 2509 or PSYC 3000 [1.0];
10. 2.0 credit in CHEM 1000 [1.0], CHEM 2203, CHEM 2204;
11. 1.0 credit in either PHYS 1001 and PHYS 1002, or PHYS 1007 and PHYS 1008;
12. 2.0 credit from Science Psychology excluding PSYC 3000;
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Science, not in Psychology;
14. 0.5 credit in Approved Arts or Social Science other than Psychology;
15. 1.0 credit in Free Electives.

#### **Note**

1. The topic for item 7 above must be in neurophysiology, animal behaviour, neuropsychology or a related topic.

#### **Biology – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (8.0 credits)*

1. 3.5 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2600;
2. 0.5 credit in either BIOL 3205 or BIOL 3305;
3. 1.0 credit in Biology at the 4000-level;
4. 2.0 credits in Biology;
5. 1.0 credit in BIOL 4907 [1.0] or BIOL 4908 [1.0];

*Credits Not Included in the Major CGPA (12.0 credits)*

6. 1.0 credit in CHEM 1000 [1.0];
7. 1.0 credit in Science Faculty Electives at the 2000-level or above, not in Biology;
8. 1.0 credit in Science Faculty Electives not in Biology;
9. 2.0 credits in Arts or Social Science at the 2000-level or above;
10. 4.0 credits in Arts or Social Science;
11. 1.0 credit at the 3000- or 4000-level approved by the Undergraduate Adviser;
12. 1.0 credit in Free Electives.

#### **Biology – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 3.5 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2600;
2. 2.5 credits in Biology;

*Credits Not Included in the Major CGPA (9.0 credits)*

3. 1.0 credit in CHEM 1000 [1.0];
4. 1.0 credit in Science Faculty Electives, not in Biology;
5. 4.0 credits in Arts and Social Science;
6. 1.0 credit at the 2000-level or above;
7. 1.0 credit in electives not in Biology;
8. 1.0 credit in Free Electives.

#### **Biology -**

#### **B.A. Combined Honours (20.0 credits)**

*Credits Included in the Biology Major CGPA (6.0 credits)*

1. 3.5 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2600;
2. 1.0 credit in Biology at the 4000-level;
3. 1.5 credits in Biology;

*Additional Requirements (14.0 credits)*

4. 1.0 credit in CHEM 1000 [1.0];
5. 1.0 credit in an Honours project: Biology BIOL 4907 [1.0] or BIOL 4908 [1.0], or equivalent from the other Honours department;
6. 1.0 credit in Science Faculty Electives, not in Biology, at the 2000-level or above;
7. 1.0 credit in Science Faculty Electives not in Biology;
8. 7.0 credits in Arts or Social Science to include the requirements for the other discipline;
9. 2.0 credits in free electives not in Biology or the other discipline;
10. 1.0 credit in free electives.

---

## Biotechnology

Department of Biology  
Institute of Biochemistry  
Faculty of Science

This section presents the requirements for the B.Sc. programs in:

- **Biochemistry and Biotechnology - B.Sc. Honours**
- **Biology and Biotechnology - B.Sc. Honours**

Co-operative Education Option is available (see the Co-op section of this Calendar for details.)

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.Sc. students including those relating to Science Continuation and Breadth requirements (see the Bachelor of Science degree regulations section of this Calendar).

Students should consult with the Department or Institute responsible for their program when planning their program and selecting courses.

### **Biology and Biotechnology – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.5 credits)*

1. 5.0 credits in BIOL 1003 and BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200, BIOL 2303, BIOL 3104, BIOL 3201, BIOL 4901;
2. 0.5 credit from BIOL 3205 or BIOL 3305;
3. 0.5 credit from BIOL 4300 or BIOL 4301;
4. 1.0 credit from BIOL 4106, BIOL 4109, BIOL 4201, or BIOL 4302;
5. 1.0 credits in Biology (BIOL);
6. 2.0 credits in BIOC 3100 [1.0], BIOC 3005, BIOC 4004;
7. 1.5 credits from BIOL 3101, BIOL 3303, BIOL 4106, BIOL 4109, BIOL 4201, BIOL 4202, BIOL 4300, BIOL 4301, BIOL 4302, BIOC 4001, BIOC 4002, BIOC 4006, CHEM 2101, CHEM 3700, CHEM 3800, TSES 4001, and TSES 4002;
8. 1.0 credit in BIOL 4908 [1.0] in an area approved by the Biotechnology Co-ordinator;

*Credits Not Included in the Major CGPA (7.5 credits)*

9. 2.0 credits in CHEM 1000 [1.0], CHEM 2203 and CHEM 2204;
10. 1.0 credit in PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
11. 1.5 credits in MATH 1007, MATH 1107, STAT 2507;
12. 0.5 credits in NSCI 1000 or an Approved Arts or Social Sciences elective;
13. 1.5 credits in Approved Arts or Social Science electives;
14. 1.0 credit in free electives.

### **Biochemistry and Biotechnology – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (14.5 credits)*

1. 2.0 Biology credits: BIOL 1003, BIOL 2104, BIOL 3104, BIOL 3201;
2. 0.5 credit in BIOL 2001 or BIOL 2002;

3. 0.5 credit in BIOL 2303 or BIOL 3301;
  4. 0.5 credit in BIOL 3205 or BIOL 3305;
  5. 1.0 credit chosen from BIOL 4106, BIOL 4109, BIOL 4201, BIOL 4300 and BIOL 4301;
  6. 2.5 credits in BIOC 2200 or the equivalent, BIOC 3005, BIOC 3100 [1.0], BIOC 4001;
  7. 1.0 credit in BIOC 4907 [1.0] or BIOC 4908 [1.0];
  8. 1.0 credit from BIOC 4002, BIOC 4004, BIOC 4005, BIOC 4006, BIOC 4007, BIOC 4202, BIOC 4302, BIOC 4400;
  9. 4.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2203, CHEM 2204, CHEM 2303, CHEM 3201 and CHEM 3503;
  10. 0.5 credits in CHEM 3202 or CHEM 3205;
  11. 1.0 credit chosen from the Biochemistry courses listed in 8. above, or BIOL 2001, BIOL 2002, BIOL 3205, BIOL 3305, BIOL 4106, BIOL 4109, BIOL 4201, BIOL 4209, BIOL 4300, BIOL 4301, CHEM 2102, CHEM 3202, CHEM 3205, CHEM 3700, CHEM 3800;
- Credits Not Included in the Major CGPA (5.5 credits)*
12. 1.0 credit in PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
  13. 1.5 credits in MATH 1007, MATH 1107, STAT 2507;
  14. 0.5 credits in NSCI 1000 or an Approved Arts or Social Sciences elective.

## Business

Eric Sprott School of Business  
Faculty of Public Affairs and Management

This section presents the requirements for the programs:

- **Bachelor of Commerce**
- **Bachelor of Commerce with Concentration in:**
  - Accounting**
  - Business Operations Analysis**
  - Finance**
  - Information Systems**
  - International Business**
  - Marketing**
  - Strategic Human Resource Management**
  - Technology and Operations Management**
- **Bachelor of International Business**
- **Minor in Business**

Co-operative Education Option is available in the Bachelor of Commerce.

In addition to the requirements listed below, students must satisfy the University regulations (see *The Academic Regulations of the University* section of this Calendar).

Students should consult with the School when planning their program and selecting courses.

### Academic Performance Evaluation

For purposes of Academic Performance Evaluation (A.P.E.), students in B.Com. and B.I.B. are considered Honours students. Students in programs of the Eric Sprott School of Business who are not in Good Standing at any A.P.E. will be required to withdraw from the program with the standing Ineligible to Return (ITR).

### Bachelor of Commerce - Credits Included in the Major CGPA (14.0 credits)

1. 3.0 credits in BUSI 1004, BUSI 1005, BUSI 1402, BUSI 2101, ECON 1000 [1.0];
2. 2.5 credits in BUSI 2208, BUSI 2300, BUSI 2400, BUSI 2504, BUSI 2601;
3. 1.0 credit in ECON 2002, ECON 2102;
4. 2.5 credits in BUSI 3103, BUSI 3107, BUSI 3300, BUSI 4601, BUSI 4609;
5. 1.0 credit in Business at the 4000-level;
6. 0.5 credit in MATH 1009 or MATH 1007;
7. 0.5 credit in MATH 1109 or MATH 1107;
8. 1.0 credit in ECON 2200 [1.0] or (STAT 2606 and STAT 2607);
9. 1.0 credit in either (PSYC 1001 and PSYC 1002) or SOCI 1000 [1.0];
10. 1.0 credit in a free elective at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

11. 6.0 credits in free electives.

### Concentrations in the B.Com. Program

Concentrations described below are open to students registered in the B.Com. program. Students enrolled in a concentration must satisfy the requirements for Bachelor of Commerce (above) while gaining credit for the requirements of the Concentration through proper choice of electives. Students in the Concentration in International Business take Business BUSI 4709 in place of BUSI 4609 in the B.Com. requirements.

### Concentration in Accounting

1. 2.0 credit in BUSI 2001, BUSI 2002, BUSI 3001, BUSI 3008;
2. 2.0 credit from BUSI 2505, BUSI 3005, BUSI 4000, BUSI 4001, BUSI 4002, BUSI 4007, BUSI 4008, BUSI 4400.

### Concentration in Business Operations Analysis

1. 2.0 credit in BUSI 4305, BUSI 4306, BUSI 3308, BUSI 4406;
2. 2.0 credit from: BUSI 2402, BUSI 3207, BUSI 3400, BUSI 4307, BUSI 4407, STAT 3503, STAT 3504, STAT 3507, STAT 4600.

### Concentration in Finance

1. 2.0 credit in BUSI 2505, BUSI 3500, BUSI 3502, and BUSI 3504;
2. 2.0 credits in either:
  - a) 0.5 credit in BUSI 4500 and 1.5 credits from BUSI 2001, BUSI 2002, BUSI 2402, BUSI 3001, BUSI 3400, BUSI 3403, BUSI 4106, BUSI 4502, BUSI 5500, to focus on **corporate finance**;
  - or
  - b) 0.5 credit in BUSI 4502 and 1.5 credits from BUSI 2001, BUSI 2002, BUSI 2402, BUSI 3001, BUSI 3400, BUSI 3403, BUSI 4106, BUSI 4500, to focus on **financial services**.

### Concentration in Information Systems

1. 2.5 credit in BUSI 2402, BUSI 3400, BUSI 3403, BUSI 3404, BUSI 4400;
2. 2.0 credit from BUSI 3308, BUSI 4106, BUSI 4402, BUSI 4404, BUSI 4406, BUSI 4407, BUSI 4607, TSES 4005.

### Concentration in International Business

1. 2.5 credit in BUSI 3703, BUSI 3704, BUSI 4107, BUSI 4205, BUSI 4704;
2. 1.0 credit from: BUSI 3502; BUSI 3504; BUSI 3601; BUSI 4106; BUSI 4604; BUSI 5300, BUSI 5301;
3. 1.0 credit from EURL 4005; ECON 3601, ECON 3602, ECON 3700; GEOG 2200, GEOG 3209, GEOG 3404; LAWS 3207, LAWS 4200; PSCI 2600 [1.0], PSCI 3600.

### Concentration in Marketing

1. 2.0 credit in BUSI 3207, BUSI 4206 [1.0], BUSI 4208;
2. 2.0 credit from BUSI 3204, BUSI 3205, BUSI 3208, BUSI 4203, BUSI 4205.

### Concentration in Strategic Human Resources Management

1. 2.5 credit in BUSI 3102, BUSI 4103, BUSI 4104, BUSI 4105, BUSI 4106;
2. 2.0 credit from BUSI 3703, BUSI 4107, BUSI 4108, BUSI 4602, BUSI 5100, BUSI 5101, ECON 3506, PSYCH 3103, LAWS 3006, LAWS 3401, LAWS 4402 and SOAN 3508.

### Concentration in Technology and Operations Management

1. 2.0 credit in BUSI 3302, BUSI 3303, BUSI 4407, and BUSI 4607;
2. 2.0 credit from BUSI 3008, BUSI 3304, BUSI 3308, BUSI 4106, BUSI 4305, BUSI 4308, BUSI 4404, BUSI 5601, BUSI 5701.

### Bachelor of International Business

The Bachelor of International Business (B.I.B.) program is characterized by the requirement that students spend third year in studies abroad.

## Program Information

Students in the B.I.B. program are required to specialize in one of four languages: French, German, Spanish or Japanese. The requirements for B.I.B. in French, German, and Spanish are similar and are presented together. The requirements for B.I.B. in Japanese are presented separately.

### Academic Performance Evaluation for B.I.B.

The B.I.B. defines a Language Core consisting of the required 4.0 credits in the language of specialization.

Good Standing requires:

*At the first A.P.E.:*

- Overall CGPA at least 4.50
- Major CGPA at least 6.00
- Language Core CGPA at least 6.00

*At all subsequent A.P.E.'s and at graduation:*

- Overall CGPA at least 5.00
- Major CGPA at least 6.50
- Language Core CGPA at least 6.50

Students who do not achieve Good Standing must leave the program with status Ineligible to Return (ITR).

### Language Training Component

Students may select French, German, Spanish, or Japanese as their specialization language for study. Applicants to the program should indicate both a first and second choice, as their first choice may be oversubscribed. Students are strongly advised to continue study and use of their selected language independently, in the summers between academic years. Failure to do so may seriously undermine success during the year of study abroad.

Applicants to the program interested in languages other than those listed above should contact the Eric Spratt School of Business Supervisor of Undergraduate Programs to verify if the preferred language option may have become available after the publication of this calendar.

All first year Bachelor of International Business students will be assessed for ability in their selected language by the relevant language unit and placed in the appropriate courses as authorized by the language unit.

Students with some ability in their selected language may be allowed to pursue studies in that language on the understanding that they will effect a significant improvement in their ability.

The language credits must be prespecified by course numbers by the selected Language units. Students are advised not to register in courses before they have been specified.

### The Year Abroad

The third year of study will be spent taking a set of courses at a foreign institution approved by the Eric Spratt School of Business.

In order to be eligible to study abroad in third year, students must be in Good Standing and are required to have successfully completed a minimum of:

1. 4.0 credits in the specified Language Core (3.0 credits in the case of Japanese), and
2. 5.0 credits in Business and Economics from the Major requirements below the 3000-level, and

The number of courses available in English in foreign schools may vary. Students will take up to 5.0 credits as outlined below. Carleton credits commensurate to courses taken abroad will be determined by the School and awarded towards the student's degree.

At least 1.0 credit of the courses taken abroad must be delivered in the student's selected language.

Students are responsible for all traveling, living and incidental costs for fulfilling Third-year requirements abroad. Tuition fees and compulsory miscellaneous fees will be paid to Carleton University according to Carleton University's fee structure. The student may be liable for compulsory miscellaneous fees assessed by the foreign institution.

A limited number of bursaries are available to offset costs. For details on how to apply for a bursary, contact the Awards Office.

### B.I.B. in French, German or Spanish (20.0 credits)

*Credits Included in the Major CGPA (12.5 credits)*

1. 3.0 credits in BUSI 1701, BUSI 1703 [1.0], BUSI 2700, ECON 1000 [1.0];
2. 4.0 credits in BUSI 2101, BUSI 2204, BUSI 2400, BUSI 2504, BUSI 3703, BUSI 4601, BUSI 4701, BUSI 4709;
3. 1.5 credits from: BUSI 3300, BUSI 3504, BUSI 3704, BUSI 4107, BUSI 4205, BUSI 4704, BUSI 5300, BUSI 5301;
4. 1.0 credit in Business at the 2000-level or above;
5. 3.0 credits in Business or Economics at the 2000-level or above;

*Credits Included in the Core CGPA (4.0 credits)*

6. 4.0 credits in one of French, German or Spanish;

*Credits Not Included in the Major or Core CGPA (3.5 credits)*

7. 1.0 credit in ECON 2200 [1.0] or STAT 2606 and STAT 2607;
8. 1.0 credit in Political Science, History, Geography, Law, Sociology, Anthropology or Women's Studies;
9. 1.0 credit in free electives;
10. 0.5 credits a free elective.

### B.I.B. in Japanese (20.0 credits)

*Credits Included in the Major CGPA (12.5 credits)*

1. 3.0 credits in BUSI 1701, BUSI 1703 [1.0], BUSI 2700, ECON 1000 [1.0];
2. 4.0 credits in BUSI 2101, BUSI 2204, BUSI 2400, BUSI 2504, BUSI 3703, BUSI 4601, BUSI 4701, BUSI 4709;
3. 1.5 credits from: BUSI 3300, BUSI 3504, BUSI 3704, BUSI 4107, BUSI 4205, BUSI 4704, BUSI 5300, BUSI 5301;
4. 1.0 credit in Business at the 2000-level or above
5. 1.0 credit from BUSI 2505, BUSI 2601, BUSI 3103, BUSI 3205;
6. 2.0 credits in Business or Economics at the 2000-level or above;

*Credits Included in the Core CGPA (4.0 credits)*

7. 4.0 credits in Japanese;

*Credits Not Included in the Major or Core CGPA (3.5 credits)*

8. 1.0 credit in ECON 2200 [1.0] or (STAT 2606 and STAT 2607);
9. 1.0 credit in Political Science, History, Geography, Law, Sociology, Anthropology or Women's Studies (transferred from Year Abroad);
10. 1.0 credit in free electives (transferred from Year Abroad);
11. 0.5 credits a free elective.

### Minor in Business

The Minor in Business is open to all students registered in undergraduate programs who have completed at least 4.0 credits toward their degree, including BUSI 1001 and BUSI 1002 with a minimum grade of C+ in each, and with a minimum Overall CGPA of 6.00.

For any student, continuation in the Business Minor requires that the Minor CGPA be at least the minimum required for Honours students (see the Academic Regulations section of this Calendar).

Students who are required to leave the Minor due to a low Minor CGPA may not return to the Minor at any subsequent date.

### Requirements

1. 3.0 credits in BUSI 1001, BUSI 1002, BUSI 2101, BUSI 2204, BUSI 2400, BUSI 2504;
2. 1.0 credit in Business at the 3000-level or above;
3. 1.0 credit in Business.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

## Canadian Studies

School of Canadian Studies  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Canadian Studies - B.A. Combined Honours**
- **Canadian Studies - B.A. General**
- **Minor in Aboriginal Studies**
- **Minor in Canadian Studies**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *The Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the School when planning their program and selecting courses.

### Canadian Studies – B.A. Combined Honours (20 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit from: CDNS 1000 [1.0], FYSM 1406 [1.0], FYSM 1409 [1.0], FYSM 1600 [1.0];
2. 1.0 credit from: FREN 1006 [1.0], FREN 1405 [1.0] or ALSS 1900 [1.0];
3. 1.0 credit from: CDNS 2100, CDNS 2101, CDNS 2200, CDNS 2300, CDNS 2102, CDNS 2808 [1.0];
4. 1.0 credit from: CDNS 3100, CDNS 3101, CDNS 3102, CDNS 3104, CDNS 3200, CDNS 3300, CDNS 3301, CDNS 3500;
5. 0.5 credit in CDNS 4100;
6. 0.5 credit chosen from CDNS 4101, CDNS 4102, CDNS 4104, CDNS 4200, CDNS 4300;
7. 1.0 credit, at the 4000-level, from the list of Approved Canadian Studies Electives below;
8. 1.0 credit from the list of Approved Canadian Studies Electives below;

#### *Additional Requirements*

9. The requirements for Combined Honours in the other discipline must be satisfied;
10. 5.0 credits not in Canadian Studies or the other discipline;
11. Sufficient free electives to achieve a total 20.0 credits for the program.

### Canadian Studies – B.A. General (15.0 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit in CDNS 1000 [1.0], FYSM 1406 [1.0], FYSM 1409 [1.0], FYSM 1600 [1.0];
2. 1.0 credit from FREN 1006 [1.0], FREN 1405 [1.0] or ALSS 1900 [1.0];
3. 1.0 credit from CDNS 2100, CDNS 2101, CDNS 2102, CDNS 2200, CDNS 2300, CDNS 2808 [1.0];
4. 1.0 credit from CDNS 3100, CDNS 3101, CDNS 3102, CDNS 3104, CDNS 3200, CDNS 3300, CDNS 3301, CDNS 3500;
5. 1.0 credit, at the 3000-level, from the list of Approved Canadian Studies Electives (below);

## Program Information

6. 2.0 credit from the list of Approved Canadian Studies Electives (below);

*Credits Not included in the Major CGPA (8.0 credits)*

7. 7.0 credits in electives not in Canadian Studies;
8. 1.0 credit free elective.

### Minor in Aboriginal Studies

The Minor in Aboriginal Studies is available only to B.A. Honours and B.A. General students.

#### Requirements

1. 1.0 credit in CDNS 1000 [1.0], FYSM 1409 [1.0], FYSM 1305 [1.0], FYSM 1600 [1.0] or PSCI 1105 [1.0];
2. 1.0 credit in LALS 1900 [1.0];
3. 2.0 credits including at least 1.0 credit at the 3000-level or above satisfying:
  - a) 1.0 credit from: CDNS 2100, CDNS 2101, CDNS 3801, CDNS 3802, CDNS 3803, CDNS 4101, CDNS 4104;
  - b) 1.0 credit in Aboriginal Studies from the list of Approved Canadian Studies Electives.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Minor in Canadian Studies

The Minor in Canadian Studies is available only to B.A. Honours and B.A. General students.

#### Requirements

1. 1.0 credit from CDNS 1000 [1.0], FYSM 1406 [1.0], FYSM 1409 [1.0], FYSM 1600;
2. 1.0 credit from CDNS 2100, CDNS 2101, CDNS 2102, CDNS 2200, CDNS 2300, CDNS 2808 [1.0];
3. 1.0 credit at the 3000- or 4000-level chosen from the following courses: CDNS 3100, CDNS 3101, CDNS 3102, CDNS 3104, CDNS 3200, CDNS 3300, CDNS 3301, CDNS 3500, CDNS 3800, CDNS 3801, CDNS 3802, CDNS 3803, CDNS 4100, CDNS 4101, CDNS 4102, CDNS 4104, CDNS 4200, CDNS 4300, CDNS 4901, CDNS 4902, CDNS 4903, CDNS 4904, CDNS 4905, CDNS 4906 or CDNS 4907;
4. 1.0 credit from the list of approved Canadian Studies Electives (below).
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

#### **Mention: français**

Students who wish to qualify for the *Mention: français* notation in Canadian Studies may do so by fulfilling the requirements listed below, in consultation with the Undergraduate Supervisor. Courses taken for the *Mention: français* notation may be used to fulfil Combined Honours and the General program requirements.

Courses taught in French at the University of Ottawa or at another university and which are approved by the Undergraduate Supervisor may be used to satisfy *Mention: français* requirements. Students who wish to enrol in University of Ottawa courses for this purpose must do so through the University of Ottawa Exchange Agreement. To enrol in courses in French at another university, a Letter of Permission is required from Registrarial Services.

#### **Combined Honours Program**

To graduate with the notation *Mention: français*, students must include the following courses in their degree program:

1. 1.0 credit in the advanced study of the French language;
2. 1.0 credit in French-Canadian culture and heritage such as FREN 2700 [1.0], or FREN 3702 and FREN 3803 or a

course in another appropriate discipline, given in French, which is approved by the Undergraduate Supervisor. Courses from the University of Ottawa or another university must be approved by the Undergraduate Supervisor;

3. 1.0 credit on a Canadian subject at the 2000- or 3000-level, taught in French, in any appropriate discipline. For Carleton University courses that may be used to fulfil this requirement, consult the list of Approved Canadian Studies Electives (below). Courses from the University of Ottawa or another university must be approved by the Undergraduate Supervisor;
4. 1.0 credit on a Canadian subject at the 4000-level, taught in French, including either CDNS 4903 and CDNS 4904, or a directed studies, tutorial, research paper, or course in any appropriate discipline.

All written work must be submitted in French. Note that directed studies, tutorials, and research papers are weighted differently in various departments. Courses from the University of Ottawa or another university must be approved by the Undergraduate Supervisor.

5. Combined Honours program students must meet *Mention: français* requirements of both disciplines.

#### **B.A. General**

To graduate with the notation *Mention: français* students must include the following courses in their degree program:

1. 1.0 credit in the advanced study of the French language;
2. 1.0 credit in French-Canadian culture and heritage such as FREN 2700 [1.0], or FREN 3702 and FREN 3803, or a course in another appropriate discipline, given in French, which is approved by the Undergraduate Supervisor. Courses from the University of Ottawa or another university must be approved by the Undergraduate Supervisor;
3. 1.0 credit on a Canadian subject at the 2000- or 3000-level, taught in French, in any appropriate discipline. For Carleton University courses that may be used to fulfil this requirement, consult the list below of Approved Canadian Studies Electives. Courses from the University of Ottawa or another university must be approved by the Undergraduate Supervisor.

#### **Approved Canadian Studies Electives**

##### Aboriginal Studies

###### *Anthropology/Sociology*

ANTH 3108, ANTH 3109 [1.0], SOAN 3007, SOAN 4200, ANTH 4700

###### *Applied Language Studies*

ALSS 1900

###### *Art History*

ARTH 2005, ARTH 2006, ARTH 3104, ARTH 4004, ARTH 4005

##### Canadian Studies

CDNS 3800 [1.0], CDNS 3801, CDNS 3802, CDNS 3803, CDNS 4901, CDNS 4902, CDNS 4903, CDNS 4904, CDNS 4905, CDNS 4906, CDNS 4907 [1.0]

###### *English*

ENGL 4808, ENGL 4809

###### *Geography*

GEOG 3501

###### *History*

HIST 3503 [1.0]

###### *Law*

LAWS 3504, LAWS 4504, LAWS 4604

###### *Music*

MUSI 4104

*Political Science*

PSCI 1105, PSCI 4002, PSCI 4109, PSCI 4206

*Social Work*

SOWK 4102, SOWK 4203

Other Canadian Studies Electives may be used as Aboriginal Studies electives when material on Aboriginal Studies is central to the course. Such substitutions must be individually approved by the School.

*Identities**Art History*

ARTH 2002, ARTH 2003, ARTH 3000, ARTH 3001, ARTH 3002, ARTH 3602, ARTH 4000, ARTH 4001

*Canadian Studies*

CDNS 3800 [1.0], CDNS 3801, CDNS 3802, CDNS 3803, CDNS 4901, CDNS 4902, CDNS 4903, CDNS 4904, CDNS 4905, CDNS 4906, CDNS 4907 [1.0]

*Economics*

ECON 3200

*English*

ENGL 2808 [1.0], ENGL 2802 [1.0], ENGL 3801, ENGL 3803, ENGL 4802, ENGL 4803, ENGL 4806, ENGL 4808, ENGL 4809

*Film Studies*

FILM 2209 [1.0], FILM 3209, FILM 4209

*French*

FREN 2700 [1.0], FREN 3702, FREN 3704, FREN 3803, FREN 4702

*Geography*

GEOG 2505, GEOG 4004, GEOG 4301, GEOG 4305

*History*

HIST 1300 [1.0], HIST 2304 [1.0], HIST 3208, HIST 3300, HIST 3301, HIST 3302, HIST 3303, HIST 3309 [1.0], HIST 4307 [1.0], HIST 4309 [1.0], HIST 4300 [1.0]

*Journalism*

JOUR 2205, JOUR 2501, JOUR 3006, JOUR 4000

*Law*

LAWS 2003 [1.0], LAWS 3001, LAWS 3305, LAWS 3402, LAWS 3501, LAWS 3502, LAWS 4100, LAWS 4308

*Linguistics and Applied Languages*

LALS 2701, LALS 2704, LALS 3705

*Mass Communication*

MCOM 3006, MCOM 2300, MCOM 2302, MCOM 2101 [1.0]

*Music*

MUSI 3103, MUSI 3104, MUSI 3302, MUSI 4104

*Political Science*

PSCI 1104, PSCI 3306, PSCI 3406, PSCI 4003, PSCI 4009, PSCI 4101, PSCI 4107, PSCI 4109, PSCI 4205

*Social Work*

SOWK 4103

*Sociology/Anthropology*

SOAN 2200 [1.0], SOAN 2401 [1.0], SOCI 2502, SOAN 3200 [1.0], SOCI 2407 [1.0]

Other Canadian Studies Electives may be used as Identities electives when material on Identities is central to the course. Such substitutions must be individually approved by the School.

*Policy, Economy and Society**Canadian Studies*

CDNS 3800 [1.0], CDNS 3801, CDNS 3802, CDNS 3803, CDNS 4901, CDNS 4902, CDNS 4903, CDNS 4904, CDNS 4905, CDNS 4906, CDNS 4907 [1.0]

*Economics*

ECON 2305 [1.0], ECON 3205 [1.0], ECON 3206, ECON 3300, ECON 3305 [1.0], ECON 3401, ECON 3404, ECON 3407, ECON 3408, ECON 3507, ECON 3607, ECON 3800, ECON 4100, ECON 4306, ECON 4309, ECON 4401, ECON 4402, ECON 4605, ECON 4701

*Geography*

GEOG 3200, GEOG 3305 [1.0], GEOG 4403, GEOG 4407

*History*

HIST 1300 [1.0], HIST 2303 [1.0], HIST 2304 [1.0], HIST 2305 [1.0], HIST 3202, HIST 3205, HIST 3209, HIST 3301, HIST 3302 [1.0], HIST 3303, HIST 4204 [1.0], HIST 4206 [1.0], HIST 4301 [1.0], HIST 4309 [1.0], HIST 3304, HIST 3306, HIST 3307, HIST 3309 [1.0], HIST 3500, HIST 3506, HIST 3507, HIST 3602

*Journalism*

JOUR 3005, JOUR 3502

*Law*

LAWS 1000 [1.0], LAWS 2004 [1.0], LAWS 2005 [1.0], LAWS 3003, LAWS 3306, LAWS 3307, LAWS 3405, LAWS 3408, LAWS 3500, LAWS 3503, LAWS 3506, LAWS 3509, LAWS 4309 [1.0], LAWS 4507, LAWS 4607

*Mass Communication*

MCOM 2302, MCOM 2501, MCOM 3005, MCOM 3502, MCOM 4500, MCOM 4501

*Political Science*

PSCI 2001 [1.0], PSCI 2002, PSCI 2003, PSCI 3000, PSCI 3001, PSCI 3002, PSCI 3003, PSCI 3004, PSCI 3005, PSCI 3006, PSCI 3007, PSCI 3109, PSCI 3305, PSCI 3306, PSCI 3401, PSCI 3402, PSCI 3407, PSCI 3606, PSCI 3607, PSCI 4000 [1.0], PSCI 4005, PSCI 4006, PSCI 4007, PSCI 4008, PSCI 4009, PSCI 4100, PSCI 4101, PSCI 4106, PSCI 4107, PSCI 4108, PSCI 4109, PSCI 4204, PSCI 4206, PSCI 4401, PSCI 4407, PSCI 4607.

*Sociology/Anthropology*

SOAN 2200 [1.0], SOAN 2401 [1.0], SOCI 2502, SOCI 2506, SOAN 3200 [1.0], SOCI 3703, SOCI 3507, SOCI 3802, SOCI 4704, SOAN 4404 [1.0]

## Chemistry

Department of Chemistry  
Faculty of Science

This section presents the requirements for:

- **Chemistry – B.Sc. Honours**
- **Chemistry with Specialization in Business – B.Sc. Honours**
- **Chemistry – B.Sc. General**
- **Computational Chemistry – B.Sc. Honours**
- **Computational Chemistry – B.Sc. General**
- **Chemistry and Computer Science – B.Sc. Combined Honours**
- **Chemistry and Geology – B.Sc. Combined Honours**
- **Chemistry and Physics – B.Sc. Combined Honours**

Co-operative Education Option is available (see the Co-operative Education section of this Calendar for details).

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.Sc. programs including those relating to Science Continuation and Breadth requirements (see the *Academic Regulations for the Bachelor of Science Degree*),

Students should consult with the Department when planning their program and selecting courses.

### Chemistry – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 7.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 2302, CHEM 2303, CHEM 3101, CHEM 3201, CHEM 3503, CHEM 3504, CHEM 3505, CHEM 4908 [1.0];
2. 0.5 credit from CHEM 2204 or CHEM 2206;
3. 1.0 credit from CHEM 3105, CHEM 3106, CHEM 3205 or CHEM 3305;
4. 1.0 credit at the 4000-level in Chemistry or BIOC 3100 [1.0];
5. 0.5 credit at the 3000- or 4000-level in Chemistry;

*Credits Not Included in the Major CGPA (10.0 credits)*

6. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
7. 0.5 credit in Mathematics (MATH or STAT) at the 2000-level;
8. 1.0 credit in PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
9. 0.5 credit in Science Continuation (not CHEM);
10. 0.5 credit in COMP 1004;
11. 1.0 credit in Science Faculty Electives at the 1000-level;
12. 2.0 credits in Science Faculty Electives or Science Continuation Courses;
13. 0.5 credits in NSCI 1000 or an Approved Arts or Social Sciences elective;
14. 1.5 credits in Approved Arts or Social Science electives;
15. 1.0 credit in Free Elective.

#### Note

Normally the credits in Req. 12 above will be chosen either from non-compulsory Chemistry courses or other Science Continuation courses. Students who wish to broaden and strengthen a non-Science interest by substituting non-Science courses must obtain written permission from the Undergraduate Adviser prior to registration.

### Chemistry – B.Sc. General (15.0 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 4.5 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 2302, CHEM 2303, CHEM 3101, CHEM 3503;
2. 0.5 credit from: CHEM 2204, CHEM 2206;
3. 0.5 credit from: CHEM 3105, CHEM 3106, CHEM 3205, CHEM 3305, or CHEM 3505;

4. 0.5 credits in Chemistry at the 3000-level;

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
6. 0.5 credit in Mathematics at the 2000-level;
7. 1.0 credit in PHYS 1003 and PHYS 1004 or PHYS 1007 and PHYS 1008;
8. 0.5 credit in Science Continuation (not CHEM);
9. 0.5 credit in COMP 1004;
10. 1.0 credit in Science Faculty Electives at the 1000-level;
11. 1.0 credit in Science Faculty Electives or Science Continuation Courses;
12. 0.5 credit in NSCI 1000 or an Approved Arts or Social Sciences elective;
13. 1.5 credits in Approved Arts or Social Sciences electives;
14. 1.0 credit in Free Electives.

### Computational Chemistry – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (13.0 credits)*

1. 6.5 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3201, CHEM 3503, CHEM 3504, CHEM 4406;
2. 0.5 credit in Chemistry or Biochemistry at the 3000- or 4000-level;
3. 0.5 credit in Chemistry or Biochemistry at the 4000-level;
4. 3.5 credits in COMP 1002, COMP 1005, COMP 1006, COMP 2002, COMP 2003, COMP 2004, COMP 3004;
5. 0.5 credit from: COMP 3005, COMP 3806;
6. 0.5 credit in Computer Science at the 3000- or 4000-level;
7. 1.0 credit in CMPS 4909 [1.0];

*Credits Not Included in the Major CGPA (7.0 credits)*

8. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
9. 0.5 credit in BIOL 1003;
10. 1.0 credit in BIOC 3100 [1.0];
11. 0.5 credit in PHYS 1003 or PHYS 1007;
12. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
13. 1.5 credit in Approved Arts or Social Science;
14. 0.5 credit in Science Faculty Electives;
15. 1.0 credit in Free Electives.

### Computational Chemistry – B.Sc. General (15.0 credits)

*Credits Included in the Major CGPA (9.5 credits)*

1. 5.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3201, CHEM 3503;



2. 1.0 credits in BIOC 3100 [1.0];
3. 3.5 credits in COMP 1002, COMP 1005, COMP 1006, COMP 2002, COMP 2003, COMP 2004, COMP 3004;

*Credits Not Included in the Major CGPA (5.5 credits)*

4. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
5. 0.5 credits in BIOL 1003;
6. 0.5 credits in PHYS 1003 or PHYS 1007;
7. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
8. 1.5 credit in Approved Arts or Social Science;
9. 1.0 credit in Free Electives.

### **Chemistry and Computer Science – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (14.0 credits)*

1. 6.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3503, CHEM 3504, CHEM 3201, CHEM 4406;
2. 1.0 credit in BIOC 3100 [1.0];
3. 5.5 credits in COMP 1002, COMP 1005, COMP 1006; COMP 2002, COMP 2003, COMP 2004, COMP 3000, COMP 3004, COMP 3005, COMP 3804, COMP 3806;
4. 0.5 credit in Computer Science at the 4000-level;
5. 1.0 credit in either:
  - a) CMPS 4909 [1.0]
  - or
  - b) COMP 4905 and 0.5 credit in Computer Science at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

6. 2.5 credit in MATH 1007, MATH 1107, MATH 2007, MATH 2107, BIOL 1003;
7. 0.5 credit in PHYS 1003 or PHYS 1007;
8. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
9. 1.5 credits in Approved Arts or Social Science;
10. 1.0 credit in Free Electives.

### **Chemistry and Geology – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

1. 4.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2302, CHEM 2303, CHEM 3503, CHEM 3504;
2. 1.0 credit in Chemistry at the 4000-level;
3. 0.5 credit chosen from GEOL 1007, GEOL 1008;
4. 2.5 credits in GEOL 1006, GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2801;
5. 1.0 credit in Geology at the 3000-level;
6. 1.0 credit in Geology at the 4000-level;
7. 1.0 credit in Chemistry or Geology;
8. 1.0 credit in either CHEM 4908 or GEOL 4908;

*Credits Not Included in the Major CGPA (8.0 credits)*

9. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
10. 0.5 credit in MATH or STAT at the 2000-level;
11. 1.0 credit in either (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);

12. 1.0 credit in Science Faculty Electives (not CHEM or GEOL);

13. 1.0 credit in Science Faculty Electives;

14. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;

15. 1.5 credits in Approved Arts or Social Science;

16. 1.0 credit in Free Electives;

*Additional Non-credit Requirement*

17. The Department of Earth Sciences Language Requirement must be satisfied. (consult the Earth Sciences program section for more information)

### **Chemistry and Physics – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.5 credits)*

1. 1.0 credit in (PHYS 1001 and PHYS 1002) or (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
2. 3.0 credits in PHYS 2202, PHYS 2604, PHYS 3007, PHYS 3606, PHYS 3701, PHYS 4707;
3. 1.0 credit in Physics at the 4000-level;
4. 4.5 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 3102, CHEM 3503, CHEM 3504, CHEM 4102;
5. 0.5 credit from: CHEM 2204 or CHEM 2206;
6. 0.5 credit from: CHEM 3105 or CHEM 3106;
7. 0.5 credit in Chemistry at the 4000-level;
8. 1.0 credit from: CHEM 4908 [1.0], PHYS 4909 [1.0];
9. 0.5 credit in ELEC 3105;

*Credits Not Included in the Major CGPA (7.5 credits)*

10. 3.0 credits in MATH 1004, MATH 1005, MATH 1104, MATH 2004, MATH 3502, MATH 3705;
11. 0.5 credit in ECOR 2606;
12. 0.5 credit in COMP 1007;
13. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
14. 0.5 credit in Chemistry, Physics, Mathematics, Statistics, Computer Science, or Engineering excluding CHEM 0100, CHEM 1003, PHYS 1900, MATH 1805, COMP 1805;
15. 1.5 credits in Approved Arts or Social Science;
16. 1.0 credit in Free Electives.

---

## Child Studies

Child Studies Committee  
Institute of Interdisciplinary Studies  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Child Studies - B.A. Honours**
- **Child Studies - B.A. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students (see *Academic Regulations for the Bachelor of Arts Degree*).

Students in the Child Studies programs are exempt from the First-Year Seminar requirement and the Breadth requirement.

Students should consult the Program Co-ordinator when planning their program and selecting courses.

### Articulation agreements

Articulation agreements with Algonquin College of Applied Arts and Technology in Ottawa and Loyalist College in Belleville allow graduates with the ECE diploma from these colleges to apply for admission into Carleton's Child Studies program. Applicants from other colleges are welcome and will be considered on an individual basis. Successful applicants will be granted up to a maximum of 5.0 credits on admission.

### Admission Requirements

Enrolment into the program is limited. Successful applicants must demonstrate a high level of personal enthusiasm and professionalism, excellent communication skills (oral and written) and evidence of previous academic success. Further information may be obtained from the Program Co-ordinator.

Applications for admission should be made to the Institute of Interdisciplinary Studies, presenting:

- a) the diploma in Early Childhood Education from Algonquin or Loyalist College or an equivalent Early Childhood Education program from another institution;
- b) a B+ average overall or better at the college level;
- c) satisfactory performance in field placements;
- d) three letters of reference, including at least one letter from a faculty member in the ECE program, and one letter from the director of a child care centre;
- e) a letter of application, including a statement of professional goals and expectations of the program and a curriculum vitae.

Upon admission into the program, students will be granted up to a maximum of 5.0 credits based on their ECE studies, on the recommendation of the Program Coordinator. These credits are applicable only to the Child Studies program.

Students admitted may receive the following credits:

CHST 14xx, CHST 24xx, ISSC 14xx, ISSC 24xx, PSYC 25xx, PSYC 35xx, PSYC 3901, SOWK 2201, SOCI 1xxx, SOCI 2xxx

### Academic Performance Evaluation

For the Child Studies programs, all credits are included in the Major CGPA, making the Major CGPA and Overall CGPA identical. The minimum requirements for Good Standing are those specified for Major CGPA.

## Child Studies – B.A. Honours (20.0 credits)

### Requirements

1. 2.5 credits in ISSC 4100, CHST 2501, CHST 3901, CHST 4908 [1.0];
2. 1.5 credits in PSYC 1001 and PSYC 1002 (or PSYC 1000 [1.0]), PSYC 2500;
3. 1.0 credit from PSYC 3505, PSYC 3506, PSYC 3507;
4. 1.0 credits in SOCI 3105 [1.0];
5. 1.0 credit from SOAN 2200 [1.0], CDNS 1000 [1.0], HIST 1300 [1.0], SOCI 2401 [1.0];
6. 1.0 credit from PSYC 2000 [1.0], SOCI 2003 [1.0];
7. 1.0 credit from the Faculty of Science;
8. 1.0 credit from the Faculty of Arts and Social Sciences and/or the Faculty of Public Affairs and Management, not Psychology or Sociology;
9. 9.0 credits in electives approved by the Program Co-ordinator (including up to 5.0 credits granted on admission);
10. 1.0 credit in electives at the 3000-level or above approved by the Program Co-ordinator.

### Notes

1. Additional credits may be required to meet the total specified in the Statement of Standing on Admission, as proposed by the student and approved by the Program Co-ordinator. A list of program electives that may be of interest can be obtained from the Program Co-ordinator.
2. In collaboration with the Program Co-ordinator, Honours students will develop a field of interest. Normally, a minimum of 2.0 elective credits should be in the field of interest. Three possible fields of interest are Developmental, Sociocultural and Managerial. A list of courses related to these fields can be obtained from the Program Co-ordinator.
3. Honours students who plan to apply for admission to Teacher's College or a graduate program should seek advice from the Program Co-ordinator in selecting their elective credits. Some substitutions to required courses may be acceptable, with permission of the Program Co-ordinator and the relevant department.
4. Some students may have to take courses extra to the degree to meet prerequisite requirements.

## Child Studies – B.A. General (15.0 credits)

### Requirements

1. 1.0 credits in CHST 2501, CHST 3901;
2. 1.5 credits in PSYC 1001 and PSYC 1002 (or PSYC 1000 [1.0]), PSYC 2500;
3. 1.0 credit from PSYC 3505, PSYC 3506, PSYC 3507;
4. 1.0 credits in SOCI 3105 [1.0];
5. 1.0 credit from SOAN 2200 [1.0], CDNS 1000 [1.0], HIST 1300 [1.0], SOCI 2401 [1.0];
6. 1.0 credit from PSYC 2000 [1.0], SOCI 2003 [1.0];
7. 1.0 credit from the Faculty of Science;
8. 1.0 credit from the Faculty of Arts and Social Sciences and/or the Faculty of Public Affairs and Management, and not Psychology or Sociology;
9. 6.5 credits in electives approved by the Program Co-ordinator (including up to 5.0 credits granted on admission).

## Classics and Religion

College of the Humanities  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Classics, Religion, Humanities – B.A. Honours, with Concentration in Classics Religion Jewish Studies**
- **Classics, Religion, Humanities – B.A. General, with Concentration in Classical Civilization Classical Languages and Literature Religion Jewish Studies**
- **Classics and Religion – B.A. Combined Honours**
- **Minor in Classics**
- **Minor in Religion**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* in this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars (see *Academic Regulations for the Bachelor of Arts Degree*). Students in the Classics, Religion, Humanities programs are exempt from the B.A. Breadth requirements.

Students should consult the College when planning their program and selecting courses.

### Approved Humanities Courses

The following courses are approved as Humanities credits for the Classics, Religion and Humanities programs.

#### Art History

ARTH 1100, ARTH 1101, ARTH 2100, ARTH 2202, ARTH 2300, ARTH 2806, ARTH 4202, ARTH 4203, ARTH 4305, ARTH 4800

#### English

FYSM 1004 [1.0], ENGL 1000 [1.0], ENGL 1001 [1.0], ENGL 2802 [1.0], ENGL 2902 [1.0], ENGL 3000 [1.0], ENGL 3304 [1.0], ENGL 4208, ENGL 4301, ENGL 4306

#### History

FYSM 1102 [1.0], HIST 1001 [1.0], HIST 2005 [1.0], HIST 2100 [1.0], HIST 2201 [1.0], HIST 2504 [1.0], HIST 3003 [1.0], HIST 3006, HIST 3007, HIST 3105, HIST/RELI 3708, HIST 3808 [1.0], HIST 4006 [1.0], HIST 4209 [1.0] (CLCV 4209 [1.0]), HIST 4502 [1.0], HIST 4509 [1.0]

#### Music

MUSI 1001, MUSI 2009, MUSI 2100 [1.0], MUSI 2101

#### Philosophy

FYSM 1300 [1.0], PHIL 1600 [1.0], PHIL/CLCV 2006, PHIL/CLCV 2007, PHIL 2008, PHIL 2009, PHIL 2101, PHIL 2301, PHIL 2307, PHIL/RELI 2601, PHIL/CLCV 3001, PHIL 4003, PHIL 4004, PHIL 4403

### Approved Language Courses

The following courses are approved to satisfy the program requirements for credits in a language or literature other than English:

- a) Any courses in Greek (GREK), Latin (LATN), French (FREN), German (GERM), Italian (ITAL), Russian (RUSS), Spanish (SPAN), Japanese (JAPA), Applied Language Studies (ALSS)
- b) The following specific courses: RELI 1902, RELI 2902, RELI 3902

### Classics, Religion, Humanities – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (14.0 credits)*

1. 7.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 2.0 credits in Religion (RELI);
  - c) 3.0 credits in Classics (CLAS) or Religion (RELI);
  - d) at least 1.0 credit at the 3000-level or above;
2. 7.0 credits collectively satisfying:
  - a) 3.0 credits in Approved Humanities courses;
  - b) 2.0 credits at the 3000-level or above in Approved Humanities, Classical Civilization (CLCV) or Religion (RELI), or at the 2000-level or above in Latin (LATN) or Greek (GREK);
  - c) 2.0 credits in a language or literature other than English;
  - d) at least 1.0 credit at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

3. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI);
4. 1.0 credit in free electives.

### Classics, Religion, Humanities with Concentration in Classics – B.A. Honours

*Credits Included in the Major CGPA (14.0 credits)*

1. 5.0 credits collectively satisfying:
  - a) 1.0 credit from: CLCV 2900 [1.0], CLCV 2901 [1.0], CLCV 3201, CLCV 3202, CLCV 4209 [1.0];
  - b) 1.0 credit from: CLCV 2009 [1.0], CLCV 3701, CLCV 3702, CLCV 4208 [1.0];
  - c) 1.0 credit in Greek (GREK) or Latin (LATN);
  - d) 2.0 additional credits in Classics (CLAS);
  - e) at least 1.5 credits at the 3000-level or above;
2. 9.0 credits collectively satisfying:
  - a) 2.0 credits in Religion (RELI);
  - b) 3.0 credits in Approved Humanities;
  - c) 2.0 credits at the 3000-level or above in Approved Humanities, Classical Civilization (CLCV) or Religion (RELI), or at the 2000-level or above in Latin (LATN) or Greek (GREK);
  - d) 2.0 credits in a language or literature other than English;
  - e) at least 1.0 credit at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

3. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI);
4. 1.0 credit in free electives.

### Classics, Religion, Humanities with Concentration in Religion – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (14.5 credits)*

1. 1.0 credit from among FYSM 1501 [1.0], RELI 1000, and RELI 1001, RELI 1205;
2. 2.0 credits in Religion (RELI) at the 2000-level or above;
3. 0.5 credit in RELI 3301;
4. 1.0 credit in Religion (RELI) at the 3000-level or above;

## Program Information

5. 1.0 credit in Religion (RELI) at the 4000-level;
6. 9.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 3.0 credits in Approved Humanities;
  - c) 2.0 credits at the 3000-level or above in Approved Humanities, Classical Civilization (CLCV) or Religion (RELI), or at the 2000-level or above in Latin (LATN) or Greek (GREK);
  - d) 2.0 credits in a language or literature other than English;
  - e) at least 1.0 credit at the 4000-level;

*Credits Not Included in the Major CGPA (5.5 credits)*

7. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI);
8. 0.5 credit in free electives.

### **Classics, Religion, Humanities with Concentration in Jewish Studies – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (14.0 credits)*

1. 3.5 credits in RELI 2206, RELI 2508, RELI 2701, RELI 2708 [1.0], RELI 3505, RELI 3301;
2. 0.5 credit in RELI 2507 or RELI 2508;
3. 1.0 credit in Religion (RELI) at the 3000-level or above;
4. 9.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 3.0 credits in Approved Humanities;
  - c) 2.0 credits at the 3000-level or above in Approved Humanities, Classical Civilization (CLCV) or Religion (RELI), or at the 2000-level or above in Latin (LATN) or Greek (GREK);
  - d) 2.0 credits in a language or literature other than English;
  - e) at least 1.0 credit at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

5. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI);
6. 1.0 credit in free electives.

### **Classics and Religion – B.A. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (7.0 credits)*

1. 7.0 credits in Classics or Religion collectively including:
  - a) 2.0 credits in Classics (CLAS);
  - b) 2.0 credits in Religion (RELI);
  - c) 3.0 credits in Classics (CLAS) or Religion (RELI);
  - d) 1.0 credit at the 3000-level;
  - e) 1.0 credit at the 4000-level;

*Additional Requirements (13.0 credits)*

2. The requirements for B.A. Combined Honours in the other discipline;
3. 5.0 credits in electives not in Classics, Religion or the other discipline;
4. Sufficient elective credits to make up 20.0 credits total for the program.

### **Classics, Religion and Humanities – B.A. General (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 10.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 2.0 credits in Religion (RELI);
  - d) 2.0 credits in Classics (CLAS) or Religion (RELI);
  - e) 3.0 credits in Approved Humanities;
  - f) 1.0 credit in a language or literature other than English;
  - g) 4.0 credits at the 2000-level or above;
  - h) 1.0 at the 3000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

2. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI).

### **Classics, Religion and Humanities with Concentration in Classical Civilization – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 4.0 credits collectively satisfying:
  - a) 1.0 credit from: CLCV 2900 [1.0], CLCV 2901 [1.0], CLCV 3201, CLCV 3202;
  - b) 1.0 credit from: CLCV 2009 [1.0], CLCV 3701, CLCV 3702;
  - c) 2.0 credits in Classical Civilization (CLCV), Greek (GREK), or Latin (LATN);
  - d) at least 1.0 credit must be at the 3000-level or above;
2. 6.0 credits collectively satisfying:
  - a) 2.0 credits in Religion (RELI);
  - b) 2.0 credits in Approved Humanities;
  - c) 1.0 credits in Approved Humanities at the 2000-level or above;
  - d) 1.0 credit in a language or literature other than English;
  - e) at least 1.0 credit at the 3000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

3. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI).

### **Classics, Religion and Humanities with Concentration in Classical Languages and Literature – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in Greek (GREK);
2. 1.0 credit in Latin (LATN);
3. 1.5 additional credits in Greek (GREK) or Latin (LATN);
4. 0.5 credit in Classics (CLAS);
5. 6.0 credits collectively satisfying:
  - a) 2.0 credits in Religion (RELI);
  - b) 2.0 credits in Approved Humanities courses;
  - c) 1.0 credits in Approved Humanities courses at the 2000-level or above;
  - d) 1.0 credit in a language or literature other than English;
  - e) at least 1.0 credit at the 3000-level or above.

*Credits Not Included in the Major CGPA (5.0 credits)*

6. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI).

**Classics, Religion and Humanities with Concentration in Religion – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit from: FYSM 1501 [1.0], RELI 1000, RELI 1001, and RELI 1205;
2. 1.5 additional credits in Religion (RELI) at the 2000-level or above;
3. 0.5 credit in RELI 3301;
4. 1.0 credit in Religion (RELI) at the 3000-level or above;
5. 6.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 2.0 credits in Approved Humanities courses;
  - c) 1.0 credits in Approved Humanities courses at the 2000-level or above;
  - d) 1.0 credit in a language or literature other than English;
  - e) at least 1.0 credit at the 3000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

6. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI).

**Classics, Religion and Humanities with Concentration in Jewish Studies – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 3.0 credits in RELI 2206, RELI 2508, RELI 2701, RELI 2708 [1.0], RELI 3505;
2. 0.5 credit in RELI 2507 or RELI 2509;
3. 0.5 credit in Religion (RELI) at the 3000-level or above;
4. 6.0 credits collectively satisfying:
  - a) 2.0 credits in Classics (CLAS);
  - b) 2.0 credits in Approved Humanities courses;
  - c) 1.0 credits in Approved Humanities courses at the 2000-level or above;
  - d) 1.0 credit in a language or literature other than English;
  - e) at least 1.0 credit at the 3000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

5. 5.0 credits in electives not in Classics (CLAS) or Religion (RELI).

**Minor in Classics**

Open to all undergraduate students.

*Requirements*

1. 1.0 credit in FYSM 1106 [1.0] or in Classical Civilization (CLCV), Greek (GREK) or Latin (LATN) at the 1000-level;
2. 1.0 credit from: CLCV 2000 [1.0] or CLCV 2009 [1.0] (ENGL 2009 [1.0]);
3. 1.0 credit from: CLCV 2900 [1.0] (HIST 2900 [1.0]) or CLCV 2901 [1.0] (HIST 2901 [1.0]);
4. 1.0 credit in either:
  - i) Classical Civilization (CLCV) at the 3000-level,
  - or
  - ii) Greek (GREK) or Latin (LATN) at the 2000-level or above.

5. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Minor in Religion**

Open to all undergraduate students.

*Requirements*

1. 1.0 credit in Religion (RELI) at the 1000-level;
2. 1.0 credit in Religion (RELI) at the 3000-level or above;
3. 2.0 credits in Religion (RELI).
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

## Cognitive Science

Cognitive Science Committee  
Institute of Interdisciplinary Studies  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Cognitive Science - B.A. Honours with Specialization in:**
  - Philosophical Concepts and Ideas**
  - Language and Linguistics**
  - The Biological Foundations of Cognition**
  - Cognition and Psychology**
  - Cognition and Computation**
- **A Co-operative Education Option is available. See the Co-operative Education section of this Calendar.**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the Undergraduate Co-ordinator when planning their program and selecting courses.

### Cognitive Science with Specialization in Philosophical and Conceptual Issues – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (15.5 credits)*

1. 1.0 credit in CGSC 2001 and CGSC 3001;
2. 1.0 credit in CGSC 4908 [1.0];
3. 2.5 credits in COMP 1005, COMP 1006, COMP 1805, COMP 2002 and COMP 3007;
4. 0.5 credit in either COMP 4106 or COMP 4107;
5. 2.5 credits in LALS 1000 [1.0], LALS 2001, LALS 2003 and LALS 3506;
6. 0.5 credit in PHIL 1301, PHIL 2001 or PHIL 3306;
7. 0.5 credit in either PHIL 2501 or PHIL 3502;
8. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2200 and PSYC 2700;
9. 5.0 credits in the specialization:
  - a) 3.5 credits in PHIL 2300, PHIL 3104, PHIL 3105, PHIL 3302, PHIL 3501, PHIL 3504, PHIL 3506;
  - b) 0.5 credit in PHIL 4503 or PHIL 4504;
  - c) 1.0 credit from: (PHIL 4103 or PHIL 4104), (PHIL 4508 or PHIL 4509), (PHIL 4506 or PHIL 4507), (PHIL 4102 or PHIL 4202), (PHIL 4301 or PHIL 4302) (only one course from each pair may be counted.);

*Credits Not Included in the Major CGPA (4.5 credits)*

10. 4.5 credits in free electives.

### Cognitive Science Language and Linguistics – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (14.5 credits)*

1. 1.0 credit in CGSC 2001 and CGSC 3001;
2. 1.0 credit in CGSC 4908 [1.0];
3. 2.5 credits in COMP 1005, COMP 1006, COMP 1805, COMP 2002 and COMP 3007;

4. 0.5 credit in either COMP 4106 or COMP 4107;
5. 2.5 credits in LALS 1000 [1.0], LALS 2001, LALS 2003 and LALS 3506;
6. 0.5 credit in PHIL 1301, PHIL 2001 or PHIL 3306;
7. 0.5 credit in either PHIL 2501 or PHIL 3502;
8. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2200 and PSYC 2700;
9. 4.0 credits in the specialization:
  - a) 1.0 credit in LALS 3002 and LALS 3004;
  - b) 2.0 credits from: LALS 2401, LALS 2603, LALS 2604, LALS 2701, LALS 3601, LALS 3101, LALS 3903;
  - c) 1.0 credit from: LALS 4001, LALS 4002, LALS 4009, LALS 4602;

*Credits Not Included in the Major CGPA (5.5 credits)*

10. 5.5 credits in free electives.

### Cognitive Science in the Biological Foundations of Cognition – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (15.0 credits)*

1. 1.0 credit in CGSC 2001 and CGSC 3001;
2. 1.0 credit in CGSC 4908 [1.0];
3. 2.5 credits in COMP 1005, COMP 1006, COMP 1805, COMP 2002 and COMP 3007;
4. 0.5 credit in either COMP 4106 or COMP 4107;
5. 2.5 credits in LALS 1000 [1.0], LALS 2001, LALS 2003 and LALS 3506;
6. 0.5 credit in PHIL 1301, PHIL 2001 or PHIL 3306;
7. 0.5 credit in either PHIL 2501 or PHIL 3502;
8. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2200 and PSYC 2700;
9. 4.5 credits in the specialization:
  - a) 1.0 credits in (PSYC 2001 and PSYC 2002) or PSYC 2000 [1.0];
  - b) 2.0 credits in PSYC 3000 [1.0] and PSYC 3200 [1.0];
  - c) 0.5 credit in either PSYC 3202 or PSYC 3702;
  - d) 1.0 credit at the 4000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

10. 5.0 credits in free electives.

### Cognitive Science in Cognition and Psychology – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (15.0 credits)*

1. 1.0 credit in CGSC 2001 and CGSC 3001;
2. 1.0 credit in CGSC 4908 [1.0];
3. 2.5 credits in COMP 1005, COMP 1006, COMP 1805, COMP 2002 and COMP 3007;
4. 0.5 credit in either COMP 4106 or COMP 4107;
5. 2.5 credits in LALS 1000 [1.0], LALS 2001, LALS 2003 and LALS 3506;
6. 0.5 credit in PHIL 1301, PHIL 2001 or PHIL 3306;
7. 0.5 credit in either PHIL 2501 or PHIL 3502;
8. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2200 and PSYC 2700;

9. 4.5 credits in the specialization:
  - a) 1.0 credits in (PSYC 2001 and PSYC 2002) or PSYC 2000 [1.0];
  - b) 2.0 credits in PSYC 3000 [1.0], PSYC 3700 [1.0];
  - c) 0.5 credit in either PSYC 3202 or PSYC 3702;
  - d) 1.0 credit at the 4000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

10. 5.0 credits in free electives.

### **Cognitive Science in Cognition and Computation – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (14.5 credits)*

1. 1.0 credit in CGSC 2001 and CGSC 3001;
2. 1.0 credit in CGSC 4908 [1.0];
3. 2.5 credits in COMP 1005, COMP 1006, COMP 1805, COMP 2002 and COMP 3007;
4. 0.5 credit in either COMP 4106 or COMP 4107;
5. 2.5 credits in LALS 1000 [1.0], LALS 2001, LALS 2003 and LALS 3506;
6. 0.5 credit in PHIL 1301, PHIL 2001 or PHIL 3306;
7. 0.5 credit in either PHIL 2501 or PHIL 3502;
8. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2200 and PSYC 2700;
9. 4.0 credits in the specialization:
  - a) 0.5 credit in COMP 1002;
  - b) 2.0 credits at the 2000-level or above in Computer Science;
  - c) 1.5 credits at the 4000-level or above in Computer Science.

*Credits Not Included in the Major CGPA (5.5 credits)*

10. 5.5 credits in free electives.

#### **Notes**

1. Students must choose one of the specializations of study. Students should consult with the Area Co-ordinator when selecting courses within that specialization.
2. The topic of the Honours Research Essay must be in the area covered by the student's specialization. Registration in CGSC 4908 requires that the student have already completed or be concurrently registered in all of the requirements of their specialization.

## **Computational Sciences**

College of Natural Sciences  
Faculty of Science

This section presents the requirements for:

- **Computational Biochemistry - B.Sc. Honours**
- **Computational Biology with Specialization in Molecular Bioinformatics - B.Sc. Honours Biodiversity - B.Sc. Honours**
- **Computational Chemistry - B.Sc. Honours**
- **Computational Chemistry - B.Sc. General**
- **Computational Geophysics - B.Sc. Honours**

These programs are offered by the Institute of Biochemistry and the Departments of Biology, Chemistry and Earth Sciences.

In addition to the requirements listed below, students must satisfy the University regulations common to all undergraduate students (see the *Academic Regulations of the University* in this Calendar),

Students should consult with the relevant Department(s) when planning their program and selecting courses.

### **Course Categories for Computational Sciences**

The program descriptions below make use of the following categories defined in the *Academic Regulations for the Bachelor of Science Degree* section of this Calendar.

#### **Science Faculty Electives**

#### **Approved Arts or Social Science**

#### **Free Elective**

### **Computational Biochemistry – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major (14.0 credits)*

1. 1.5 credits in BIOL 1003, BIOL 2104, BIOL 3104;
2. 1.0 credit in Biology at the 1000-level or higher;
3. 3.0 credits in CHEM 1000 [1.0], CHEM 2203, CHEM 2101, CHEM 2303, CHEM 3503;
4. 0.5 credit in CHEM 2204 or CHEM 2206;
5. 2.5 credits in Biochemistry: BIOC 2200, BIOC 3005, BIOC 3100 [1.0], BIOC 4006;
6. 0.5 credit in Biochemistry at the 4000-level or CHEM 4406;
7. 0.5 credit in Biochemistry at the 4000-level;
8. 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
9. 0.5 credits in Computer Science at the 2000-level or above;
10. 2.5 credits in CMPS 2800, CMPS 3604, CMPS 3800, CMPS 4909 [1.0];

*Credits Not Included in the Major (6.0 credits)*

11. 1.0 credit in PHYS 1007 and PHYS 1008; or PHYS 1003 and PHYS 1004;
12. 1.5 credits in MATH 1007, MATH 1107, and STAT 2507;
13. 2.0 credits in Approved Arts or Social Science;
14. 1.5 credits in Free Electives.

### **Computational Biology with Specialization in Molecular Bioinformatics – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

1. 4.0 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200 BIOL 2600, BIOL 4901;

## Program Information

- 0.5 credit in BIOL 3205 or BIOL 3305;
- 2.5 credits in CMPS 2800, CMPS 3604, CPMS 3800, CMPS 4909[1.0];
- 4.0 credits in CHEM 2203, CHEM 2204, BIOL 3104, BIOC 3100 [1.0], BIOC 4002, BIOC 4006, BIOL 4106;
- 1.0 credit in Biology or Biochemistry at the 3000-level or above;

*Credits Not Included in the Major CGPA (8.0 credits)*

- 1.0 credit in CHEM 1000 [1.0];
- 1.0 credit in PHYS 1007 and PHYS 1008, or PHYS 1003 and PHYS 1004;
- 1.5 credits in MATH 1007, MATH 1107 and MATH 2507;
- 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
- 0.5 credit in Computer Science at the 2000-level or above;
- 0.5 credits in NSCI 1000 or Approved Arts or Social Sciences;
- 1.5 credits in Approved Arts or Social Sciences;
- 0.5 credit in Free Elective.

### **Computational Biology with Specialization in Biodiversity – B.Sc. Honours**

*Credits Included in the Major CGPA (11.0 credits)*

- 4.0 credits in BIOL 1003, BIOL 1004, BIOL 2001, BIOL 2002, BIOL 2104, BIOL 2200 BIOL 2600, BIOL 4901;
- 0.5 credit in BIOL 3205 or BIOL 3305;
- 1.5 credits in CMPS 2800, CMPS 4909 [1.0];
- 0.5 credit in CMPS 3604 or CMPS 3800;
- 2.0 credits in BIOL 3601, BIOL 3602, BIOL 3604, BIOL 4103;
- 0.5 credit in BIOL 4104 or BIOL 4609;
- 2.0 credits in Biology at the 3000-level or above;

*Credits Not Included in the Major CGPA (9.0 credits)*

- 1.0 credit in CHEM 1000 [1.0];
- 1.0 credit in Physics: PHYS 1007 and PHYS 1008, or PHYS 1003 and PHYS 1004;
- 1.5 credits in MATH 1007, MATH 1107 and MATH 2507;
- 1.5 credits in COMP 1005, COMP 1006, COMP 2002;
- 0.5 credit in Computer Science at the 2000-level or above;
- 0.5 credits in NSCI 1000 or Approved Arts or Social Sciences;
- 1.5 credits in Approved Arts or Social Sciences;
- 1.5 credit in Free Elective.

### **Computational Chemistry – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.0 credits)*

- 6.5 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3201, CHEM 3503, CHEM 3504, CHEM 4406;
- 0.5 credit in Chemistry or Biochemistry at the 3000- or 4000-level;
- 0.5 credit in Chemistry or Biochemistry at the 4000-level;
- 3.5 credits in COMP 1002, COMP 1005, COMP 1006; COMP 2002, COMP 2003, COMP 2004, COMP 3004;

- 0.5 credit from: COMP 3005, COMP 3806;
- 0.5 credit in Computer Science at the 3000- or 4000-level;
- 1.0 credit in CMPS 4909 [1.0];

*Credits Not Included in the Major CGPA (7.0 credits)*

- 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
- 0.5 credit in BIOL 1003;
- 1.0 credit in BIOC 3100 [1.0];
- 0.5 credit in PHYS 1003 or PHYS 1007;
- 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
- 1.5 credit in Approved Arts or Social Science;
- 0.5 credit in Science Faculty Electives;
- 1.0 credit in Free Electives.

### **Computational Chemistry – B.Sc. General (15.0 credits)**

*Credits Included in the Major CGPA (9.5 credits)*

- 5.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3201, CHEM 3503;
- 1.0 credits in BIOC 3100 [1.0];
- 3.5 credits in COMP 1002, COMP 1005, COMP 1006, COMP 2002, COMP 2003, COMP 2004, COMP 3004;

*Credits Not Included in the Major CGPA (5.5 credits)*

- 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
- 0.5 credits in BIOL 1003;
- 0.5 credits in PHYS 1003 or PHYS 1007;
- 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
- 1.5 credit in Approved Arts or Social Science;
- 1.0 credit in Free Electives.

### **Computational Geophysics - B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.5 credits)*

- 1.5 credits in COMP 1005, COMP 1006, and COMP 2002;
- 0.5 credit in Computer Science at the 2000-level or above;
- 2.0 credits in CMPS 2800, CMPS 3800, and CMPS 4909 [1.0];
- 0.5 credit in Computational Science (CMPS) at the 3000-level or above;
- 1.0 credit from GEOL 1006, GEOL 1007 and GEOL 1008;
- 4.0 credits in GEOL 2801, GEOL 2205, GEOL 2208, GEOL 3201, GEOL 3805, GEOL 3806, GEOL 4801, GEOL 4804;

*Credits Not Included in the Major CGPA (10.5 credits)*

- 2.5 credits in MATH 1007, MATH 1107, MATH 2007, MATH 2008, STAT 2507;
- 2.5 credits in PHYS 1001, PHYS 1002, PHYS 2202, PHYS 3807, PHYS 4203;
- 0.5 credit in ELEC 3105;
- 1.0 credit in CHEM 1000 [1.0];
- 2.0 credits from GEOL 2203, GEOL 2301, GEOL 2802, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 4203, GEOL 4707, GEOL 4805, PHYS 2604, PHYS 3604;



12. 0.5 credits in NSCI 1000 or Approved Arts and Social Science;

13. 1.5 credits in Approved Arts and Social Science.

**Note**

The courses in Requirement 10 should be selected in consultation with the program adviser.

## Computer Science

School of Computer Science  
Faculty of Science

This section presents the requirements for:

- **Bachelor of Computer Science with streams**
  - Software and Computing
  - Management and Business systems
  - Software Engineering
  - Network Computing
- **Computer Science and Chemistry - B.Sc. Combined Honours**
- **Computer Science and Mathematics - B.Math. Combined Honours**
- **Minor in Computer Science**

The Co-operative Education Option is available in Computer Science. See the Co-operative Education section of this Calendar for details.

In addition to the requirements listed below, students must satisfy the University regulations common to all undergraduate students (see the *Academic Regulations of the University* section of this Calendar).

Students should consult with the School when planning their program and selecting courses.

### Academic Performance Evaluation

Students in the Bachelor of Computer Science or in Combined Computer Science programs are subject to the following regulations.

At each Academic Performance Evaluation, the minimum required Major CGPA is 6.50 and Overall CGPA is 5.00. These are also the required minima for graduation. These standards replace the Standard Required Minimum CGPA (see *Academic Performance Evaluation* in the Academic Regulations section of this Calendar.).

Students who do not achieve the status Good Standing at any Academic Performance Evaluation will be required to leave the program with the status Ineligible to Return (ITR).

### Bachelor of Computer Science

All B.C.S. students must be registered in one of the following streams:

#### Software and Computing Stream (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 7.0 credits in COMP 1405, COMP 1805, COMP 1406, COMP 1402, COMP 2402, COMP 2003, COMP 2404, COMP 2805, COMP 3000, COMP 3004, COMP 3005, COMP 3007, COMP 3804, COMP 4905;
2. 0.5 credit in COMP 4804;
3. 0.5 credit in Computer Science at the 2000-level or above;
4. 1.0 credit in Computer Science at the 3000-level or above;
5. 1.5 credits in Computer Science at the 4000-level;

*Credits Not Included in the Major CGPA (9.5 credits)*

5. 3.0 credits in MATH 1007, MATH 1104, MATH 2007, MATH 2107, STAT 2605, MATH 3101;
6. 1.0 credit in Experimental Science;
7. 2.5 credits in Approved Arts or Social Science;
8. 1.0 credit in Science or Business;
9. 2.0 credits in free electives.

### Management and Business Systems Stream (20.0 credits)

*Credits Included in the Major CGPA (9.5 credits)*

1. 7.0 credits in COMP 1405, COMP 1805, COMP 1406, COMP 1402, COMP 2402, COMP 2003, COMP 2404, COMP 2805, COMP 3000, COMP 3004, COMP 3005, COMP 3007, COMP 3804, COMP 4905;
2. 0.5 credit in Computer Science at the 2000-level or above;
3. 1.5 credit in Computer Science at the 4000-level;
4. 0.5 credit in BUSI 2300;

*Credits Not Included in the Major CGPA (10.5 credits)*

5. 2.5 credits in MATH 1007, MATH 1104, MATH 2107, MATH 3101, STAT 2507;
6. 0.5 credit in STAT 2509 or in Mathematics (MATH) or Statistics (STAT) at the 2000-level or above;
7. 2.5 credits in BUSI 1001, BUSI 1002, BUSI 2101, BUSI 2504, BUSI 3403;
8. 1.0 credit in ECON 1000 [1.0];
9. 1.0 credit in Business at the 3000-level or above;
10. 0.5 credit in Business at the 4000-level;
11. 2.5 credits in free electives.

### Software Engineering Stream (20.0 credits)

*Credits Included in the Major CGPA (11.0 credits)*

1. 7.0 credits in COMP 1405, COMP 1805, COMP 1406, COMP 1402, COMP 2402, COMP 2003, COMP 2404, COMP 2805, COMP 3000, COMP 3004, COMP 3005, COMP 3007, COMP 3804, COMP 4905;
2. 0.5 credit in COMP 2405;
3. 0.5 credit in Computer Science at 2000-level or above;
4. 3.0 credits in COMP 3104, COMP 4004, COMP 4101, COMP 4104, COMP 4804, SYSC 3303;

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 3.0 credits in MATH 1007, MATH 1104, MATH 2007, MATH 2107, STAT 2605, MATH 3101;
6. 1.0 credit in an Experimental Science;
7. 1.0 credit in Science or Business;
8. 2.5 credits in Approved Arts or Social Science;
9. 1.5 credits in free electives.

#### Note

The course BUSI 4407 is also strongly recommended in this stream.

### Network Computing Stream (20.0 credits)

*Credits Included in the Major CGPA (11.0 credits)*

1. 7.0 credits in COMP 1405, COMP 1805, COMP 1406, COMP 1402, COMP 2402, COMP 2003, COMP 2404, COMP 2805, COMP 3000, COMP 3004, COMP 3005, COMP 3007, COMP 3804, COMP 4905;
2. 0.5 credit in COMP 2405;
3. 0.5 credit in Computer Science at 2000-level or above;
4. 3.0 credits in COMP 3203, COMP 4001, COMP 4009, COMP 4101, COMP 4103, COMP 4804;

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 3.0 credits in MATH 1007, MATH 1104, MATH 2007, MATH 2107, STAT 2605; MATH 3101;

6. 1.0 credit in Experimental Science Electives;
7. 1.0 credit in Science or Business Electives;
8. 2.5 credits in Approved Arts or Social Science;
9. 1.5 credits in free electives.

### Chemistry and Computer Science – B.Sc. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (14.0 credits)*

1. 6.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2203, CHEM 2206, CHEM 3101, CHEM 3102, CHEM 3106, CHEM 3503, CHEM 3504, CHEM 3201, CHEM 4406;
2. 1.0 credit in BIOC 3100 [1.0];
3. 5.5 credits in COMP 1002, COMP 1005, COMP 1006; COMP 2002, COMP 2003, COMP 2004, COMP 3000, COMP 3004, COMP 3005, COMP 3804, COMP 3806;
4. 0.5 credit in Computer Science at the 4000-level;
5. 1.0 credit in either:
  - a) CMPS 4909 [1.0]or
  - b) COMP 4905 and 0.5 credit in Computer Science at the 4000-level;

*Credits Not Included in the Major CGPA (6.0 credits)*

6. 2.5 credits in MATH 1007, MATH 1107, MATH 2007, MATH 2107, BIOL 1003;
7. 0.5 credit in PHYS 1003 or PHYS 1007;
8. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
9. 1.5 credits in Approved Arts or Social Science;
10. 1.0 credit in Free Electives.

### Computer Science and Mathematics – B.Math. Combined Honours (20.0 credits)

Students must register in one of the two streams below, each of which adds 5.0 credits to the Major CGPA.

*Credits Included in the Major CGPA (15.0 credits)*

1. 4.0 credits in MATH 1002 [1.0], MATH 1107, MATH 2107, MATH 2000 [1.0], MATH 2100 [1.0];
2. 5.5 credits in COMP 1002, COMP 1005, COMP 1006; COMP 2002, COMP 2003, COMP 2004, COMP 3004, COMP 3000, COMP 3005, COMP 3804, COMP 3805;
3. 0.5 credit in MATH 4905 or COMP 4905;

#### *and for the stream in Computing Theory and Numerical Methods:*

4. 2.5 credits in MATH 2454, STAT 2655; MATH 3801, MATH 3806, COMP 4804;
5. 0.5 credit from: MATH 3001, MATH 3002, MATH 3057, MATH 3008;
6. 1.0 credit from MATH 4801, MATH 4802, MATH 4803, MATH 4805, MATH 4806, MATH 4808;
7. 1.0 credit in Computer Science at the 3000-level or above.

#### *and for the stream in Statistics and Computing:*

4. 2.5 credits in MATH 2454, STAT 2559, STAT 2655, STAT 3558, STAT 3559;
5. 0.5 credit in STAT 3505 or STAT 3506;
6. 1.0 credit in Statistics at the 4000-level;
7. 1.0 credit in Computer Science at the 4000-level.

*Credits Not Included in the Major CGPA (5.0 credits)*

8. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science;
  - b) 2.0 credit in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
9. 1.0 credits in Free Electives.

### Minor in Computer Science

The Minor in Computer Science is open only to students registered in B.Sc. Honours or B.Math. Honours programs.

*Requirements*

1. 3.5 credits in COMP 1005, COMP 1006, COMP 1002, COMP 1805, COMP 2002, COMP 2004, COMP 3806 (MATH 3806);
2. 0.5 credit from: COMP 3004 or COMP 3005.
3. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Course Categories

The following categories of courses are used in defining the program requirements in Computer Science.

*Computer Science*

In addition to the courses with subject code COMP, the following courses offered by the Eric Sprott School of Business and the Faculty of Engineering and Design are relevant to the B.C.S. program and the Combined Honours programs. These courses are counted as Computer Science credits in B.C.S. and Combined Honours program requirements:

*Business*

BUSI 2300, BUSI 2400, BUSI 4400, BUSI 4402, BUSI 4406, BUSI 4407

*Engineering*

SYSC 3303, SYSC 4005, SYSC 4507

*Experimental Science Electives*

All courses in Biochemistry, Biology, Chemistry, Geology and Physics are eligible as Experimental Science electives with the exception of: BIOL 1902, BIOL 1903, BIOL 2106, CHEM 1003, GEOL 1004, GEOL 2401, GEOL 2402, GEOL 2403, PHYS 1900 [1.0], PHYS 1901, PHYS 1902, ISCI 1001, ISCI 1002, ISCI 2001 and ISCI 2002

*Approved Arts or Social Science*

All courses offered by the Faculty of Arts and Social Sciences and the Faculty of Public Affairs and Management, excluding Prohibited Courses listed below.

*Science or Business Electives*

All courses in Biology, Biochemistry, Chemistry, Geology, Physics and Business and also: GEOG 1005, ISCI 1001, ISCI 1002, ISCI 2001, ISCI 2002

*Natural Science Electives*

This category is defined with the B.Math. programs. See the Mathematics Program section of this Calendar for details.

*Prohibited Courses*

The following courses cannot be used for credit in the B.C.S. or any Combined Computer Science program: BUSI 1402, BUSI 2402, ISCI 3000, COMP 1001, COMP 1004, COMP 1007

## Criminology and Criminal Justice

Institute of Criminology and Criminal Justice  
Faculty of Public Affairs and Management

This section presents the requirements for:

- **Criminology and Criminal Justice – B.A. Honours with Concentration in**
  - Law
  - Psychology
  - Sociology
- **Criminology and Criminal Justice – B.A. General with Concentration in**
  - Law
  - Psychology
  - Sociology
- **Field Placement Practicum**
- **Carleton/Algonquin Articulation Agreement – B.A. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars. The B.A. Breadth requirement is waived for students in Criminology and Criminal Justice (see *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the Institute when selecting courses and planning their program.

### Criminology and Criminal Justice – B.A. Honours

Students in this program choose to follow one of the three concentrations. The selection must take place before second year status is achieved.

#### CCJ with Concentration in Law – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA: (13.0 credits)*

1. 2.5 credits in LAWS 1000 [1.0], LAWS 2004 [1.0], LAWS 3907;
2. 0.5 credit from: LAWS 3305 or LAWS 3306;
3. 1.0 further credits in Law at the 2000-level or higher;
4. 1.5 further credits in Law at the 3000-level or higher;
5. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402;
6. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
7. 1.0 credits in SOCI 2505, SOCI 2701;
8. 0.5 credit in either: SOCI 3703 or SOCI 3808;
9. 1.0 credit from: CRCJ 3000 [1.0] or Approved CCJ Electives at the 3000-level or higher (See Note 2);
10. 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;
11. 1.0 credit from: CRCJ 4908 [1.0] or Approved CCJ Electives at the 4000-level;

*Credits Not Included in the Major CGPA (7.0 credits)*

12. 7.0 credits in free electives.

#### Note

1. The course CRCJ 3901 may not be repeated.
2. See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives.

**CCJ with Concentration in Psychology –  
B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.5 credits)*

1. 2.0 credits in LAWS 1000 [1.0], LAWS 2004 [1.0];
2. 0.5 credits from: LAWS 3305 or LAWS 3306;
3. 3.0 credits in PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402, PSYC 3000 [1.0];
4. 1.0 credit in (PSYC 2001 and PSYC 2002) or in PSYC 2000 [1.0];
5. 1.0 credits in Psychology at the 2000-level or higher;
6. 0.5 credit in Psychology at the 3000-level or higher;
7. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
8. 1.0 credits in: SOCI 2505, SOCI 2701;
9. 0.5 credit from: SOCI 3703 or SOCI 3808;
10. 1.0 credit from: CRCJ 3000 [1.0] or PSYC 3400 [1.0] or Approved CCJ Electives at the 3000-level or higher (See Note 2);
11. 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;
12. 1.0 credit from: CRCJ 4908 [1.0] or Approved CCJ Electives at the 4000-level;

*Credits Not Included in the Major CGPA (6.5 credits)*

13. 6.5 credits in free electives.

**Note**

See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives .

**CCJ with Concentration in Sociology –  
B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA: (13.0 credits)*

1. 2.0 credits in: LAWS 1000 [1.0], LAWS 2004 [1.0];
2. 0.5 credits from: LAWS 3305 or LAWS 3306;
3. 2.0 credits in: PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402;
4. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
5. 2.0 credits in Sociology SOCI 2003 [1.0], SOCI 2505, SOCI 2701;
6. 0.5 credit from: SOCI 3703 or SOCI 3808;
7. 1.0 credit in Sociology at the 2000-level or higher;
8. 1.0 credit in Sociology at the 3000-level or higher;
9. 1.0 credit from: CRCJ 3000 [1.0] or SOCI 3700 [1.0] or Approved CCJ Electives at the 3000-level or higher (See Note 2);
10. 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;
11. 1.0 credit from: CRCJ 4908 [1.0] or Approved CCJ Electives at the 4000-level;

*Credits Not Included in the Major CGPA (7.0 credits)*

12. 7.0 credits in free electives.

**Notes for all Concentrations**

1. For Requirement 11 in each concentration, registration in the Honours Research Project CRCJ 4908 requires a Major CGPA of at least 10.00.

2. Sociology SOCI 3700 may be substituted for CRCJ 3000 for students doing their Concentration in Sociology. Psychology PSYC 3400 may be substituted for students doing their Concentration in Psychology.
3. In Item 8 in the Concentration in Sociology, SOAN 2005 [1.0] or SOCI 4006 [1.0] is highly recommended.
4. See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives .

**Criminology and Criminal Justice –  
B.A. General**

Students in this program choose to follow one of the three concentrations. The selection must take place before second year status is achieved.

**CCJ with Concentration in Law –  
B.A. General (15.0 credits)**

*Credits Included in the Major CGPA: (10.0 credits)*

1. 2.0 credits in LAWS 1000 [1.0], LAWS 2004 [1.0];
2. 0.5 credit from: LAWS 3305 or LAWS 3306;
3. 2.0 further credits in Law at the 2000-level or higher;
4. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402;
5. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
6. 1.0 credits in SOCI 2505, SOCI 2701;
7. 0.5 credit from: SOCI 3703 or SOCI 3808;
8. 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;

*Credits Not Included in the Major CGPA (5.0 credits)*

9. 5.0 credits in free electives.

**Note**

See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives .

**CCJ with Concentration in Psychology –  
B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (10.5 credits)*

1. 2.0 credits in LAWS 1000 [1.0], LAWS 2004 [1.0];
2. 0.5 credits from: LAWS 3305, LAWS 3306;
3. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402;
4. 1.0 credit in (PSYC 2001 and PSYC 2002) or in PSYC 2000 [1.0];
5. 1.5 credits in Psychology at the 2000-level or higher;
6. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
7. 1.0 credits in: SOCI 2505, SOCI 2701;
8. 0.5 credit from: SOCI 3703 or SOCI 3808;
9. 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;

*Credits Not Included in the Major CGPA (4.5 credits)*

10. 4.5 credits in free electives.

**Note**

See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives .

## CCJ with Concentration in Sociology – B.A. General (15.0 credits)

*Credits Included in the Major CGPA: (10.0 credits)*

- 2.0 credits in: LAWS 1000 [1.0], LAWS 2004 [1.0];
- 0.5 credits from: LAWS 3305 or LAWS 3306;
- 2.0 credits in: PSYC 1001, PSYC 1002, PSYC 2400, PSYC 3402;
- 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0];
- 2.0 credits in Sociology SOCI 2003 [1.0], SOCI 2505, SOCI 2701;
- 0.5 credit from: SOCI 3703 or SOCI 3808;
- 1.0 credit in Sociology at the 2000-level or higher;
- 1.0 credit from: CRCJ 3901 [1.0] or Approved CCJ Electives at the 3000-level;

*Credits Not Included in the Major CGPA (5.0 credits)*

- 5.0 credits in free electives.

### Note

See **Note 2** under *Course Categories for Criminology and Criminal Justice* below regarding maximum permissible number of CCJ electives.

### Field Placement Practicum

The Field Placement Practicum (CRCJ 3901) is offered at the 3000-level to students in CCJ programs. Students complete a 1.0 (or 2.0) credit Field Placement Practicum course during the fall/winter session. To be eligible for the Practicum students must have completed at least 9.0 credits, including all of the 1000- and 2000-level requirements in the Major CGPA. Enrolment is restricted. A floating cutoff will be used to identify the students with the highest Major CGPA over those required courses, who may then receive permission to register for the Field Placement. Allocation of Field Placements will be determined by the Field Placement Coordinator.

Students wishing to register for a Field Placement Practicum must apply to the Institute no later than May 1 of their second year. If granted permission, students will then register in CRCJ 3901 [1.0] during August registration. Students in the B.A. Honours program may receive permission to complete a 2.0 credit placement, in which case they will also register in CRCJ 3902 [1.0].

## Course Categories for Criminology and Criminal Justice

### Approved CCJ Electives

*Criminology*  
CRCJ 3902 [1.0]

*Law*  
LAWS 3006, LAWS 3307, LAWS 4302, LAWS 4305, LAWS 4306, LAWS 4307, LAWS 4308, LAWS 4309, LAWS 4504, LAWS 4900 [1.0], LAWS 4901, LAWS 4902

*Psychology*  
PSYC 2100, PSYC 2200, PSYC 2500, PSYC 2600, PSYC 3102, PSYC 3204, PSYC 3403, PSYC 3405, PSYC 3507, PSYC 3604, PSYC 4900, PSYC 4902

*Sociology*  
SOCI 2506, SOCI 3001, SOCI 3201, SOCI 3507, SOCI 4005, SOCI 4007, SOCI 4503, SOCI 4704, SOCI 4901, SOCI 4902

### Notes

- Each of the courses LAWS 3305, LAWS 3306, SOCI 3703, and SOCI 3808 may be used as an elective if it has not been used to satisfy a Major requirements and student does not exceed maximum number of courses allowed in the Major and Concentration.

- CCJ Electives may be used to satisfy requirements for the Major where so indicated or to satisfy requirements for the Concentration but students may not exceed the limit allowed in the Major and Concentration, which is 11.5 for the B.A. General and 15.0 for the B.A. Honours. Consult the Institute if clarification is required.
- Students may request permission to offer courses towards the Major which are not listed as electives, including those offered by the Criminal Justice and Social Policy Summer School, as well as special topics courses offered from time to time by the Institute or Departments of Law, Psychology and Sociology. Students should consult the Coordinator for a listing of courses approved as alternative electives.

## Carleton University/Algonquin College Articulation Agreement

### B.A. General (Carleton)/Police Foundations (Algonquin)

An articulation agreement between Carleton University and Algonquin College of Applied Arts and Technology permits graduates with a Diploma in Police Foundations from Algonquin College to apply for admission into the B.A. program at Carleton University. Successful applicants will be granted 5.0 credits on admission towards the completion of a B.A. in either Criminology, or Law, or Psychology, or Sociology.

To be eligible for consideration for admission according to this Articulation Agreement, students must have completed the Diploma in Police Foundations at Algonquin College with a minimum B average (GPA of 3.0). They will then be considered for admission to a B.A. General program at Carleton in either Criminology, or Law, or Psychology, or Sociology.

### Normal course transfer credits:

2.0 credits in Law; 2.0 credits in Sociology, 0.5 in Political Science and 0.5 in Psychology.

Further information may be obtained from the Undergraduate Supervisor or Coordinator of the appropriate B.A. program.

---

## Directed Interdisciplinary Studies

Institute of Interdisciplinary Studies  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Directed Interdisciplinary Studies – B.A. Honours**
- **Directed Interdisciplinary Studies – B.A. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the Institute when selecting courses and planning their program.

### General Information

The degree of Bachelor of Arts in Interdisciplinary Studies is pursued by means of a plan of study proposed by the student. Lists of courses from which proposals may be drawn are provided in the following areas: Aboriginal Studies, African Studies, Asian Studies, Labour Studies, Latin American and Caribbean Studies, Medieval Studies, United States Studies and Urban Studies. For Visual and Performing Arts, see the course listings for the School for Studies in Art and Culture. For Technology, Society, Environment Studies, see course listings under Technology, Society and the Environment in this Calendar. Students may also propose a plan of study in an area of special interest to them that they define themselves.

1. Prior to submitting a formal application, students are advised to consult with the Program Co-ordinator for assistance in working out a suitable pattern of courses.
2. To allow time for adequate appraisal by the Committee, the proposal should be submitted as early as possible before the year of entry to the program (by June 1 for September registration and by November 1 for January registration).
3. Students may apply for admission to the program at any time after completion of their first 5.0 credits and before they begin their last 5.0 credits towards the degree.
4. Normally, 3.0 credits in the student's field of interest are to be included among the last 5.0 credits taken towards the degree.

### Directed Interdisciplinary Studies – B.A. Honours (20.0 credits)

Students applying for the B.A. (Honours) program in Directed Interdisciplinary Studies must complete the prescribed application form, available from the Institute of Interdisciplinary Studies office. They are required to list 4.5 credits which meet the requirements listed in Part A below, and 9.5 credits which meet the requirements listed in Part B below, along with Honours essay (IASS 4908). The credits in Part B must be related to a significant theme or field of interest and fit into a coherent pattern. It is expected that the credits of Part A will be related to that theme as well. Lists of appropriate courses to meet these requirements will be provided. On acceptance of the proposed pattern of study, the credits described above, or variations agreed to by the Committee, become a requirement for completion of the degree.

*Credits included in the Major CGPA (15.0 credits)*

*Part A (4.5 credits)*

1. 1.0 credit that addresses the temporal dimension of human societies, analyzing times before the current era, and societies other than our own;

2. 1.0 credit that addresses the artifacts of the imagination, in literature and other forms, that addresses the life of the imagination and the culture;
3. 1.0 credit that addresses the understanding of social and/or natural processes, and the ways in which that understanding is obtained in science and social science;
4. 1.0 credit that addresses matters of human values, ethics and social responsibilities;
5. 0.5 credit in DIST 3901;

*Part B (9.5 credits)*

6. 9.5 credits as proposed by the student and approved by the committee including:
  - a) 1.0 credit in IASS 4908[1.0] Honours Essay;
  - b) At least 4.0 credits in one discipline;
  - c) At least 3.0 credits at the 4000-level or above;

*Credits not included in the Major CGPA (5.0 credits)*

7. 5.0 credits in free electives.

### Directed Interdisciplinary Studies – B.A. General (15.0 credits)

Students applying for the B.A. General program in Directed Interdisciplinary Studies must complete the prescribed application form, available from the Institute of Interdisciplinary Studies office. They are required to list 4.5 credits which meet the requirements listed in Part A below, and 5.5 credits which meet the requirements listed in Part B below. The credits in Part B must be related to a significant theme or field of interest and fit into a coherent pattern. It is expected that the credits of Part A will be related to that theme as well. On acceptance of the proposed pattern of study, the credits described above, or variations agreed to by the Committee, become a requirement for completion of the degree.

*Credits included in the Major CGPA (10.0 credits)*

*Part A (4.5 credits)*

1. 1.0 credit that addresses the temporal dimension of human societies, analyzing times before the current era, and societies other than our own;
2. 1.0 credit that addresses the artifacts of the imagination, in literature and other forms, or that addresses the life of the imagination and the culture;
3. 1.0 credit that addresses the understanding of social and/or natural processes, and the ways in which that understanding is obtained in science and social science;
4. 1.0 credit that addresses matters of human values, ethics and social responsibilities;
5. 0.5 credit in DIST 3901;

*Part B (5.5 credits)*

6. 5.5 credits as proposed by the student and approved by the committee including: at least 1.0 credit at the 3000-level;

*Credits not included in the Major CGPA (5.0 credits)*

7. 5.0 credits in free electives.

### Interdisciplinary Subject Areas

The Institute of Interdisciplinary Studies sponsors the interdisciplinary subject areas described below. There are no majors in these areas but there is strong teaching and active research interest. Students interested in pursuing work in any of these areas either through the Directed Interdisciplinary Studies major or in conjunction with a disciplinary major should arrange a meeting with the area co-ordinator. Where a co-ordinator is not named, contact the office of the Institute of Interdisciplinary Studies.

In all cases detailed descriptions of the courses listed for each area can be found in the various departmental courses listings in this Calendar. Courses at the 5000-level are described in the Graduate Calendar.

### Aboriginal Studies

**Co-ordinator:** Armand Garnet Ruffo

Individual departments at Carleton offer courses concerned with aboriginal issues. Growing interest in Canadian first peoples has promoted a gradual increase in courses about aboriginal cultures and an increase in related activities on campus. No degree program in aboriginal studies exists, but students may submit a coherent pattern of courses for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies, according to the procedures described for this degree in the Calendar. For course suggestions, consult the D.I.S. web site.

### African Studies

**Co-ordinator:** Edward Osei Kwadwo Prempeh

The Committee on African Studies, an informal committee of faculty with teaching and research interest in Africa, coordinates activities in this area. African Studies is one of the earliest and strongest area studies programs, with courses offered in various departments and schools. Students can select these courses as part of their degree program.

Students may also submit a pattern of courses of African Studies for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies according to the procedures described for this degree in the Calendar. For course suggestions, consult the D.I.S. web site.

### Asian Studies

**Co-ordinator:** P.J. Davidson

No degree program for Asian studies exists but members of the Committee for Asian Studies offer a variety of courses about Asia. Research activities are encouraged through such units as the Asian Pacific Research and Resource Centre. The University is a member of the Shastri Indo-Canadian Institute. The Norman Paterson School of International Affairs supports graduate studies and research on Asia. Students may submit a coherent pattern of courses for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies according to the procedures described for this degree in the Calendar. For course suggestions, consult the D.I.S. web site.

### Labour Studies

**Co-ordinator:** To be announced

The Committee on Labour Studies, consisting of faculty members with research and teaching interests in labour, acts as a co-ordinating unit for activities in this area. An interdisciplinary Labour Studies Research and Resource Centre has been established for use by the University community and the public at large. The University offers a wide range of courses in the humanities and social sciences relating to labour, and students can select those courses as part of their degree program.

Students may submit a coherent pattern of courses in Labour Studies for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies. Assistance in planning such a pattern is available from the co-ordinator. For course suggestions, consult the D.I.S. web site.

### Latin American and Caribbean Studies

**Co-ordinator:** To be announced

At present, no degree program in Latin American and Caribbean Studies exists at Carleton. It is possible, however, for students to construct a program for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies that could focus on the Latin American and Caribbean region. For course suggestions, consult the D.I.S. web site.

Of particular interest to some students may be a B.A. Honours or B.A. General degree in French with supporting work in one or more of the Social Sciences, or a Social Science program with supporting work in French. The same combinations would be possible for those students interested in English and the English Speaking Caribbean.

Courses with a Latin American and Caribbean content are listed below. Detailed course descriptions may be found in the departmental listings of this Calendar. Graduate level courses are described in the Graduate Calendar.

Knowledge of languages is indispensable for the study of the region. The language courses relevant for Latin America are described under the listings of Spanish and French in this Calendar.

### Medieval Studies

**Co-ordinator:** To be announced

The University offers a wide range of courses in the humanities and social sciences relating to the Middle Ages, and students can select these courses as part of their degree program.

Students may also submit a coherent pattern of courses in Medieval Studies for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies in accordance with the procedures described for this degree in the Calendar. Contact the Co-ordinator for assistance in planning a program. For course suggestions, consult the D.I.S. web site.

### United States Studies

**Co-ordinator:** To be announced

No degree program in United States Studies exists, but students may utilize the considerable number of relevant courses already offered at Carleton to develop a relevant plan of study in this area. The aim of the United States Studies concentration within Directed Interdisciplinary Studies is to introduce students to a broad and systematic study of the United States and its peoples; to give a broad understanding of their history, culture and society and to study the relationships between these various aspects of American experience. For course suggestions, consult the D.I.S. web site.

### Urban Studies

**Co-ordinator:** Charles Gordon

Students may submit a coherent pattern of courses in urban studies for a B.A. Honours or B.A. General degree in Directed Interdisciplinary Studies in accordance with the procedures described for this degree in the Calendar. Assistance in planning such a program is available from members of the Committee on Urban Studies. For course suggestions, consult the D.I.S. web site.

### Visual and Performing Arts

For this area of study please consult the School for Studies in Art and Culture.

### Technology, Society, Environment

For this area of study please see the Technology, Society, Environment section of this Calendar.

## Economics

Department of Economics  
Faculty of Public Affairs and Management

This section presents the requirements for the programs:

- **Economics - B.A. Honours**
- **Economics with concentration in Financial Economics - B.A. Honours**
- **Economics - B.A. General**
- **Economics - B.A. Combined Honours**
- **Economics and Political Science - B.A. Combined Honours**
- **Economics and Journalism - B.A. or B.J. Combined Honours**
- **Economics and Sociology - B.A. Combined Honours**
- **Minor in Economics**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar.)
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the Department when planning their program and selecting courses.

### Access to Economics Courses

To meet the prerequisite requirements for 2000-level required economics courses, students must have obtained a grade of C- or better in ECON 1000 [1.0] or FYSM 1003 [1.0]. Certain higher-level economics courses also have prerequisites with minimum grade requirements. These requirements are specified with the course descriptions.

### Economics – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 5.0 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 4200, ECON 4201, ECON 4706;
3. 1.0 credit in ECON 4900 [1.0] or ECON 4908 [1.0] (see Note below);
4. 2.0 credits in Economics at the 4000-level;

*Credits Not Included in the Major CGPA (11.0 credits)*

5. 1.0 credit in MATH 1009 and MATH 1109;
6. 7.0 credits in electives not in Economics;
7. 3.0 credit in free electives.

#### Note

An Honours Essay (ECON 4908 [1.0]) with a grade of B- or better may be written to earn 1.0 credit at the 4000-level, and can replace the ECON 4900 [1.0] requirement. Students who choose to do the Honours Essay must have a detailed outline of the Essay approved by their adviser and by the Honours Supervisor before the last day for withdrawal from full-credit courses. In the absence of such an approved outline, the Department may require the student to withdraw from the Honours Essay.

### Economics with Concentration in Financial Economics – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (11.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 5.0 credit in ECON 2002, ECON 2003, ECON 2102,

ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 4200, ECON 4201, ECON 4706;

3. 1.0 credit in ECON 4900 [1.0] or ECON 4908 [1.0] (see Note under Economics Honours);
4. 4.0 credit in BUSI 1001, BUSI 1002, ECON 2504 (or BUSI 2504), ECON 2505 (or BUSI 2505), ECON 3500 (or BUSI 3500), ECON 3502 (or BUSI 3501), ECON 4008 (or BUSI 4500), ECON 4101 (or BUSI 4502).

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 1.0 credit in MATH 1009 and MATH 1109;
6. 7.0 credits in electives not in Economics;
7. 1.0 credit in free electives.

#### Note

The concentration in Financial Economics is available also to students in the B.A. General program. However, it is unlikely that a student could meet the requirements of the concentration within the 15.0 credits required for the B.A. General degree.

### Economics – B.A. General (15.0 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 3.0 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0];
3. 2.0 credits in Economics.

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 1.0 credit in MATH 1009 and MATH 1109;
5. 6.0 credits in electives not in Economics;
6. 2.0 credit in free electives.

### Economics – B.A. Combined Honours (20.0 credits)

Students may apply for Combined Honours in Economics and another discipline with the following requirements.

*Credits Included in the Economics Major CGPA (7.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 4.5 credit in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 4200, ECON 4201;
3. 1.0 credit in ECON 4900 [1.0] or ECON 4908 [1.0] (see Note under Economics Honours);
4. 0.5 credit at the 4000-level;

*Additional Requirements*

5. The requirements for the other discipline must be satisfied;
6. 1.0 credit in MATH 1009 and MATH 1109;
7. 4.0 credits in electives not in Economics or the other discipline;
8. Sufficient credits in free electives to make 20.0 credits for the degree.

### Economics and Political Science – B.A. Combined Honours (20.0 credits)

*Credits Included in the Economics Major CGPA (7.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 5.5 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 4200, ECON 4201, ECON 4900 [1.0];
3. 0.5 credit in Economics at the 4000-level;



*Credits Included in the Political Science Major CGPA (7.0 credits)*

4. 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
5. 2.0 credits in 47.2300 [1.0] and 47.2700 [1.0];
6. 2.0 credits from the 4000-level Seminars in Political Science;
7. 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Credits Not Included in Either Major CGPA (6.0 credits)*

8. 1.0 credit in MATH 1009 and MATH 1109;
9. 4.0 credits in electives not in Economics or Political Science;
10. 1.0 credit in free elective;

## Additional Requirements

11. The Political Science Departmental language requirement must be satisfied.

**Economics and Journalism –  
B.A. or B.J. Combined Honours (20.0 credits)**

The Combined Honours program in Economics and Journalism is only available to students who have been admitted to the School of Journalism and Communication. Students in this program may choose to graduate with either a B.A. (Honours) or B.J. (Honours).

*Credits Included in the Economics Major CGPA (8.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 5.5 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 3200, ECON 4200, ECON 4201, ECON 4206, ECON 4207, ECON 4900 [1.0];
3. 1.0 credit in Economic History: ECON 2305 [1.0], ECON 3005, ECON 3205 [1.0], ECON 3404, ECON 4205 [1.0];
4. 0.5 credit in Economics at the 4000-level;

*Credits Included in the Journalism Major CGPA (6.0 credits)*

5. 5.0 credits in JOUR 1000 [1.0], JOUR 2201 [1.0], JOUR 2205, JOUR 2501, JOUR 4000 [1.0], JOUR 4201 [1.0];
6. 1.0 credits from: JOUR 4205, JOUR 4206, JOUR 4207, JOUR 4208;

*Credits Not Included in the Either Major CGPA (6.0 credits)*

7. 1.0 credit in MATH 1009 and MATH 1109;
8. 1.0 credit in FREN 1200 [1.0], FREN 1300 [1.0], FREN 1400 [1.0] or FREN 1500 [1.0] or another approved language course;
9. 3.0 credits in electives not in Economics or Journalism;
10. 1.0 credit free elective.

**Economics and Sociology –  
B.A. Combined Honours (20.0 credits)***Credits Included in the Economics Major CGPA (7.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0],
2. 4.5 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2400, ECON 4200, ECON 4201, ECON 4900 [1.0];
3. 1.0 credit in ECON 2200 [1.0] or SOCI 3700 [1.0];
4. 0.5 credit in Economics at the 4000-level;

*Credits Included in the Sociology Major CGPA (7.0 credits)*

5. 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
6. 1.0 credit in SOCI 2003 [1.0] or ANTH 2003 [1.0];
7. 1.0 credit in SOCI 3700 [1.0] or ECON 2200 [1.0];
8. 1.0 credit in SOAN 2005 [1.0] or SOCI 4006 [1.0];
9. 2.0 credits in Sociology or Anthropology at the 4000-or 5000-level;
10. 1.0 credit in Sociology and/or Anthropology at the 2000-level or above;

*Credits Not Included in the Either Major CGPA (6.0 credits)*

11. 1.0 credit in MATH 1009 and MATH 1109;
12. 4.0 credits in electives not in Economics or Sociology;
13. 1.0 credit in free elective.

**Minor in Economics***Requirements*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 0.5 credit in ECON 2001 or ECON 2002;
3. 0.5 credit in ECON 2101 or ECON 2102;
4. 2.0 credits in Economics at the 2000-level or above.
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

## Engineering

### Faculty of Engineering and Design

This section presents the requirements for:

- **Aerospace Engineering with streams:**
  - Aerodynamics, Propulsion and Vehicle Performance
  - Aerospace Structures, Systems and Vehicle Design
  - Aerospace Electronics and Systems
- **Civil Engineering**
- **Civil Engineering with Concentration in Management**
- **Communications Engineering**
- **Computer Systems Engineering**
- **Electrical Engineering**
- **Engineering Physics**
- **Environmental Engineering**
- **Mechanical Engineering**
- **Mechanical Engineering with Concentration in Computer Integrated Manufacturing**
- **Software Engineering**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.Eng. programs (see *Academic Regulations for the Bachelor of Engineering Degree*).

Students should consult with their Department when planning their program and selecting courses.

### Course Categories for Engineering Programs

The following categories of courses are used in defining the programs.

#### Complementary Studies Electives

##### *Courses with 0.5 credit weight*

BUSI 2101, BUSI 3102, BUSI 3103, BUSI 3600, BUSI 4105, BUSI 4607, CGSC 2001, CLST 2007, CLST 2008, ECON 2002, ECON 2003, ECON 2102, ECON 2103, GEOG 1003, ISCI 2002, MUSI 1001, PHIL 1001, PHIL 1002, PHIL 1501, PHIL 1804, PHIL 2001, PHIL 2003, PSCI 1001, PSCI 1002, PSCI 1102, PSYC 1001, PSYC 1002, RELI 1000, RELI 1001, SPAN 2100, SPAN 2101, TSES 3001, TSES 3002

##### *Courses with 1.0 credit weight*

ANTH 1000, CLCV 2000, CLST 1000, CLST 2001, ECON 1000, ENGL 1000, ENGL 1001, ENGL 1602, EURR 2000, FILM 1000, FILM 2000, GERM 2400, HIST 1001, HIST 1002, HIST 1700, HIST 2100, HIST 2201, HIST 2202, HIST 2203, HIST 2205, HIST 2303, HIST 2304, HIST 2306, HIST 2307, HIST 2400, HIST 2500, HIST 2504, HIST 2509, HIST 2600, HIST 2705, HIST 2708, HIST 2801, HIST 2805, HIST 2806, ITAL 1500, PHIL 1100, PHIL 1500, PHIL 1600, SOCI 1000, SOWK 1000, WOMN 1808

#### Breadth Electives for Communications Engineering

SYSC 3601/ELEC 4601, SYSC 4507, SYSC 4005, SYSC 3303, SYSC 4800, ELEC 4503, ELEC 4509, ELEC 4706, ELEC 4707, ELEC 4708

#### Science Electives for Electrical Engineering

- a) All course in Biochemistry (BIOC)
- b) All course in Biology (BIOL) except BIOL 1902, BIOL 1903 and BIOL 2106
- c) All courses in Chemistry (CHEM) except CHEM 1003
- d) All courses in Geology (GEOL)
- e) All courses in Mathematics and Statistics (MATH, STAT) except MATH 1002, MATH 1007, MATH 1009, MATH 1102, MATH 1107, MATH 1109, MATH 2007, MATH

2008, MATH 2009, MATH 2000, MATH 2404, MATH 2454, STAT 2507, STAT 2605, STAT 2606

- f) All physics courses (PHYS) except PHYS 1900, PHYS 1901, PHYS 1902, PHYS 2101, PHYS 2305, PHYS 2306, PHYS 3308

#### Approved Science and Computer Science Electives for Software Engineering

Consult the Department of Systems and Computer Engineering for a list of these electives.

### Aerospace Engineering

Students in Aerospace Engineering must satisfy the requirements for one of the following streams:

#### Stream A: Aerodynamics, Propulsion and Vehicle Performance

##### First Year

1. 4.0 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
2. 1.0 credit in Complementary Studies Electives;

##### Second Year

3. 5.0 credits in MATH 2004, MATH 3705, MAAE 2001, MAAE 2101, MAAE 2202, MAAE 2300, MAAE 2400, MAAE 2700, ECOR 2606, ALSS 1000;

##### Third Year

4. 5.0 credits in STAT 3502, MAAE 3004, MAAE 3202, MAAE 3300, MAAE 3400, MAAE 3901, AERO 3002, AERO 3700, SYSC 3600, ELEC 3605;

##### Fourth Year

5. 4.5 credits in MAAE 4500, MAAE 4905, AERO 4003, AERO 4302, AERO 4306, AERO 4308, AERO 4907 [1.0], ECOR 3800;
6. 1.5 credits in Mechanical and Aerospace Engineering (MAAE, AERO or MECH) at the 4000-level or ELEC 4504.

#### Stream B: Aerospace Structures, Systems and Vehicle Design

##### First Year

1. 4.0 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
2. 1.0 credit in Complementary Studies Electives;

##### Second Year

3. 5.0 credits in MATH 2004, MATH 3705, MAAE 2001, MAAE 2101, MAAE 2202, MAAE 2300, MAAE 2400, MAAE 2700, ECOR 2606, ALSS 1000;

##### Third Year

4. 5.0 credits in STAT 3502, MAAE 3004, MAAE 3202, MAAE 3300, MAAE 3901, AERO 3002, AERO 3101, AERO 3700, SYSC 3600, ELEC 3605;

##### Fourth Year

5. 4.5 credits in MAAE 4500, MAAE 4102, MAAE 4905, AERO 4003, AERO 4602, AERO 4608, AERO 4907 [1.0], ECOR 3800;
6. 1.5 credits in Mechanical and Aerospace Engineering (MAAE, AERO or MECH) at the 4000-level or ELEC 4504.

#### Stream C: Aerospace Electronics and Systems

##### First Year

1. 4.5 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606, ALSS 1000;
2. 0.5 credit in Complementary Studies Electives;

**Second Year**

3. 5.0 credits in MATH 2004, MATH 3705, MAAE 2001, MAAE 2101, MAAE 2202, MAAE 2700, ELEC 2501, ECOR 2606, ELEC 2607, ELEC 2507;

**Third Year**

4. 5.0 credits in STAT 3502, MAAE 2400, MAAE 3202, AERO 3002, SYSC 3501, SYSC 3600, ELEC 3500, ELEC 3509, ELEC 3105, ELEC 3909;

**Fourth Year**

5. 3.0 credits in MAAE 4905, AERO 4003, AERO 4907 [1.0], ECOR 3800, MAAE 4500;
6. 1.5 credit from: AERO 4801, ELEC 4505, SYSC 4600, ELEC 4503;
7. 1.0 credit from: SYSC 4405, ELEC 4502, ELEC 4509, ELEC 4600, ELEC 4706;
8. 0.5 credit in Complementary Studies Electives.

**Civil Engineering****First Year**

1. 4.5 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606, ALSS 1000;
2. 0.5 credit in Complementary Studies Electives.

**Second Year**

3. 5.0 credits in GEOL 2404, MATH 2004, MATH 3705, CIVE 2004, CIVE 2101, CIVE 2200, CIVE 2700, MAAE 2300, MAAE 2400, ECOR 2606;

**Third Year**

4. 5.0 credits in MATH 2507, CIVE 3202, CIVE 3203, CIVE 3204, CIVE 3205, CIVE 3206, CIVE 3208, CIVE 3304, ECOR 3800, ELEC 3605;
5. 0.5 credit in Complementary Studies Electives.

**Fourth Year**

6. 2.5 credits in CIVE 4208, CIVE 4209, CIVE 4407, CIVE 4905, CIVE 4908;
7. 2.5 credits either as:
  - a) i) 1.5 credits from: CIVE 4200, CIVE 4302, CIVE 4303, ENVE 3003, CIVE 4400, CIVE 4403;
  - ii) 1.0 credit from: CIVE 4201, CIVE 4202, CIVE 4301, CIVE 4307, CIVE 4308, CIVE 4500;
 or
  - b) i) 1.0 credit in CIVE 4907 [1.0] and
  - ii) 1.0 credits from: CIVE 4200, CIVE 4302, CIVE 4303, CIVE 4400, CIVE 4403, ENVE 3003;
  - (iii) 0.5 credit from: CIVE 4201, CIVE 4202, CIVE 4301, CIVE 4307, CIVE 4308, CIVE 4500;
8. 1.0 credit in Complementary Studies Electives.

**Concentration in Management****First Year**

1. 4.5 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606, ALSS 1000;
2. 0.5 credit in Complementary Studies Electives.

**Second Year**

3. 5.0 credits in BUSI 3103, BUSI 2700, GEOL 2404, MATH 2004, CIVE 2004, CIVE 2101, CIVE 2200, CIVE 2700, MAAE 2300, ECOR 2606;

**Third Year**

4. 5.5 credits in BUSI 2204, MATH 2507, CIVE 3202, CIVE 3203, CIVE 3204, CIVE 3205, CIVE 3206, CIVE 3208, CIVE 3304, ECOR 3800, ELEC 3605;

**Fourth Year**

5. 2.0 credits in CIVE 4400, CIVE 4905, CIVE 4908, SYSC 3200;
6. 1.5 credits from: CIVE 4200, CIVE 4208, CIVE 4302, CIVE 4303, CIVE 4403, CIVE 4407, ENVE 3003;
7. 0.5 credit in either BUSI 2101 or BUSI 2504;
8. 1.0 credit from CIVE 4201, CIVE 4202, CIVE 4209, CIVE 4301, CIVE 4307, CIVE 4308, CIVE 4500;
9. 1.0 credit from BUSI 3102, BUSI 3600, BUSI 4105, BUSI 4305, BUSI 4607.

**Note**

Credit in CIVE 4907 [1.0] may replace 0.5 credit under Item 6 and 0.5 credit under Items 7, 8 and 9.

**Communications Engineering****First Year**

1. 4.0 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
2. 1.0 credit in Complementary Studies Electives;

**Second Year**

3. 5.0 credits in MATH 2004, SYSC 2001, SYSC 2002, ELEC 2501, ALSS 1000, MATH 3705, SYSC 2003, SYSC 2500, ELEC 2507, ELEC 2607;

**Third Year**

4. 4.5 credits in MATH 2605, ELEC 3509, SYSC 3502, ELEC 3500, ELEC 3909, SYSC 3503, SYSC 4405, ECOR 3800, SYSC 2004;
5. 0.5 credits in Breadth Electives;

**Fourth Year**

6. 4.0 credit in SYSC 4909 [1.0], SYSC 4604, SYSC 4504, SYSC 3905, SYSC 4602, SYSC 4700, SYSC 4701;
7. 0.5 credits in Breadth Electives;
8. 0.5 credits in Breadth Electives or Systems and Computer (SYSC) or Electronics (ELEC) at the 4000-level;
9. 1.0 credit in Complementary Studies Electives.

**Computer Systems Engineering****First Year**

1. 4.5 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606, ALSS 1000;
2. 0.5 credit in Complementary Studies Electives;

**Second Year**

3. 5.0 credits in MATH 2004, MATH 3705, MAAE 2101, SYSC 2001, SYSC 2002, SYSC 2003, SYSC 2004, ELEC 2501, ELEC 2507, ELEC 2607;

**Third Year**

4. 5.0 credits in STAT 3502, ECOR 3800, SYSC 3001, SYSC 3100, SYSC 3303, SYSC 3501, SYSC 3600, SYSC 3601, SYSC 3905, ELEC 3500;

#### Fourth Year

- 2.5 credits in SYSC 4507, SYSC 4602, SYSC 4800, SYSC 4805, ELEC 4705;
- 1.0 credit in either SYSC 4908 [1.0] or ELEC 4908 [1.0];
- 1.5 credits from: MECH 4503, ECOR 2606 or Systems and Computer (SYSC) or Electronics (ELEC) at the 3000-level or above;
- 1.0 credit in Complementary Studies Electives.

#### Note for Computer Systems Engineering

For Requirement 6 above, students should register in SYSC 4908 if their supervisor is in Systems and Computer Engineering, and in ELEC 4908 if their supervisor is in Electronics.

#### Electrical Engineering

##### First Year

- 4.5 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
- 1.0 credit in Complementary Studies Electives.

##### Second Year

- 4.5 credits in MATH 2004, ECOR 2606, ELEC 2501, SYSC 2002, MATH 3705, SYSC 2004, ELEC 2507, ELEC 2607, ALSS 1000;
- 0.5 credit in Complementary Studies;

##### Third Year

- 5.0 credit in SYSC 3600, ELEC 3509, ELEC 3500, ELEC 3908, ELEC 3105, STAT 3502, SYSC 3006, SYSC 3501, ELEC 3905, ELEC 3909;

##### Fourth Year

- 1.0 credit in ELEC 4601, ECOR 3800;
- 1.0 credit in either SYSC 4907 [1.0] or ELEC 4907 [1.0];
- 3.0 credits from: AERO 4300, MECH 4403, MECH 4503, MECH 4704, MECH 4705, SYSC 3100, SYSC 3200, or Systems and Computer(SYSC) or Electronics (ELEC) at the 4000-level;
- 0.5 credit either in Science Electives for Electrical Engineering or in ENVE, CIVE, IDES, MAAE, AERO, MECH at the 2000-level or above;
- 0.5 credit in Complementary Studies.

#### Note for Electrical Engineering

For Requirement 7 above, students should register in ELEC 4907 if their supervisor is in Electronics, and in SYSC 4907 if their supervisor is in Systems and Computer Engineering.

#### Engineering Physics

##### First Year

- 4.5 credits in ALSS 1000, CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1001, PHYS 1002, ECOR 1606, ELEC 1908;
- 0.5 credit in Complementary Studies Electives;

##### Second Year

- 5.0 credits in MATH 2004, MATH 3705, PHYS 2202, PHYS 2604, SYSC 2002, SYSC 2004, ECOR 2606, ELEC 2501, ELEC 2507, ELEC 2607;

##### Third Year

- 5.0 credits in STAT 3502, PHYS 3604, PHYS 3701, PHYS 3807, SYSC 3501, ELEC 3105, ELEC 3500, ELEC 3509, ELEC 3908, ELEC 3909;

#### Fourth Year

- 3.0 credits in PHYS 4008, PHYS 4707, ECOR 3800, ELEC 3905, ELEC 4907 [1.0];
- 1.0 credit in Physics (PHYS) at the 4000-level;
- 1.0 credit in Electronics (ELEC) at the 4000-level;
- 1.0 credit in Complementary Studies Electives.

#### Environmental Engineering

##### First Year

- 5.0 credit in CHEM 1000 [1.0], MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606, ALSS 1000;

##### Second Year

- 5.0 credits in CHEM 2800, GEOL 2404, MATH 2004, MATH 2507, ENVE 2001, ENVE 2002, CIVE 2200, MAAE 2300, MAAE 2400, ECOR 2606;

##### Third Year

- 5.0 credits in BIOL 3604, CHEM 2302, ENVE 3001, ENVE 3002, ENVE 3003, ENVE 3004, CIVE 2700, CIVE 3208, CIVE 4307, ECOR 3800;

##### Fourth Year

- 3.5 credit in ENVE 4003, ENVE 4005, ENVE 4006, ENVE 4101, ENVE 4104, ENVE 4908, CIVE 4905;
- 1.5 credits from: ENVE 4907 [1.0], ENVE 4002, CIVE 3304, CIVE 4208, CIVE 4301, CIVE 4303, CIVE 4400, MECH 4401, MECH 4403, MECH 4406, MECH 4407, SYSC 3200;
- 1.0 credit in Complementary Studies Electives.

#### Mechanical Engineering

##### First Year

- 4.0 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
- 1.0 credit in Complementary Studies Electives.

##### Second Year

- 5.0 credits in MATH 2004, MATH 3705, MAAE 2001, MAAE 2101, MAAE 2202, MAAE 2300, MAAE 2400, MAAE 2700, ECOR 2606, ALSS 1000;

##### Third Year

- 5.0 credits in STAT 3502, MAAE 3004, MAAE 3202, MAAE 3300, MAAE 3400, MAAE 3901, MECH 3002, MECH 3700, SYSC 3600, ELEC 3605;

##### Fourth Year

- 4.0 credits in MAAE 4500, MAAE 4102, MAAE 4905, MECH 4003, MECH 4406, MECH 4907 [1.0], ECOR 3800;
- 2.0 credits in Mechanical and Aerospace (MECH, AERO, MAAE) at the 4000-level.

#### Concentration in Computer Integrated Manufacturing

##### First Year

- 4.0 credits in CHEM 1101, MATH 1004, MATH 1005, MATH 1104, PHYS 1004, ECOR 1000, ECOR 1101, ECOR 1606;
- 1.0 credit in Complementary Studies Electives;

##### Second Year

- 5.0 credits in MATH 2004, MATH 3705, MAAE 2001, MAAE 2101, MAAE 2202, MAAE 2300, MAAE 2400, MAAE 2700, ECOR 2606, ALSS 1000;

**Third Year**

4. 4.5 credits in STAT 3502, MAAE 3004, MAAE 3202, MAAE 3300, MAAE 3901, MECH 3002, MECH 3700, SYSC 3600, ELEC 3605;
5. 0.5 credit in either BUSI 1001 or BUSI 2100;

**Fourth Year**

6. 4.0 credits in MAAE 4500, MAAE 4102, MAAE 4905, MECH 4003, MECH 4406, MECH 4907 [1.0], ECOR 3800;
7. 1.5 credits from: AERO 4304, MECH 4501, MECH 4503, MECH 4604, MECH 4704, MECH 4705;
8. 0.5 credit in Mechanical and Aerospace (MECH, AERO, MAAE) at the 4000-level.

**Software Engineering****First Year**

1. 5.0 credits in ALSS 1000, MATH 1004, MATH 1005, MATH 1104, PHYS 1003, PHYS 1004, ECOR 1000, SYSC 1100, SYSC 1101, SYSC 1102;

**Second Year**

2. 4.5 credits in CHEM 1101, MATH 2004, MATH 1805, ECOR 1101, SYSC 2001, SYSC 2003, SYSC 2100, SYSC 2101, ELEC 2501;
3. 0.5 credit in either ELEC 2607 or SYSC 3600;

**Third Year**

4. 5.0 credits in COMP 3005, ECOR 3800, SYSC 3001, SYSC 3100, SYSC 3101, SYSC 3303, SYSC 3905, SYSC 4800, SYSC 4005, STAT 3502;

**Fourth Year**

5. 3.5 credit in SYSC 4101, SYSC 4507, SYSC 4106, SYSC 4806, SYSC 4905 [1.0], ELEC 4705;
6. 1.0 credit from ELEC 2507, ELEC 2607 or Systems and Computer (SYSC) or Electronics (ELEC) at the 3000-level or above;
7. 0.5 credit from the list in Item 6 or in Approved Science and Computer Science Electives;
8. 1.0 credit in Complementary Studies Electives.

**English**

Department of English Language and Literature  
Faculty of Arts and Social Sciences

This section presents the requirements for the programs:

- **English - B.A. Honours**
- **English - B.A. Combined Honours**
- **English and Journalism - B.A. or B.J. Combined Honours**
- **English - B.A. General**
- **Minor in English Language and Literature**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the Department when planning their program and selecting courses.

**English - B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in English at the 1000-level (FYSM 1006 [1.0] or ENGL 1602 [1.0] recommended);
2. 4.0 credits in English ENGL 2300 [1.0], ENGL 2802 [1.0], ENGL 3304 [1.0], ENGL 3502 [1.0];
3. 2.0 credits in English at the 4000-level;
4. 3.0 credits in English;

*Credits Not Included in the Major CGPA (10.0 credits)*

5. 8.0 credits in electives not in English;
6. 2.0 credits in free electives (may be English).

**English -****B.A. Combined Honours (20.0 credits)**

*Credits Included in the English Major CGPA (6.0 credits)*

1. 1.0 credit in English at the 1000-level (FYSM 1006 [1.0] or ENGL 1602 [1.0] recommended);
2. 3.0 credits in English ENGL 2300 [1.0], ENGL 2802 [1.0], ENGL 3502 [1.0];
3. 1.0 credit in English at the 4000-level;
4. 1.0 credit in English;

*Additional Requirements (14.0 credits)*

5. The requirements for B.A. Combined Honours in the other discipline;
6. 5.0 credits in electives not in English or the other discipline;
7. Sufficient elective credits to make up 20.0 credits total for the program.

**English and Journalism -****B.A. or B.J. Combined Honours**

A Combined Honours program in English and Journalism may be arranged for students admitted to the School of Journalism and Communication.

Candidates for the degree of Bachelor of Journalism, Combined Honours Journalism and English, take 20.0 credits. The 6.0 required English credits are the same as for any other Combined Honours program in English.

Candidates for the degree of Bachelor of Arts, Combined Honours English and Journalism, take 20.0 credits (20.5 credits if admitted prior to 1995-96). The 6.0 English credits required for the Combined Honours program must include ENGL 4908.

### **English - B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in English at the 1000-level (FYSM 1006 [1.0] or ENGL 1602 [1.0] recommended);
2. 3.0 credits in English ENGL 2300 [1.0], ENGL 2802 [1.0], ENGL 3502 [1.0];
3. 2.0 credits in English;

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 7.0 credits not in English;
5. 2.0 credits in free electives (may be in English).

### **Minor in English Language and Literature**

Open to all undergraduate degree students not in English programs.

*Requirements (4.0 credits)*

1. 1.0 credit in English at the 1000-level (FYSM 1006 [1.0] or ENGL 1602 [1.0] recommended);
2. 3.0 credits in English ENGL 2300 [1.0], ENGL 2802 [1.0], ENGL 3502.
3. The remaining requirements of the major discipline(s) and degree must be satisfied.

---

## **Environmental Science**

Institute of Environmental Science  
Faculty of Science

This section presents the requirements for:

- **Environmental Science – B.Sc. Honours with Concentration in Biology Chemistry Geology**

Co-operative Education Option is available in the Environmental Science program.

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.Sc. programs including those relating to Science Continuation and Breadth requirements (see *Academic Regulations for the Bachelor of Science Degree*).

Students should consult with the Institute when planning their program and selecting courses.

### **Environmental Science – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 4.0 credits in ENSC 1500, ENSC 3509, ENSC 3906, BIOL 2600, CHEM 2800, GEOL 2308, ENSC 4906 [1.0];
2. 3.5 credits in Approved Science for Environmental Science (see below);
3. 1.0 credit in Approved Science for Environmental Science at the 4000-level excluding ENSC.4001;
4. 1.5 credits chosen in consultation with the Program Adviser;

*Credits Not Included in the Major CGPA (10.0 credits)*

5. 1.5 credit in: MATH 1007, STAT 2507, PHIL 1804;
6. 3.5 credits in BIOL 1003, BIOL 1004, CHEM 1000 [1.0], CHEM 2302, GEOL 2805, GEOG 3108;
7. 1.0 credit in one of (GEOL 1006 and GEOG 2100) or GEOL 1005 [1.0] or GEOG 1005 [1.0];
8. 0.5 credit from: BIOL 2104, BIOL 2200;
9. 0.5 credit in Science Geography at the 3000- or 4000-level;
10. 2.0 credits in Approved Arts or Social Science;
11. 1.0 credit in Free Electives.

### **Environmental Science with Concentration in Biology (20.0 credits)**

*For this Concentration, replace Requirements 2 & 3 above with:*

- i) 1.5 credits in BIOL 2001, BIOL 2002, BIOL 2200;
  - ii) 0.5 credit from: BIOL 3004, BIOL 3101, BIOL 2303;
  - iii) 2.0 credits in either:
    - a) Ecology focus
      - 1.0 credit from: BIOL 3601, BIOL 3602, BIOL 3605, BIOL 3606;
      - 0.5 credit in BIOL 3604;
      - 0.5 credit in Biology at the 4000-level;
- or

- b) Microbiology/genetics focus  
 1.0 credit in BIOL 3104, BIOL 4103;  
 0.5 credit from: BIOL 2303 or BIOL 3101 or BIOL 3303;  
 0.5 credit in Biology at the 4000-level;
- (iv) 0.5 credits in Approved Science at the 4000-level.

### Environmental Science with Concentration in Geology (20.0 credits)

For this Concentration, replace Requirements 2, 3 & 4 with:

- i) 3.0 credits in GEOL 2203, GEOL 2205, GEOL 2208, GEOL 3201, GEOL 3805, GEOL 3806;
- ii) 2.0 credits from: GEOL 2301, GEOL 2306, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 4203, GEOL 4205, GEOL 4301, GEOL 4302, GEOL 4804 [1.0], GEOL 4805;
- iii) 0.5 credit in MATH 1107;
- iv) 0.5 credit in Environmental Science Specialization.

### Environmental Science with Concentration in Chemistry - B.Sc. Honours (20.0 credits)

Credits Included in the Major CGPA (10.0 credits)

- 2.0 credits in: ENSC 1500, ENSC 3509, ENSC 4906 [1.0];
- 1.0 credit in BIOL 2600, GEOL 2308;
- 5.0 credits in: CHEM 2101, CHEM 2102, CHEM 2203, CHEM 2204, CHEM 2302, CHEM 2303, CHEM 3305, CHEM 3503, CHEM 3800, CHEM 4800;
- 0.5 credit in Chemistry at the 4000-level;
- 1.5 credits in one of:
  - Organic focus: CHEM 3201, CHEM 3202, CHEM 3205;
  - Inorganic focus: CHEM 3504, CHEM 3505, and 0.5 credit in Chemistry at the 2000-level or above;
  - Physical focus: CHEM 3101, CHEM 3105, MATH 2007;

Credits Not Included in the Major CGPA (10.0 credits)

- 1.5 credit in: MATH 1007, STAT 2507; PHIL 1804;
- 1.0 credit one of (GEOL 1006 and GEOG 2100) or GEOL 1005 [1.0] or GEOG 1005 [1.0];
- 1.0 credits in GEOL 2805, GEOG 3108;
- 0.5 credit in Science Geography at the 3000- or 4000-level;
- 1.5 credits in BIOL 1003, BIOL 1004, BIOL 2104;
- 1.0 credit in CHEM 1000 [1.0];
- 1.0 credits in (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
- 1.5 credits in Approved Arts or Social Science;
- 1.0 credit in Free Electives.

### Course Categories for Environmental Science

The program description makes use of the following course categories:

**Science Geography Courses** (see *Academic Regulations for the Bachelor of Science Degree*)

**Approved Arts or Social Science** (see *Academic Regulations for the Bachelor of Science Degree*)

**Free Electives** (see *Academic Regulations for the Bachelor of Science Degree*)

and:

### Approved Science for Environmental Science

#### Biology

BIOL 2001, BIOL 2002, BIOL 2200, BIOL 2303, BIOL 3004, BIOL 3101, BIOL 3104, BIOL 3201, BIOL 3205, BIOL 3305, BIOL 3501, BIOL 3601, BIOL 3602, BIOL 3604, BIOL 3605, BIOL 3606, BIOL 3801, BIOL 3802, BIOL 3901, BIOL 4102, BIOL 4103, BIOL 4104, BIOL 4106, BIOL 4109, BIOL 4204, BIOL 4300, BIOL 4404, BIOL 4603, BIOL 4609, BIOL 4801, BIOL 4901

#### Chemistry

CHEM 2203, CHEM 2204, CHEM 2207, CHEM 2208, CHEM 3101, CHEM 3102, CHEM 3105, CHEM 3201, CHEM 3202, CHEM 3205, CHEM 3305, CHEM 3503, CHEM 3504, CHEM 3505, CHEM 3700, CHEM 3800, CHEM 4301, CHEM 4302, CHEM 4700, CHEM 4800

#### Computer Science

COMP 1002, COMP 1004, COMP 1005, COMP 1007

#### Environmental Science

ENSC 4001, ENSC 4700

#### Geography

GEOG 2007, GEOG 2100, GEOG 2101, GEOG 3002, GEOG 3003, GEOG 3005, GEOG 3006, GEOG 3007, GEOG 3101, GEOG 3102, GEOG 3103, GEOG 3105, GEOG 3109, GEOG 4000, GEOG 4003, GEOG 4005, GEOG 4006, GEOG 4101, GEOG 4104, GEOG 4107, GEOG 4108

#### Geology

GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2301, GEOL 2306, GEOL 2401, GEOL 2402, GEOL 2403, GEOL 3201, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 3805, GEOL 3806, GEOL 4203, GEOL 4205, GEOL 4301, GEOL 4302, GEOL 4804, GEOL 4805

#### Mathematics

MATH 1107, MATH 2007, STAT 2509

#### Physics

PHYS 1001, PHYS 1002, PHYS 1007, PHYS 1008, PHYS 2901, PHYS 2902

#### Prohibited and Restricted Courses

Technology, Society, Environment Studies (TSES) courses are not accepted as Science Continuation courses in these programs. Refer to the B.Sc. rules on Science Continuation.

---

## Environmental Studies

Department of Geography and Environmental Studies  
Faculty of Arts and Social Science

This section presents the requirements for the programs:

- **Environmental Studies - B.A. Honours**
- **Environmental Studies - B.A. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars (see *Academic Regulations for the Bachelor of Arts Degree*). Environmental Studies students are exempt from the Breadth requirements.

Students should consult with the Department when planning their program and selecting courses.

### Environmental Studies – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (12.5 credits)*

1. 1.5 credits in ISCI 1001, ISCI 1002, PHIL 1804;
2. 1.0 credit in either:
  - a) ENST 1001 [1.0], or
  - b) GEOG 1002 and 0.5 credit in Approved Environmental Studies Electives;
3. 1.5 credits in ENST 2000, ISCI 2001 and ISCI 2002;
4. 1.0 credit from: ECON 2200 [1.0], (GEOG 2005 and GEOG 2006), PSCI 2700 [1.0], PSYC 2000 [1.0] or SOCI 2003 [1.0];
5. 0.5 credit in ENST 3000;
6. 0.5 credit in either PHIL 2804 or LAWS 3800;
7. 0.5 credit in either BIOL 2106 or Science Continuation Courses;
8. 1.5 credits in ENST 4000 and ENST 4907 [1.0];
9. 0.5 credit in either ENST 4001 or ENST 4002;
10. 1.5 credits in Approved Environmental Studies Electives at the 3000-level or above;
11. 2.5 credits in Approved Environmental Studies Electives;

*Credits Not Included in the Major CGPA (7.5 credits)*

12. 7.5 credits in free electives.

#### Note

It may be necessary to use some of the free elective credits to fulfil prerequisite requirements for courses in the Major.

### Environmental Studies – B.A. General (15.0 credits)

*Credits Included in the Major CGPA (8.5 credits)*

1. 2.5 credits in ISCI 1001, ISCI 1002, ISCI 2001, ISCI 2002, PHIL 1804;
2. 1.0 credit in either:
  - a) ENST 1001 [1.0], or
  - b) GEOG 1002 and 0.5 credit in Approved Environmental Studies Electives;

3. 1.0 credit in ENST 2000 and ENST 3000;
4. 1.0 credit from: ECON 2200 [1.0], PSYC 2000 [1.0], SOCI 2003 [1.0], PSCI 2700 [1.0], (GEOG 2005 and GEOG 2006);
5. 0.5 credit in either PHIL 2804 or LAWS 3800;
6. 1.5 credits in Approved Environmental Studies Electives;
7. 1.0 credits in Approved Environmental Studies Electives at the 3000-level or above.

*Credits Not Included in the Major CGPA (6.5 credits)*

8. 6.5 credits in free electives.

### Approved Environmental Studies Electives

Courses are grouped under thematic headings to assist students in planning. Additional selections may be made from the departments whose courses appear below. Students may also select courses from Chemistry, Physics, Earth Sciences, Architecture or other disciplines that relate to their chosen theme.

#### Environment, Economy and Development

*Biology*  
BIOL 2106

*Economics*  
ECON 3805, ECON 3806

*Environmental Studies*  
ENST 2900

*European and Russian Studies*  
EURR 4005

*Geography*  
GEOG 2004, GEOG 2101, GEOG 2200, GEOG 3101, GEOG 3108, GEOG 3109, GEOG 3209, GEOG 3306, GEOG 4004, GEOG 4300, GEOG 4405

*Sociology/Anthropology*  
ANTH 2006, SOCI 4501

*Technology, Society Environment*  
TSES 3001, TSES 3002, TSES 3500, TSES 4001, TSES 4002

#### Environment, Policy and Law

*Environmental Studies*  
ENST 2900

*Geography*  
GEOG 3206, GEOG 4004, GEOG 4300

*Law*  
LAWS 2005 [1.0], LAWS 3005, LAWS 3800

*Political Science*  
PSCI 2002, PSCI 2003, PSCI 4002

*Sociology*  
SOCI 3408, SOCI 3802, SOCI 3803, SOCI 4400

*Technology, Society Environment*  
TSES 3001, TSES 3002, TSES 3500

#### Environmental Attitudes and Ethics

*Environmental Studies*  
ENST 2900

*Geography*  
GEOG 2004, GEOG 2300, GEOG 4004, GEOG 4300, GEOG 4301

*Philosophy*  
PHIL 2102, PHIL 2804, PHIL 3300 [1.0], PHIL 4105, PHIL 4106

*Sociology/Anthropology*  
ANTH 2006, SOCI 3408



*Technology, Society Environment*  
TSES 3001, TSES 3002, TSES 3500

Human Population and the Built Environment

*Architecture*  
ARCU 3902 (Section A), ARCH 4100, ARCH 4105

*Engineering*  
CIVE 4303

*Environmental Studies*  
ENST 2900

*Geography*  
GEOG 3200, GEOG 3700, GEOG 4203, GEOG 4207

*History*  
HIST 3209

*Political Science*  
PSCI 3002

*Sociology/Anthropology*  
SOC1 2501, SOC1 2504, SOC1 2600, ANTH 3305, SOAN 3309,  
SOC1 4501, SOAN 4506

## European and Russian Studies

Institute of European and Russian Studies  
Faculty of Public Affairs and Management

This section presents the requirements for:

- **European and Russian Studies – B.A. Honours Concentration in**
  - Russian Area Studies**
  - Central and East European Studies**
  - West European Studies**
  - European Integration**
- **European and Russian Studies – B.A. Combined Honours Concentration in**
  - Russian Area Studies**
  - Central and East European Studies**
  - West European Studies**
  - European Integration**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and for Breadth (see *Academic Regulations for the Bachelor of Arts Degree*).

Students must fulfil the requirements listed below for one of the four concentration areas. Students must also attain proficiency in a major European language appropriate to the area concentration, as noted. (See language requirement below).

Individualized programs can be worked out with the Honours Adviser. Students should consult the Institute when planning their program and selecting courses.

### Institute Language Requirement

All candidates are required to have knowledge of a major European language to be selected from the following: Russian, German, French, Spanish, Italian. The choice of language depends on the concentration that the student has selected within the European and Russian Studies program.

This requirement may be fulfilled in one of two ways:

- i) Completion of an advanced course in the language. The following courses fulfil this requirement: RUSS 2000 [1.0], FREN 2405 [1.0] or FREN 2600 [1.0]; GERM 3105 [1.0]; SPAN 3105 [1.0]; ITAL 3000 [1.0].
- ii) Certification by the unit offering the relevant language that the student has attained a level of language proficiency equivalent to completion of an advanced course in the chosen language.

### European and Russian Studies – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit in HIST 1001 [1.0], HIST 1002 [1.0], FYSM 1102 [1.0], or approved sections of FYSM 1405 [1.0];
2. 2.0 credits in EURL 2000 [1.0], PSCI 3207, EURL 4003;
3. 0.5 credit in either ECON 3600 or ECON 3700;

and one of the following Concentrations, also included in the Major CGPA:

*Concentration in Russian Area Studies*

4. 1.0 credit from: HIST 2600 [1.0], HIST 3600 [1.0];
5. 1.0 credit in PSCI 3208, PSCI 3209;
6. 0.5 credit in either PSCI 3704, PSCI 3705 or PSCI 3206;

## Program Information

- 0.5 credit from: GEOG 3600 or GEOG 4600;
- 2.0 credits in Russian Area Electives at the 4000-level one of which may be EURR 4908 [1.0];
- 2.0 credits in Russian Area Electives;
- The Institute Language requirement must be satisfied in Russian.

### *Concentration in Central and East European Studies (7.0 credits)*

- 1.0 credit from: HIST 2509 [1.0], HIST 2600 [1.0], HIST 2801 [1.0], HIST 3509, HIST 3600 [1.0], HIST 3606, HIST 3800, HIST 3801;
- 1.0 credits in PSCI 3704 and PSCI 3705;
- 0.5 credit from: PSCI 3206, PSCI 3208, PSCI 3209;
- 0.5 credit from: GEOG 3600, GEOG 3603;
- 2.0 credit in Central and East European Area Electives at the 4000-level one of which may be EURR 4908 [1.0];
- 2.0 credits in Central and East European Area Electives;
- The Institute Language requirement must be satisfied in German or Russian.

### *Concentration in West European Studies (7.0 credits)*

- 1.0 credit from: HIST 2509 [1.0], HIST 2801 [1.0], HIST 3800, HIST 3801;
- 0.5 credit in PSCI 3206;
- 1.0 credits from: PSCI 3704, PSCI 3705, PSCI 3208, PSCI 3209;
- 0.5 credit from: GEOG 3600 or GEOG 3603;
- 2.0 credit in West European Area Electives at the 4000-level one of which may be EURR 4908 [1.0];
- 2.0 credits in West European Area Electives;
- The Institute Language requirement must be satisfied in French, German, Italian or Spanish.

### *Concentration in European Integration Studies (7.0 credits)*

- 1.0 credit from: HIST 2801 [1.0], HIST 3800, HIST 3801;
- 1.5 credit in PSCI 3206, PSCI 3704, PSCI 3705;
- 0.5 credit in GEOG 3603;
- 1.0 credit in EURR 4908 [1.0], EURR 4104, EURR 4106 or approved European Integration Area Electives at the 4000-level;
- 1.0 credit in European Integration Area Electives at the 4000-level;
- 2.0 credits in European Integration Area Electives;
- The Institute Language requirement must be satisfied in French, German, Italian or Spanish.

### *Credits Not Included in the Major CGPA (9.5 credits)*

- 9.5 credits in free electives.

#### **Note**

Up to 2.0 credits of the elective credits (Items 8 and 9 in each concentration) may be from language courses approved by the Honours Adviser, normally at the 3000-level or above (after fulfilment of basic language requirement). In all cases, the area concentration may include approved literature and civilization courses. See the Institute for an approved list.

## **European and Russian Studies – B.A. Combined Honours (20.0 credits)**

### *Credits Included in the EURUS Major CGPA (7.0 credits)*

- 2.0 credits in PSCI 3207, EURR 2000 [1.0], EURR 4003;

- 0.5 credit in ECON 3600 or ECON 3700;

and one of the following Concentrations, also included in the Major CGPA:

### *Concentration in Russian Area Studies*

- 1.0 credit from: HIST 2600 [1.0] or HIST 3600 [1.0];
- 1.0 credit in: PSCI 3208 and PSCI 3209;
- 1.0 credit in EURR 4908 [1.0] or in Russian Area Electives at the 4000-level;
- 1.5 credits in Russian Area Electives;
- The Institute Language requirement must be satisfied in Russian.

### *Concentration in Central and East European Studies*

- 1.0 credit from: HIST 2509 [1.0], HIST 2801 [1.0], HIST 3509 [1.0], HIST 3606 HIST 3800, HIST 3801;
- 1.0 credit in PSCI 3704 and PSCI 3705;
- 1.0 credit in EURR 4908 [1.0] or in Central and East European Area Electives at the 4000-level;
- 1.5 credits in Central and East European Area Electives;
- The Institute Language requirement must be satisfied in German or Russian.

### *Concentration in West European Studies*

- 1.0 credit from: HIST 2509 [1.0], HIST 2801 [1.0], HIST 3800, HIST 3801;
- 1.0 credit in PSCI 3206 and one of PSCI 4102 or PSCI 4103;
- 1.0 credit in EURR 4908 [1.0] or in West European Area Electives at the 4000-level;
- 1.5 credits in West European Area Electives;
- The Institute Language requirement must be satisfied in French, German, Italian or Spanish.

### *Concentration in European Integration Studies*

- 1.0 credit from: HIST 2801 [1.0], HIST 3800, HIST 3801;
- 1.5 credits in PSCI 3704, PSCI 3705 and PSCI 3206;
- 1.0 credit from: EURR 4908 [1.0], EURR 4104, EURR 4105, EURR 4106;
- 1.0 credits in European Integration Area Electives;
- The Institute Language requirement must be satisfied in French, German, Italian or Spanish.

### *Additional Credit Requirements*

- The requirements from the other discipline must be satisfied;
- 5.0 credits in electives not in courses with code EURR or the other discipline;
- Sufficient free electives to make 20.0 credits for the degree.

#### **Notes**

- At most, one Honours Essay course from either department may be counted toward this Combined program. The Honours Essay topic must be in the Concentration area.
- Combined Honours in European and Russian Studies and Journalism is available only to students already admitted to the Bachelor of Journalism degree.

#### **Russian Area Electives**

**Economics:** ECON 3600, ECON 3700, ECON 4806

**European and Russian Studies:** FYSM 1002 [1.0], EURR 4002, EURR 4005, EURR 4007, EURR 4008, EURR 4009, EURR 4100, EURR 4101, EURR 4107, EURR 4908 [1.0]

**Geography:** GEOG 3600, GEOG 4600

**History:** HIST 2600 [1.0], HIST 3600 [1.0], HIST 3605, HIST 4600 [1.0], HIST 4602

**Law:** LAWS 4806

**Philosophy:** PHIL 2201, PHIL 2202

**Political Science:** PSCI 3704, PSCI 3705, PSCI 3308, PSCI 3309, PSCI 4505, PSCI 4601

**Sociology and Anthropology:** SOAN 2005 [1.0]

### Central and East European Area Electives

**Economics:** ECON 3600, ECON 3700, ECON 4806, ECON 4807

**European and Russian Studies:** FYSM 1002 [1.0], EURR 4002, EURR 4005, EURR 4007, EURR 4008, EURR 4100, EURR 4101, EURR 4104, EURR 4106, EURR 4107, EURR 4908 [1.0]

**Geography:** GEOG 3600, GEOG 3603, GEOG 4600;

**History:** HIST 2509 [1.0], HIST 2600 [1.0], HIST 2801 [1.0], HIST 3509, HIST 3600 [1.0], HIST 3605, HIST 3606, HIST 3800, HIST 3801, HIST 4200 [1.0]

**Law:** LAWS 4806

**Philosophy:** PHIL 2201, PHIL 2202, PHIL 3006

**Political Science:** PSCI 3206, PSCI 3208, PSCI 3209, PSCI 3308, PSCI 3309, PSCI 4505, PSCI 4601

**Sociology and Anthropology:** SOAN 2005 [1.0]

### West European Area Electives

**Economics:** ECON 3600, ECON 3700, ECON 4207, ECON 4806, ECON 4807

**European and Russian Studies:** EURR 4104, EURR 4106, EURR 4908 [1.0]

**Geography:** GEOG 3603

**History:** HIST 2203 [1.0], HIST 2205 [1.0], HIST 2500 [1.0], HIST 2509 [1.0], HIST 2801 [1.0], HIST 3105, HIST 3108 [1.0], HIST 3201 [1.0], HIST 3509, HIST 3603, HIST 3800, HIST 3801, HIST 3802, HIST 3902, HIST 4200 [1.0], HIST 4508 [1.0]

**Law:** LAWS 4806

**Political Science:** PSCI 3704, PSCI 3705, PSCI 3308, PSCI 3309, PSCI 3500, PSCI 3501, PSCI 4102, PSCI 4103, PSCI 4305 [1.0], PSCI 4505, PSCI 4903 [1.0], PSCI 4904 [1.0]

**Philosophy:** PHIL 2008, PHIL 2203, PHIL 3004, PHIL 3006

**Sociology and Anthropology:** SOAN 2005 [1.0]

### European Integration Area Electives

**Economics:** ECON 3206, ECON 3600, ECON 3601, ECON 3602 [1.0], ECON 3700, ECON 4207, ECON 4806, ECON 4807

**European and Russian Studies:** FYSM 1002 [1.0], EURR 4005, EURR 4006, EURR 4008, EURR 4100, EURR 4101, EURR 4104, EURR 4106, EURR 4908 [1.0]

**History:** HIST 2203 [1.0], HIST 2204 [1.0], HIST 2205 [1.0], EURR 2504 [1.0], HIST 2509 [1.0], HIST 2801 [1.0], HIST 3105, HIST 3108 [1.0], HIST 3201 [1.0], HIST 3509, HIST 3603, HIST 3606, HIST 3800, HIST 3801, HIST 3802, HIST 3902, HIST 4200 [1.0], HIST 4508 [1.0]

**Law:** LAWS 4806

**Political Science:** PSCI 2101, PSCI 3307 [1.0], PSCI 3500, PSCI 3501, PSCI 3600, PSCI 3703, PSCI 4102, PSCI 4103, PSCI 4305 [1.0], PSCI 4505

**Philosophy:** PHIL 2008, PHIL 2103, PHIL 2201, PHIL 2202, PHIL 2203, PHIL 2900 [1.0], PHIL 3004, PHIL 3006, PHIL 3007

**Sociology and Anthropology:** SOAN 2005 [1.0]

## Film Studies

School for Studies in Art and Culture  
Faculty of Arts and Social Sciences

This section presents the requirements for the B.A. programs in

- **Film Studies – B.A. Honours**
- **Film Studies – B.A. Combined Honours**
- **Film Studies – B.A. General**
- **Minor in Film Studies**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the School when planning their program and selecting courses.

### Film Studies - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

1. 3.0 credits in FILM 1000 [1.0], FILM 2000 [1.0], FILM 3505 [1.0];
2. 1.0 credit in Film Studies at the 3000-level;
3. 2.0 credits in Film Studies at the 4000-level;
4. 3.0 credits in Film Studies beyond the 1000-level;

*Credits Not Included in the Major CGPA (11.0 credits)*

5. 8.0 credits in electives not in Film Studies;
6. 3.0 credits in free electives

### Film Studies - B.A. Combined Honours (20.0 credits)

*Credits Included in the Film Studies Major CGPA (7.0 credits)*

1. 3.0 credits in FILM 1000 [1.0], FILM 2000 [1.0], FILM 3505 [1.0];
2. 2.0 credits in Film Studies at the 2000-level or above;
3. 1.0 credits in Film Studies at the 3000-level or above;
4. 1.0 credit in Film Studies at the 4000-level;

*Additional Requirements*

5. The requirements of the other discipline must be satisfied;
6. 5.0 credits not in Film Studies or the other discipline;
7. Sufficient free electives to total 20.0 credits for the program.

### Film Studies - B.A. General (15.0 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 2.0 credits in FILM 1000 [1.0], FILM 2000 [1.0];
2. 2.0 credits in Film Studies at the 2000-level or above;
3. 2.0 credits in Film Studies at the 3000-level;

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 7.0 credits in electives not in Film Studies;
5. 2.0 credits in free electives.

## Minor in Film Studies

Open to all undergraduate degree students not in Film Studies programs.

*Requirements (4.0 credits)*

1. 1.0 credit from: FILM 1000 [1.0], FILM 2209 [1.0], or FILM 2608 [1.0];
2. 2.0 credits from: FILM 2000 [1.0], FILM 2101, FILM 2106, FILM 2201, FILM 2209 [1.0], FILM 2401, FILM 2601, FILM 2608 [1.0];
3. 1.0 credit from: FILM 3105, FILM 3205 [1.0], FILM 3301, FILM 3303 [1.0], FILM 3505 [1.0], FILM 3701, FILM 3209.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

---

## French

Department of French  
Faculty of Arts and Social Science

This section presents the requirements for:

- **French – B.A. Honours with Concentration in Literary Studies Linguistics**
- **French– B.A. Combined Honours with Concentration in Literary Studies Linguistics**
- **French and Journalism – B.J. Combined Honours**
- **French – B.A. General**
- **Minor in French**
- **Certificate in French Language Studies (C.F.L.S.)**
- **Certificate in French Language Translation (C.F.L.T.)**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth Requirements (see *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the Department when planning their program and selecting courses.

### French – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit from: FREN 1405 [1.0], FREN 1600 [1.0], FREN 1609 [1.0], FYSM 1407 [1.0] or FYSM 1408 [1.0];
2. 1.0 credit from: FREN 2405 [1.0], FREN 2600 [1.0] or FREN 2609 [1.0];
3. 4.0 credits in FREN 2700 [1.0], FREN 2800 [1.0], FREN 2806 [1.0] and FREN 3600 [1.0];
4. 4.0 credits in one of the following concentrations:
  - Concentration in French Literary Studies**
  - a) 2.0 credits from: FREN 3700, FREN 3701, FREN 3702, FREN 3703 or FREN 3704;
  - b) 2.0 credits in FREN 4700, FREN 4701, FREN 4702 and FREN 4703;

or

#### **Concentration in French Linguistics Studies**

- a) 2.0 credits from FREN 3800, FREN 3801, FREN 3802, FREN 3803 or FREN 3806 [1.0];
- b) 2.0 credits from FREN 4800, FREN 4801, FREN 4802, FREN 4803 or FREN 4806 [1.0];

*Credits Not Included in the Major CGPA (10.0 credits)*

5. 8.0 credits in electives not in French;
6. 2.0 credits in free electives.

### French – B.A. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit from: FREN 1405 [1.0], FREN 1600 [1.0], FREN 1609 [1.0], FYSM 1407 [1.0] or FYSM 1408 [1.0];
2. 1.0 credit from: FREN 2405 [1.0], FREN 2600 [1.0] or FREN 2609 [1.0];

3. 2.0 credits in FREN 2700 [1.0], FREN 2800 [1.0];
4. 3.0 credits in one of the following concentrations:

**French Literary Studies**

4. 2.0 credits from: FREN 3700, FREN 3701, FREN 3702, FREN 3703, FREN 3704, FREN 4700, FREN 4701, FREN 4702 or FREN 4703;
5. 1.0 credit from: FREN 4700, FREN 4701, FREN 4702 or FREN 4703;

or

**French Linguistics Studies**

4. 2.0 credits from FREN 3800, FREN 3801, FREN 3802, FREN 3803, FREN 4800, FREN 4801, FREN 4802 or FREN 4803;
5. 1.0 credit from FREN 4800, FREN 4801, FREN 4802 or FREN 4803;

*Additional Requirements*

6. The requirements from the other discipline must be satisfied;
7. 5.0 credits in electives not in French or the other discipline;
8. Sufficient free electives to make 20.0 credits for the degree.

**Note**

For the Literary Studies patterns in either B.A. Honours or Combined B.A. Honours, at least 1.0 credit in French literature (from France) and at least 1.0 credit in French-Canadian literature must be presented.

**French and Journalism –  
B.J. or B.A. Combined Honours (20.0 credits)**

This program is restricted to students in the Bachelor of Journalism program. Please consult the Journalism section of the calendar for complete details. The required credits in French are as follows:

*Requirements (7.0 credits)*

1. 1.0 credit from: FREN 1405 [1.0], FREN 1600 [1.0], FREN 1609 [1.0], FYSM 1407 [1.0] or FYSM 1408 [1.0];
2. 1.0 credit from: FREN 2405 [1.0], FREN 2600 [1.0] or FREN 2609 [1.0];
3. 2.0 credits in: FREN 2700 [1.0] and FREN 3600 [1.0];
4. 2.0 credits in French at the 3000-level;
5. 1.0 credit in French at the 4000-level.

**French – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit from: FREN 1405 [1.0], FREN 1600 [1.0], FREN 1609 [1.0], FYSM 1407 [1.0] or FYSM 1408 [1.0];
2. 1.0 credit from: FREN 2405 [1.0], FREN 2600 [1.0] or FREN 2609 [1.0];
3. 3.0 credits in FREN 2700 [1.0], FREN 2800 [1.0], FREN 3600 [1.0];
4. 1.0 credit from either:
  - a) FREN 3700, FREN 3701, FREN 3702, FREN 3703, FREN 3704

or

  - b) FREN 3800, FREN 3801, FREN 3802, FREN 3803;

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 7.0 credits not in French;
6. 2.0 credits in free electives.

**Minor in French**

Open to all undergraduate degree students not in French programs.

*Requirements (4.0 credits)*

1. 2.0 credits in one of:
  - a) FREN 1405 [1.0] and FREN 2405 [1.0] or
  - b) FREN 1600 [1.0] and FREN 2600 [1.0] or
  - c) FREN 1609 [1.0] and FREN 2609 [1.0] or
  - d) FYSM 1407 [1.0] and one of FREN 2405 [1.0], FREN 2600 [1.0], FREN 2609 [1.0] or
  - e) FYSM 1408 [1.0] and one of FREN 1600 [1.0], FREN 1609 [1.0], FREN 2405 [1.0], FREN 2600 [1.0], FREN 2609 [1.0].
2. 2.0 credits in one of:
  - a) Literature: FREN 2700 [1.0] and 1.0 credit from: FREN 3700, FREN 3701, FREN 3702, FREN 3703, FREN 3704;
  - b) French linguistics: FREN 2800 [1.0] and 1.0 credit from: FREN 3800, FREN 3801, FREN 3802, FREN 3803;
  - c) Translation: FREN 2806 [1.0], FREN 3806 [1.0];
  - d) French language: FREN 3600 [1.0] and 1.0 credit from: FREN 2700 [1.0], FREN 2800 [1.0].
3. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Note for Minor in French**

In Requirement 2 above, other elective courses may be chosen with the approval of the Department.

**Certificate in French Language Studies  
(C.F.L.S.)**

A 6.0-credit undergraduate certificate designed for both part-time and full-time students wishing to perfect their spoken and written French. Students may also earn the Certificate as part of a B.A. Honours in French, or in any other discipline or as part of a Combined B.A. Honours in French and another discipline.

*C.F.L.S. Requirements (6.0 credits)*

1. 2.0 credits in one of:
  - a) FREN 1405 [1.0] and FREN 2405 [1.0], or
  - b) FREN 1600 [1.0] and FREN 2600 [1.0], or
  - c) FREN 1609 [1.0] and FREN 2609 [1.0], or
  - d) FYSM 1407 [1.0] and one of: FREN 2405 [1.0], FREN 2600 [1.0], FREN 2609 [1.0]; or
  - e) FYSM 1408 [1.0] and one of FREN 1600 [1.0], FREN 1609 [1.0], FREN 2405 [1.0], FREN 2600 [1.0], FREN 2609 [1.0];
2. 3.0 credits in FREN 2800 [1.0], FREN 2806 [1.0] and FREN 3600 [1.0];
3. 1.0 credit from: FREN 3800, FREN 3801, FREN 3802, FREN 3803, FREN 4800, FREN 4801, FREN 4802 or FREN 4803.

For candidates with knowledge of French to the level of FREN 1600 [1.0] or FREN 1609 [1.0] the C.F.L.S. requirements are modified as follows:

1. 1.0 credit from: FYSM 1407 [1.0] or FYSM 1408 [1.0];
2. 1.0 credit from: FREN 2600 [1.0] or FREN 2609 [1.0];
3. 1.0 credit in FREN 2800 [1.0];
4. 1.0 credit from: FREN 2806 [1.0] or FREN 3600 [1.0];
5. 1.0 credit from: FREN 3806 [1.0] or FREN 4806 [1.0];

- 1.0 credit from: FREN 3800, FREN 3801, FREN 3802, FREN 3803, FREN 4800, FREN 4801, FREN 4802 or FREN 4803.

### **Certificate in French Language Translation (C.F.L.T.)**

A 6.0-credit undergraduate certificate designed for both part-time and full-time students wishing to improve their translation skills. While not a professional program, this certificate should meet the needs of those who are occasionally called upon to translate in their work environment. Students may also earn the Certificate as part of a B.A. Honours in French, or in any other discipline, or as part of a Combined B.A. Honours in French and another discipline.

*C.F.L.T. Requirements (6.0 credits)*

- 1.0 credit from: FREN 1405 [1.0], FREN 1600 [1.0], FREN 1609 [1.0], FYSM 1407 [1.0], FYSM 1408 [1.0], or, with the approval of the Department, a course given in French in another subject;
- 5.0 credits in FREN 2806 [1.0], FREN 3600 [1.0], FREN 3806 [1.0], FREN 4806 [1.0] and FREN 4807 [1.0];

#### **Note:**

Students are not permitted to count the same course(s) towards both certificates offered by the Department of French. Should any student undertake a second certificate, appropriate course substitutions will be required.

---

## **Geography Geographic Information Processing**

Department of Geography and Environmental Studies

Faculty of Arts and Social Science

This section presents the requirements for:

- **Geography – B.A. Honours with Concentration in Physical Geography Resource and Environmental Assessment Globalization, Society and Environment**
- **Geography – B.A. Combined Honours**
- **Geography – B.A. General**
- **Geographic Information Processing – B.A. Honours**
- **Geography with Concentration in Physical Geography – B.Sc. Honours**
- **Geography with Concentration in Geographical Information Processing – B.Sc. Honours**
- **Minor in Geography**
- **Minor in Geography: Physical Geography**
- **Minor in Geography: Resource and Environmental Assessment**
- **Minor in Geographic Information Processing**
- **Joint Program with Algonquin College**

The following programs are offered by the Department of Geography and Environmental Studies in cooperation with other academic units.

**Biology and Physical Geography – B.Sc. Combined Honours** (see the Biology program section of this Calendar).

**Geology and Physical Geography – B.Sc. Combined Honours** (see the Earth Sciences program section of this Calendar).

**Geology and Geography – B.Sc. Combined Honours with Concentration in Terrain Science** (see the Earth Sciences program section of this Calendar).

**Biology and Geography – B.A. Combined Honours** (see the Biology program section of this Calendar)

In addition to the requirements listed below, students must satisfy:

- i) the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) for B.A. programs, the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth Requirements (see *Academic Regulations for the Bachelor of Arts Degree*),
- iii) for B.Sc. programs the common regulations applying to all B.Sc. students including those relating to Science Continuation and Breadth Requirements (see *Academic Regulations for the Bachelor of Science Degree*),

Students should consult the Department when planning their program and selecting courses.

### **Geography – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

- 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both (GEOG 1002 and GEOG 1003);
- 0.5 credit in GEOG 1100 or GEOG 2100;
- 1.5 credit in GEOG 2004, GEOG 2005, GEOG 2006,
- 1.0 credit from GEOG 2101, GEOG 2200, and GEOG 2300;
- 1.0 credit in GEOG 3000 (or other approved field course) and GEOG 3900;
- 1.0 credit from: GEOG 4904 [1.0] or GEOG 4909 [1.0];

7. 2.0 credits in Geography at the 3000-level;
  8. 2.0 credits in Geography at the 4000-level;
- Credits Not Included in the Major CGPA (10.0 credits)*
9. 8.0 credits in electives not in Geography;
  10. 2.0 credits in free electives.

### **Geography with Concentration in Physical Geography – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both (GEOG 1002 and GEOG 1003);
2. 1.5 credit in GEOG 2004, GEOG 2005, GEOG 2006,
3. 0.5 credit from: GEOG 2101, GEOG 2200, or GEOG 2300;
4. 1.0 credit in Geography GEOG 3000 (or other approved field course) and GEOG 3900;
5. 1.0 credit in Geography GEOG 4904 [1.0] or GEOG 4909 [1.0] (with a topic in physical geography);

*and in Physical Geography:*

6. 0.5 credits in either GEOG 1100 or GEOG 2100;
7. 1.0 credit in GEOG 2102, GEOG 3002;
8. 0.5 credit in GEOG 4406 or GEOG 4408 (with a placement in physical geography);
9. 2.0 credits from: GEOG 3101, GEOG 3102, GEOG 3103, GEOG 3104, GEOG 3105, GEOG 3108 or GEOG 3109;
10. 1.5 credits from GEOG 4003, GEOG 4004, GEOG 4005 (with a topic in physical geography), GEOG 4101, GEOG 4103, GEOG 4104, GEOG 4107, or GEOG 4108, GEOG 4109;

*Credits Not Included in the Major CGPA (9.5 credits)*

11. 8.0 credits in electives not in Geography;
12. 1.5 credits in free electives.

### **Geography with Concentration in Resource and Environmental Assessment – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both GEOG 1002 and GEOG 1003;
2. 0.5 credits in GEOG 1100 or GEOG 2100;
3. 1.5 credits in GEOG 2004, GEOG 2005 and GEOG 2006;
4. 0.5 credits in either GEOG 2200 or GEOG 2300;
5. 1.0 credit in GEOG 3000 (or other approved field course), and GEOG 3900;
6. 1.0 credit in either GEOG 4904 [1.0] or GEOG 4909 [1.0] (with a topic in resources and environmental assessment);

*and in Resource and Environmental Assessment:*

7. 2.5 credits in GEOG 2007, GEOG 2101, GEOG 3101, GEOG 3306, GEOG 4004;
8. 0.5 credit in GEOG 4406 or GEOG 4408 (with a placement in resource and environmental assessment);
9. 1.0 credit from: GEOG 3002, GEOG 3102, GEOG 3103, GEOG 3104, GEOG 3105, GEOG 3108, GEOG 3109, GEOG 3206, GEOG 3209, GEOG 3300;
10. 1.0 credit from GEOG 4003, GEOG 4005 (with a topic in resource and environmental assessment), GEOG 4101, GEOG 4104, GEOG 4108, GEOG 4300, GEOG 4400, GEOG 4405, GEOG 4407;

*Credits Not Included in the Major CGPA (9.5 credits)*

11. 8.0 credits in electives not in Geography;
12. 1.5 credits in free electives.

### **Geography with Concentration in Globalization, Society and Environment – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both GEOG 1002 and GEOG 1003;
2. 0.5 credits in GEOG 1100 or GEOG 2100;
3. 2.0 credits in GEOG 2004, GEOG 2005, GEOG 2006, GEOG 2101;
4. 1.0 credit in GEOG 3000 (or other approved field course), and GEOG 3900;
5. 1.0 credit in either GEOG 4904 [1.0] or GEOG 4909 [1.0] (with a topic in globalization);

*and in globalization, society and environment:*

6. 1.0 credit from GEOG 2200, GEOG 2300, GEOG 2505;
7. 2.0 credits in GEOG 3209, GEOG 3307, GEOG 3404, GEOG 4401;
8. 0.5 credit from: GEOG 3200, GEOG 3206, GEOG 3300, GEOG 3306, GEOG 3600, GEOG 3602, GEOG 3603, GEOG 3700;
9. 1.0 credit from: GEOG 4005 (with globalization topic), GEOG 4203, GEOG 4207, GEOG 4300, GEOG 4301, GEOG 4400, GEOG 4406, GEOG 4408, GEOG 4600, GEOG 4601;
10. 0.5 credit from: GEOG 2007, GEOG 3001, GEOG 3003, GEOG 4004.

*Credits Not Included in the Major CGPA (9.5 credits)*

11. 8.0 credits in electives not in Geography;
12. 1.5 credits in free electives.

### **Geography – B.A. Combined Honours (20.0 credits)**

*Credits Included in the Geography Major CGPA (7.0 credits)*

1. 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both GEOG 1002 and GEOG 1003;
2. 0.5 credit in either GEOG 1100 or GEOG 2100;
3. 0.5 credit from: GEOG 2101, GEOG 2200, and GEOG 2300;
4. 0.5 credits in either GEOG 2005 or GEOG 2006;
5. 1.0 credits in GEOG 2004, GEOG 3900;
6. 1.5 credits in Geography at the 3000-level;
7. 1.0 credit in Geography at the 4000-level;
8. 1.0 credit in GEOG 4904 [1.0] or GEOG 4909 [1.0] or Geography at the 4000-level;

*Additional Requirements*

9. The requirements of the other Honours discipline must be satisfied;
10. 5.0 credits in electives not in Geography or the other discipline;
11. Sufficient free electives to total 20.0 credits for the program.

#### **Note**

In Item 8 above, credit in one of GEOG 4904 [1.0] or GEOG 4909 [1.0] is compulsory unless an Honours research essay or equivalent is completed in the other Honours discipline.

### **Geography – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit from: GEOG 1001 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both (GEOG 1002 and GEOG 1003);
  2. 0.5 credit in either GEOG 1100 or GEOG 2100;
  3. 1.0 credit in GEOG 2004, GEOG 2005;
  4. 1.0 credit from GEOG 2101, GEOG 2200, and GEOG 2300;
  5. 1.0 credits in Geography at the 2000-level or above;
  6. 2.5 credits in Geography at the 3000-level or above;
- Credits Not Included in the Geography Major CGPA (8.0 credits)*
7. 7.0 credits in electives not in Geography;
  8. 1.0 credit in free electives.

### **Geographic Information Processing – B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in GEOG 1001;
2. 2.0 credits in GEOG 2004, GEOG 2005, GEOG 2006, GEOG 2007;
3. 3.0 credits in GEOG 3000, GEOG 3002, GEOG 3003, GEOG 3005, GEOG 3006, GEOG 3007;
4. 1.5 credits in GEOG 4003, GEOG 4006, GEOG 4008;
5. 0.5 credit in GEOG 4406 or GEOG 4408 (with placement in a GIP-related setting);
6. 1.0 credits in Geography at the 2000-level or higher;
7. 1.0 credit in GEOG 4904 [1.0] or GEOG 4909 [1.0], with an emphasis on the nature and/or use of Geographic Information Processing;

*Credits Not Included in the Major CGPA (10.0 credits)*

8. 8.0 credits in electives not in Geography;
9. 2.0 credits in free electives.

### **Course Categories for B.Sc. Geography**

#### *Geography Science Electives*

GEOG 1005 [1.0], GEOG 2005, GEOG 2004, GEOG 2006, GEOG 2007, GEOG 2100, GEOG 2102, GEOG 3000, GEOG 3002, GEOG 3003, GEOG 3005, GEOG 3006, GEOG 3007, GEOG 3101, GEOG 3102, GEOG 3103, GEOG 3104, GEOG 3105, GEOG 3108, GEOG 3109, GEOG 4000, GEOG 4003, GEOG 4004, GEOG 4005, GEOG 4006, GEOG 4008, GEOG 4101, GEOG 4103, GEOG 4104, GEOG 4107, GEOG 4108, GEOG 4406, GEOG 4408

#### *Science Continuation*

See *Academic Regulations for the Bachelor of Science Degree* for a list of courses in this category.

#### *Experimental Science Electives*

BIOL 1003, BIOL 1004, CHEM 1000, PHYS 1001, PHYS 1002, PHYS 1003, PHYS 1004, PHYS 1007, PHYS 1008

#### *Approved Arts or Social Science Electives*

See *Academic Regulations for the Bachelor of Science Degree* for a list of courses in this category.

### **Geography with Concentration in Physical Geography – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit in (GEOG 2100 and GEOL 1006) or GEOG 1005 [1.0];
2. 1.0 credit in GEOG 2004, GEOG 2102;
3. 2.5 credits in GEOG 3101, GEOG 3102, GEOG 3104, GEOG 3105 and GEOG 3108;

4. 2.0 credits in Geography Science Electives at the 4000-level;
5. 1.5 credits in Geography Science Electives;
6. 1.0 credit in GEOG 4906 [1.0];

*Credits Not Included in the Major CGPA (11.0 credits)*

7. 1.0 in Experimental Science Electives;
8. 0.5 credit in MATH 1007;
9. 0.5 credit in Mathematics, Statistics or Computer Science;
10. 2.0 credits in Science Continuation, not in Geography;
11. 2.0 approved credits in Science, Computer Science or Engineering;
12. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
13. 1.0 credit in Approved Arts or Social Science, not in Geography;
14. 0.5 credit in Approved Arts or Social Science;
15. 3.0 credits in free electives.

### **Geography with Concentration in Geographical Information Processing – B.Sc. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit in (GEOG 2100 and GEOL 1006) or GEOG 1005 [1.0];
2. 2.0 credit in GEOG 2004, GEOG 2005, GEOG 2006, GEOG 2007;
3. 2.5 credits in GEOG 3002, GEOG 3003, GEOG 3005, GEOG 3006, GEOG 3007;
4. 1.5 credits in GEOG 4003, GEOG 4006, GEOG 4008;
5. 0.5 credits in Geography Science Electives at the 4000-level;
6. 0.5 credits in Geography Science Electives;
7. 1.0 credit in GEOG 4906 [1.0]. The project must have an emphasis on the nature and or use of geographic information processing;

*Credits Not Included in the Major CGPA (11.0 credits)*

8. 1.0 in Experimental Science Electives;
9. 2.0 approved credits in Computer Science;
10. 2.0 credits in Science Continuation, not in Geography;
11. 1.0 approved credits in Science, Computer Science or Engineering;
12. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
13. 1.0 credit in Approved Arts or Social Science, not in Geography;
14. 0.5 credit in Approved Arts or Social Science;
15. 3.0 credits in free electives.

### **Biology and Physical Geography – B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.0 credits)*

1. 2.0 credits from: BIOL 1003, BIOL 1004, (GEOG 2100 and GEOL 1006), GEOG 1005 [1.0];
2. 10.0 credits in Biology (or Biochemistry) and Science Geography at the 2000-level or above, satisfying collectively:
  - a) 0.5 credits chosen from BIOL 3605, BIOL 3606, GEOG 3000, GEOG 4000;
  - b) at least 4.0 credits in Biology or Biochemistry;
  - c) at least 4.0 credits in Geography;



- d) at least 4.0 credits are at the 3000-level or above;
- 1.0 credit in BIOL 4908 [1.0] or GEOG 4906 [1.0];  
*Credits Not Included in the Major CGPA (7.0 credits)*
  - 1.5 credits in CHEM 1000 [1.0], MATH 1007;
  - 0.5 credit in MATH 1107 or STAT 2507;
  - 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
  - 1.5 credits in Approved Arts or Social Science;
  - 1.0 credit in Science Faculty Electives;
  - 1.0 credit in Science Faculty Electives or Computer Science (COMP), not in Biology or Geography, at the 2000-level or above;
  - 1.0 credit in Free Electives.

**Notes**

- Courses in Physical Geography are listed in the *Academic Regulations for the Bachelor of Science Degree* section as Science Geography courses.
- For item 7, 1.0 credit in Geography, other than the Physical Geography, is recommended;
- For item 8, either (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008) is required, unless OAC Physics is presented on admission.

**Geology and Physical Geography –  
B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

- 1.0 credit in (GEOL 1006 and GEOG 2100) or GEOL 1005 or GEOG 1005;
- 2.0 credits in GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2805;
- 2.0 credits in Geology (GEOL) at the 3000-level or above;
- 1.0 credit in Geology (GEOL) at the 4000-level;
- 0.5 credits in GEOG 2102;
- 1.5 credit in Science Geography Courses at the 2000-level or above;
- 2.0 credits in GEOG 3002, GEOG 3102, GEOG 3105, GEOG 3108;
- 1.0 credit in Science Geography Courses at the 4000-level;
- 1.0 credits in GEOG 4906 [1.0] or GEOL 4908 [1.0];

*Credits Not Included in the Major CGPA (8.0 credits)*

- 2.0 credits in CHEM 1000 [1.0], MATH 1007 and MATH 1107;
- 1.0 credit in PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
- 1.0 credit in Mathematics (MATH, STAT) at 2000-level or above and/or in Computer Science (COMP). STAT 2507 and COMP 1004 are recommended.
- 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
- 1.5 credits in Approved Arts or Social Science;
- 2.0 credits in Free Electives.

**Notes**

- Students who have taken GEOL 1000 [1.0] (no longer offered) or any two of GEOL 1006, GEOL 1007 or GEOL 1008 may, with permission of the program advisers, substitute these courses for GEOL 1005 [1.0]/Geography GEOG 1005 [1.0].
- A Human Geography course is recommended in the program.
- GEOL 2805 precludes credit for GEOG 2909.

**Geology and Geography: Concentration in  
Terrain Science –  
B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.5 credits)*

- 1.0 credit in (GEOL 1006 and GEOG 2100) or GEOL 1005 or GEOG 1005;
- 2.5 credits in GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2802, GEOL 2805;
- 2.0 credit in GEOL 3201, GEOL 3203, GEOL 3205, GEOL 3806;
- 1.0 credit in Geology at the 4000-level;
- 0.5 credit in GEOG 2006 or STAT 2507;
- 1.5 credits in GEOG 2004, GEOG 2007, GEOG 2101;
- 2.0 credits in GEOG 3002, GEOG 3102, GEOG 3105, GEOG 3108;
- 1.0 credit in GEOG 4101 and GEOG 4108;
- 1.0 credit in GEOL 4908 [1.0] or GEOG 4906 [1.0];

*Credits Not Included in the Major CGPA (7.5 credits)*

- 1.0 credit in CHEM 1000 [1.0];
- 1.0 credit in MATH 1007 and MATH 1107;
- 1.0 credit in (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
- 0.5 credit in COMP 1003 or COMP 1004 or COMP 1007;
- 1.0 credit in Science Faculty Electives at the 2000-level or above;
- 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
- 1.5 credits in Approved Arts or Social Science;
- 1.0 credit Free Electives.

**Minor in Geography**

Open to all undergraduate students not in Geography programs.

*Requirements (4.0 credits)*

- 1.0 credit in either GEOG 1001 [1.0] or both GEOG 1002 and GEOG 1003;
- 0.5 credit in either GEOG 1100 or GEOG 2100;
- 0.5 credit in GEOG 2005;
- 0.5 credit in GEOG 2101, GEOG 2200 or GEOG 2300;
- 1.0 credit in Geography at the 3000-level;
- 0.5 credit in Geography;
- The remaining requirements of the major discipline(s) and degree must be satisfied.

**Minor in Geography: Physical Geography**

Open to all undergraduate students not in Geography programs.

*Requirements (4.0 credits)*

- 0.5 credit in GEOG 1100 or GEOG 2100;
- 0.5 credit in GEOG 2102;
- 3.0 credits from: GEOG 3002, GEOG 3101, GEOG 3102, GEOG 3103, GEOG 3104, GEOG 3105, GEOG 3108, GEOG 3109, GEOG 4101, GEOG 4104, GEOG 4108, GEOG 4109;
- The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Minor in Geography: Resource and Environmental Assessment**

Open to all undergraduate students not in Geography programs.

*Requirements (4.0 credits)*

1. 1.0 credit in GEOG 1001 [1.0] or both (GEOG 1002 and GEOG 1003);
2. 2.0 credits in GEOG 2101, GEOG 3101, GEOG 3306, GEOG 4004;
3. 1.0 credit from: GEOG 3002, GEOG 3102, GEOG 3103, GEOG 3104, GEOG 3105, GEOG 3108; GEOG 3109, GEOG 3206, GEOG 3209, GEOG 3300, GEOG 4101, GEOG 4104, GEOG 4108, GEOG 4109, GEOG 4300, GEOG 4400, GEOG 4405, GEOG 4407;
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Minor in Geographic Information Processing**

Open only to undergraduate students who have already completed 1.0 credit in GIP courses with CGPA of 6.50 or better.

*Requirements (4.5 credits)*

1. 2.0 credit in GEOG 2004, GEOG 2005, GEOG 2007, GEOG 3005;
2. 0.5 credit in either GEOG 2006 or STAT 2507;
3. 2.0 credits from: GEOG 3002, GEOG 3003, GEOG 3006, GEOG 3007, GEOG 4003, GEOG 4006 or GEOG 4008;
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

#### **Note**

Familiarity with computers is assumed. Students with little computer experience may wish to take one of the following courses as part of their program of study: BUSI 1402, COMP 1001 or COMP 1004.

### **Joint Studies between Algonquin College (GIS Technologist Program) and Carleton University (B.A. in Geography)**

#### **General Information**

This program of joint studies permits students to work concurrently towards an Algonquin College diploma and a Carleton University B.A. General degree. Students in Algonquin College's GIS Technologist program must apply both to Algonquin College and to Carleton University's School of Continuing Education for registration as a Special student.

#### **Admission Requirements**

During their program of study at Algonquin College, students will take 5.0 Carleton credits as a Special student, including 2.5 credits in Geography including: GEOG 1001 [1.0], (GEOG 1100 or GEOG 2100) and 1.0 credit from GEOG 2101, GEOG 2200 and GEOG 2300.

After successful completion of the Algonquin College GIS Technologist Diploma, candidates may apply for admission to a B.A. degree in Geography at Carleton University. To be admitted, candidates must:

1. Graduate from Algonquin College with at least an Algonquin G.P.A. of 3.0 in the courses eligible for transfer to Carleton. Candidates should consult with the GIS Technologist adviser at Algonquin College or the B.A. program adviser at Carleton for a list of such courses.
2. Have obtained an overall average in their Carleton courses to meet the requirements for continuation in the B.A. General.

Students admitted to Carleton may receive the following credits on the basis of study at Algonquin College:

GEOG 2004, GEOG 2005, GEOG 2006, GEOG 2007, GEOG 3002, GEOG 3005, GEOG 3006

Social Science option ISSC 3xxx, ISSC 4xxx, ISSC 4xxx, ISSC 4xxx

#### **Graduation Requirements**

In order to graduate, students must fulfil all University graduation requirements, and all Faculty graduation requirements, and all the Geography B.A. requirements. Consult the *Academic Regulations of the University*, and the *Academic Regulations for the Bachelor of Arts Degree* for full details.

Students who have completed the 5.0 Carleton credits as a Special student during concurrent studies and who transfer the 5.0 credits from Algonquin College identified above will be required to complete 5.0 further Carleton credits upon admission to the B.A. General program. Of these 5.0 additional credits, 2.5 must be in Geography, with at least 1.0 credit at the 3000- or 4000-level.

## Geology

Department of Earth Sciences  
Faculty of Science

This section presents the requirements for:

- **Geology – B.Sc. Honours**
- **Geology – B.Sc. General**
- **Computational Geophysics – B.Sc. Honours**
- **Geology and Physical Geography – B.Sc. Combined Honours**
- **Geology and Physical Geography with Concentration in Terrain Science – B.Sc. Combined Honours**
- **Biology and Geology – B.Sc. Combined Honours**
- **Chemistry and Geology – B.Sc. Combined Honours**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.Sc. students including those relating to First-Year Seminar, Science Continuation and Breadth requirements (see the *Academic Regulations for the Bachelor of Science Degree*).

Students should consult with the department, school or committee responsible for their program when planning their program and selecting courses.

### Course Categories for Geology Programs

The program descriptions below make use of the following course categories that are defined in the *Academic Regulations for the Bachelor of Science Degree* section of this Calendar.

#### Science Faculty Electives

#### Advanced Science Faculty Electives

#### Science Continuation Courses

#### Science Geography

#### Science Psychology

#### Approved Arts or Social Science

#### Free Elective

### Departmental Language Requirement

Most Honours and Combined Honours programs in Geology require that students meet the Departmental Language Requirement. This means that students must demonstrate, by passing an appropriate course or special examination, reading proficiency in a language other than English that is acceptable to the Department. This requirement must be satisfied before the student enrolls in 4000-level courses in Geology.

### Geology - B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from GEOL 1006, GEOL 1007 and GEOL 1008;
2. 3.5 credits GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2301, GEOL 2306, GEOL 2801, GEOL 2802;
3. 3.0 credits in GEOL 3201, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 3805 and GEOL 3806;
4. 1.0 credit in GEOL 4908 [1.0];
4. 2.0 credits in Geology at the 4000-level or above;

*Credits Not Included in the Major CGPA (9.5 credits)*

5. 1.0 credit in MATH 1007 and MATH 1107;
6. 1.0 credit in CHEM 1000 [1.0];
7. 1.0 credit in BIOL 1003 and BIOL 1004 or PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;

8. 1.0 credit in mathematics (MATH, STAT) or computer science (COMP) at the 2000-level or above;
9. 1.0 credits in Science Continuation Courses;
10. 1.0 credit in Science Faculty Electives;
11. 0.5 credits in NSCI 1000 or Approved Arts or Social Science elective;
12. 1.5 credits in Approved Arts or Social Science electives;
13. 1.5 credits in free electives;

#### *Additional Non-credit Requirement*

14. The Departmental Language Requirement must be satisfied.

### Geology - B.Sc. General (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from GEOL 1006, GEOL 1007 and GEOL 1008;
2. 3.5 credits GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2301, GEOL 2306, GEOL 2801, GEOL 2802;
3. 3.0 credits in GEOL 3201, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 3805, GEOL 3806;
4. 3.0 credits in Geology at the 4000-level;

*Credits Not Included in the Major CGPA (9.5 credits)*

5. 1.0 credit in MATH 1007 and MATH 1107;
6. 1.0 credit in CHEM 1000 [1.0];
7. 1.0 credit in BIOL 1003 and BIOL 1004 or PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
8. 1.0 credit in Science Faculty Electives;
9. 2.0 credits in Science Continuation Courses;
10. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
11. 1.5 credits in Approved Arts or Social Science;
12. 1.5 credits in Free Electives.

### Geology - B.Sc. General (15.0 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit from GEOL 1006, GEOL 1007 and GEOL 1008;
2. 3.0 credits GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2301, GEOL 2306, GEOL 2801;
3. 3.0 credits in GEOL 3201, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 3805, GEOL 3806;

*Credits Not Included in the Major CGPA (8.0 credits)*

4. 1.0 credit in MATH 1007 and MATH 1107;
5. 1.0 credit in CHEM 1000 [1.0];
6. 1.0 credit in (BIOL 1003 and BIOL 1004) or (PHYS 1003 and PHYS 1004), or (PHYS 1007 and PHYS 1008);
7. 2.0 credits in Science Continuation Courses;
8. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
9. 1.5 credits in Approved Arts or Social Science;
11. 1.0 credits in Free Electives.

### Computational Geophysics - B.Sc. Honours

*Credits Included in the Major CGPA (9.5 credits)*

1. 1.5 credits in COMP 1005, COMP 1006, and COMP 2002;
2. 0.5 credit in Computer Science at the 2000-level or above;
3. 2.0 credits in CMPS 2800, CMPS 3800, and CMPS 4909 [1.0];

## Program Information

4. 0.5 credit in Computational Science (CMPS) at the 3000-level or above;
5. 1.0 credit from GEOL 1006, GEOL 1007 and GEOL 1008;
6. 4.0 credits in GEOL 2801, GEOL 2205, GEOL 2208, GEOL 3201, GEOL 3805, GEOL 3806, GEOL 4801, GEOL 4804;

*Credits Not Included in the Major CGPA (10.5 credits)*

7. 2.5 credits in MATH 1007, MATH 1107, MATH 2007, MATH 2008, STAT 2507;
8. 2.5 credits in PHYS 1001, PHYS 1002, PHYS 2202, PHYS 3807, PHYS 4203;
9. 0.5 credit in ELEC 3105;
10. 1.0 credit in CHEM 1000 [1.0];
11. 2.0 credits from GEOL 2203, GEOL 2301, GEOL 2802, GEOL 3203, GEOL 3204, GEOL 3205, GEOL 4203, GEOL 4707, GEOL 4805, PHYS 2604, PHYS 3604;
12. 0.5 credits in NSCI 1000 or Approved Arts and Social Science;
13. 1.5 credits in Approved Arts and Social Science.

### Note

The courses in Requirement 10 above should be selected in consultation with the program adviser.

## Geology and Physical Geography – B.Sc. Combined Honours

*Credits Included in the Major CGPA (12.0 credits)*

1. 1.0 credit in (GEOL 1006 and GEOG 2100) or GEOL 1005 or GEOG 1005;
2. 2.0 credits in GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2805;
3. 2.0 credits in Geology (GEOL) at the 3000-level or above;
4. 1.0 credit in Geology (GEOL) at the 4000-level;
5. 0.5 credits in GEOG 2102;
6. 1.5 credit in Science Geography Courses at the 2000-level or above;
7. 2.0 credits in GEOG 3002, GEOG 3102, GEOG 3105, GEOG 3108;
8. 1.0 credit in Science Geography Courses at the 4000-level;
9. 1.0 credits in GEOG 4906 [1.0] or GEOL 4908 [1.0];

*Credits Not Included in the Major CGPA (8.0 credits)*

10. 2.0 credits in CHEM 1000 [1.0], MATH 1007 and MATH 1107;
11. 1.0 credit in PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008;
12. 1.0 credit in Mathematics (MATH, STAT) at 2000-level or above; and/or in Computer Science (COMP); (STAT 2507 and COMP 1004 are recommended);
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
14. 1.5 credits in Approved Arts or Social Science;
15. 2.0 credits in Free Electives.

### Notes

1. Students who have taken GEOL 1000 [1.0] (no longer offered) or any two of GEOL 1006, GEOL 1007 or GEOL 1008 may, with permission of the program advisers, substitute these courses for GEOL 1005 [1.0]/Geography GEOG 1005 [1.0].

2. A Human Geography course is recommended in the program.
3. The course GEOL 2805 precludes GEOG 2909.

## Geology and Geography: Concentration in Terrain Science – B.Sc. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (12.5 credits)*

1. 1.0 credit in (GEOL 1006 and GEOG 2100) or GEOL 1005 or GEOG 1005;
2. 2.5 credits in GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2802, GEOL 2805;
3. 2.0 credit in GEOL 3201, GEOL 3203, GEOL 3205, GEOL 3806;
4. 1.0 credit in Geology at the 4000-level;
5. 0.5 credit in GEOG 2006 or STAT 2507;
6. 1.5 credits in GEOG 2004, GEOG 2007, GEOG 2101;
7. 2.0 credits in GEOG 3002, GEOG 3102, GEOG 3105, GEOG 3108;
8. 1.0 credit in GEOG 4101 and GEOG 4108;
9. 1.0 credit in GEOL 4908 [1.0] or GEOG 4906 [1.0];

*Credits Not Included in the Major CGPA (7.5 credits)*

11. 1.0 credit in CHEM 1000 [1.0];
12. 1.0 credit in MATH 1007 and MATH 1107;
13. 1.0 credit in (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
14. 0.5 credit in COMP 1003 or COMP 1004 or COMP 1007;
15. 1.0 credit in Science Faculty Electives at the 2000-level or above;
16. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
17. 1.5 credits in Approved Arts or Social Science;
18. 1.0 credit Free Electives.

## Biology and Geology – B.Sc. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (13.0 credits)*

1. 1.0 credit in BIOL 1003 and BIOL 1004;
2. 1.0 credit in GEOL 1008 and either GEOL 1006 or GEOL 1007;
3. 10.0 credits in Biology (or Biochemistry) and Geology at the 2000-level or above, collectively satisfying:
  - a) 0.5 credit from BIOL 3605, BIOL 3606, GEOL 2801, GEOL 4807;
  - b) at least 4.0 credits are in Biology;
  - c) at least 4.0 credits are in Geology;
  - d) at least 4.0 credits are at the 3000-level or above;
4. 1.0 credit in BIOL 4908 or GEOL 4908;

*Credits Not Included in the Major CGPA (7.0 credits)*

5. 1.0 credit in MATH 1007 and MATH 1107;
6. 1.0 credit in CHEM 1000 [1.0], PHYS 1003 and PHYS 1004, or PHYS 1007 and PHYS 1008. The omitted subject, i.e. Chemistry or Physics, must have been taken at the OAC level;
7. 0.5 credit in Statistics (STAT). STAT 2507 is recommended;
8. 0.5 credit in Computer Science. COMP 1004 is recommended;

9. 1.0 credit in Science Faculty Electives;
10. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
11. 1.5 credits in Approved Arts or Social Science;
12. 1.0 credit in Free Electives;

*Additional Non-credit Requirement*

13. The Department of Earth Sciences Language Requirement must be satisfied.

**Chemistry and Geology –  
B.Sc. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

1. 4.0 credits in CHEM 1000 [1.0], CHEM 2101, CHEM 2102, CHEM 2302, CHEM 2303, CHEM 3503, CHEM 3504;
2. 1.0 credit in Chemistry at the 4000-level;
3. 0.5 credit chosen from GEOL 1007, GEOL 1008;
4. 2.5 credits in GEOL 1006, GEOL 2203, GEOL 2205, GEOL 2208, GEOL 2801;
5. 1.0 credit in Geology at the 3000-level;
6. 1.0 credit in Geology at the 4000-level;
7. 1.0 credit in Chemistry or Geology;
8. 1.0 credit in either CHEM 4908 or GEOL 4908;

*Credits Not Included in the Major CGPA (8.0 credits)*

9. 1.5 credits in MATH 1007, MATH 1107, MATH 2007;
10. 0.5 credit in MATH or STAT at the 2000-level;
11. 1.0 credit in either (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
12. 1.0 credit in Science Faculty Electives (not CHEM or GEOL);
13. 1.0 credit in Science Faculty Electives;
14. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
15. 1.5 credits in Approved Arts or Social Science;
16. 1.0 credit in Free Electives;

*Additional Non-credit Requirement*

16. The Department of Earth Sciences Language Requirement must be satisfied.

## History

Department of History  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **History – B.A. Honours**
- **History with Concentration in International History – B.A. Honours**
- **History – B.A. Combined Honours**
- **History – B.A. General**
- **Minor in History**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the Department when planning their program and selecting courses.

### Course Categories for History

The following course categories are used in the specification of the History programs.

History Fields below the 4000-level:

The following field definitions are used to classify the History courses below the 4000-level:

- a) ancient, medieval and early modern Europe
- b) modern Europe
- c) North America
- d) European expansion and the non-Western world

The field classification of each course is included with the course description. Courses that do not have a History Field classification, such as HIST 3808 [1.0], cannot be used to meet the History Field requirements of degree programs in History.

### History Seminars

HIST 4006 [1.0], HIST 4105 [1.0], HIST 4204 [1.0], HIST 4400 [1.0], HIST 4502 [1.0], HIST 4504 [1.0], HIST 4507 [1.0], HIST 4508 [1.0], HIST 4509 [1.0], HIST 4600 [1.0], HIST 4602 [1.0], HIST 4700 [1.0], HIST 4802 [1.0]

### Field Specifications for the History Seminars

i) *Ancient, medieval and early modern Europe*  
HIST 4006 [1.0], HIST 4209 [1.0], HIST 4507 [1.0]

ii) *Modern Western Europe*  
HIST 4205 [1.0], HIST 4502 [1.0], HIST 4508 [1.0], HIST 4509 [1.0], HIST 4802 [1.0]

iii) *Russia and Eastern Europe*  
HIST 4600 [1.0], HIST 4602 [1.0]

iv) *Great Britain and the Commonwealth*  
HIST 4502 [1.0], HIST 4504 [1.0], HIST 4508 [1.0], HIST 4509 [1.0]

v) *Canada*  
HIST 4204 [1.0], HIST 4206 [1.0], HIST 4300 [1.0], HIST 4301 [1.0], HIST 4307 [1.0], HIST 4308 [1.0], HIST 4309 [1.0], HIST 4602 [1.0], HIST 4802 [1.0]

vi) *United States*  
HIST 4400 [1.0], HIST 4502 [1.0]

vii) *European expansion and the non-Western world*  
HIST 4700

### Cross-Listed Courses

The Department of History cross-lists several courses offered by other departments (e.g., several Classical Civilization courses in the Discipline of Classics). No more than 2.0 credits in cross-listed courses may be included in the 7.0 credits required for the B.A. General program. No more than 3.0 credits in cross-listed courses may be included in a B.A. Honours or B.A. Combined Honours program.

### History – B.A. Honours (20.0 credits)

The requirements for this program are modified when the Honours Research Essay is included.

*Credits Included in the Major CGPA (10.0 credits)*

#### Normal Pattern

- 6.0 credits in History including 1.0 credit in each of three of the four History Fields below the 4000-level and satisfying:
  - 1.0 credit at the 1000-level;
  - 3.0 credits at the 2000-level;
  - 2.0 credits at the 3000-level;
- 1.0 credit in HIST 3808 [1.0];
- 3.0 credits in History Seminars with not more than 2.0 credits in any one Field for History Seminars.

#### Honours Research Essay Pattern

- 5.0 credits in History including 1.0 credit in each of three of the four History Fields below the 4000-level and satisfying:
  - 1.0 credit at the 1000-level;
  - 2.0 credits at the 2000-level;
  - 1.0 credit at the 3000-level;
  - 1.0 credit at the 2000- or 3000-level;
- 1.0 credit in HIST 3808 [1.0];
- 2.0 credits in History Seminars;
- 2.0 credits in HIST 4909 [2.0];

*Credits Not Included in the Major CGPA (10.0 credits)*

- 8.0 credits in electives not in History;
- 2.0 credits in free electives (may be History).

#### Notes

- One of the History seminar credits in Req. 3 above may, with departmental approval, be replaced with a credit in a discipline other than History. The replacement credit will count as part of the Major CGPA.
- Students should endeavour to have one course at the 2000- or 3000-level in the area of each fourth-year seminar.
- Students electing to follow the Honours Research Essay Pattern should consult with the Department. The decision to commit to this pattern should be made at the beginning of third year.

### History with Concentration in International History – B.A. Honours (20.0 credits)

The Concentration in International History is open to students in the History B.A. Honours program. Students in the Concentration must complete a total of 11.0 History credits, of which a minimum of 6.0 must be chosen from the list of designated courses in international history (see below). The minimum CGPA required over the courses in the Concentration is 6.50.

#### Concentration Credits (5.0 credits)

The concentration credits are those in c), d), e) and 3.

*Credits Included in the Major CGPA (11.0 credits)*

- 7.0 credits including 1.0 credit in each of three of the four History Fields below the 4000-level and satisfying:
  - 1.0 credit in History at the 1000-level;
  - 2.0 credits in History at the 2000-level;
  - 1.0 credit in HIST 2801 [1.0] (Field b);
  - 1.5 credits chosen from HIST 3304, HIST 3306, HIST 3400, HIST 3405, HIST 3800, HIST 3801;
  - 1.5 credits chosen from HIST 2205 [1.0], HIST 2806 [1.0], HIST 3605, HIST 3700, HIST 3703, HIST 3706, HIST 3709, HIST 3805, HIST 3806, HIST 3905 and courses listed under d) not already used to satisfy d);
- 1.0 credit in HIST 3808 [1.0];
- 1.0 credit in HIST 4802 [1.0];
- 2.0 credits in History Seminars;

*Credits Not Included in the Major CGPA (9.0 credits)*

- 8.0 credits in electives not in History;
- 1.0 credit in free electives (may be History).

### History – B.A. Combined Honours (20.0 credits)

*Credits Included in the History Major CGPA (6.0 credits)*

- 4.0 credits including 1.0 credit in each of three of the four History Fields below the 4000-level and satisfying:
  - 1.0 credit in History at the 1000-level;
  - 2.0 credits in History at the 2000-level;
  - 1.0 credit in History at the 3000-level;
- 1.0 credit in HIST 3808 [1.0];
- 1.0 credit in History at the 4000-level;

*Additional Credit Requirements*

- The requirements of the other discipline must be satisfied;
- 5.0 credits not in History or the other field;
- Sufficient free elective credits to make 20.0 credits for the degree.

### History – B.A. General

*Credits Included in the Major CGPA (7.0 credits)*

- 7.0 credits in History including 1.0 credit in each of three of the four History Fields below the 4000-level and satisfying:
  - 1.0 credit in History at the 1000-level;
  - 3.0 credits in History at the 2000-level;
  - 3.0 credits in History at the 3000-level;

*Credits Not Included in the Major CGPA (8.0 credits)*

- 7.0 credits not in History;
- 1.0 credit in free electives.

### Minor in History

Open to all undergraduate degree students not in History programs.

*Requirements (4.0 credits)*

- 1.0 credit in History at the 1000-level;
- 1.0 credit in History at the 2000-level;
- 1.0 credit in History at the 3000-level;
- 1.0 credit in History at either the 2000- or 3000-level;

- The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Mention: français**

Students in the B.A. (Honours) or B.A. program in History may qualify for the notation *Mention: français* by fulfilling the requirements outlined below. Those wishing to pursue this path should consult with the Department's *Mention: français* adviser. Approval of this adviser is required for all courses under *Mention: français*.

History courses presented in fulfilment of *Mention: français* requirement can double as courses to satisfy History B.A. (Honours) or B.A. requirements.

Students enrolling in courses at the University of Ottawa will do so through the University of Ottawa Exchange Program. To enrol in courses in French at another university, students must first obtain a Letter of Permission from Registrarial Services.

### **B.A. (Honours) and Combined B.A. (Honours)**

To graduate with the notation *Mention: français* students must include in their program the following:

- 1.0 credit in French language chosen in consultation with the Department of French, to perfect the student's French language skills.
- 1.0 credit from the following list of courses taught in French at Carleton or the University of Ottawa and relating to the French experience in Canada: (Carleton) FREN 3702 and FREN 3703; (University of Ottawa) Histoire HIS 2601, HIS 2701; Français FRA 2525, FRA 2526, FRA 2711, FRA 2714, FRA 2722, FRA 2727; Linguistique LIN 2502; Études Religieuses SRS 2530.
- 1.0 credit in History at the 2000-or 3000-level taught in French at Carleton, at the University of Ottawa or at another university. At Carleton, HIST 3900 [1.0] and HIST 3901 are available in French to meet this requirement.
- Either HIST 4908 [1.0], or a 1.0 credit History seminar at the 4000-level taught in French at the University of Ottawa. All written work must be submitted in French.
- Combined Honours students must meet the *Mention: français* requirements of both Honours disciplines.

### **B.A. General**

To graduate with the notation *Mention: français* students must include in their program the following:

- 1.0 credit in French language chosen in consultation with the Department of French for the purpose of perfecting the student's French language skills.
- 1.0 credit from the following list of courses taught in French at Carleton or the University of Ottawa and concerned with the study of the heritage and culture of French Canada: (Carleton) FREN 3702 and FREN 3703; (University of Ottawa) Histoire HIS 2601, HIS 2701; Français FRA 2525, FRA 2526, FRA 2711, FRA 2714, FRA 2722, FRA 2727; Linguistique LIN 2502; Études Religieuses SRS 2530.
- 1.0 credit in History at the 2000-or 3000-level taught in French at Carleton, at the University of Ottawa or at another university. At Carleton, HIST 3900 [1.0] and HIST 3901 are available in French to meet this requirement.

## **Human Rights**

Human Rights Program Committee  
Faculty of Arts and Social Science

This section presents the requirements for:

### **• Human Rights – B.A. Combined Honours**

Human Rights is available only as a Combined Honours program which can be taken in conjunction with any other B.A. Combined Honours discipline. The program is jointly sponsored by the departments of Law, Philosophy, Political Science, and Sociology and Anthropology.

In addition to the requirements listed below, students must satisfy:

- the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- the common regulations applying to all B.A. students including those relating to First-Year Seminars. (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students in the Human Rights program are exempt from the B.A. Breadth Requirement.

Students should consult the Human Rights Program Committee when planning their program and selecting courses.

Some of the Human Rights Electives have prerequisites that are not explicitly included in the program. Students should plan to have credit for the prerequisites of each course in their program or ask to have the prerequisite waived.

### **Human Rights – B.A. Combined Honours**

*Credits Included in the Major CGPA (7.0 credits)*

- 1.0 credit in SOAN 1001 [1.0] or an approved First-Year Seminar (FYSM);
- 1.5 credits in LAWS 2105, PHIL 2103, PSCI 3307;
- 1.0 credit from: LAWS 3503, LAWS 3509, LAWS 3604, LAWS 4102, LAWS 4604;
- 0.5 credit from: PHIL 2101, PHIL 2102, PHIL 2306, PHIL 3103, PHIL 3300 [1.0];
- 0.5 credit from: PSCI 3109, PSCI 4109, PSCI 4206;
- 1.0 credit from: SOAN 2002 [1.0], ANTH 2007, SOAN 3007; SOAN 2304, SOCI 2407 [1.0], SOCI 3405, SOCI 3407, SOAN 4605;
- 0.5 credit in Cultural and Cross-cultural Contexts (see list below);
- 1.0 credit in Human Rights Electives (see list below);
- In Items 1 to 8, there must be at least 1.0 credit at the 4000-level;

### *Additional Credit Requirements*

- The requirements for the other discipline must be satisfied;
- Sufficient free electives to make 20.0 credits total for the program.

### **Human Rights Electives**

*Human Rights Law, Institutions and Practices*

LAWS 2005 [1.0], LAWS 3401, LAWS 3501, LAWS 3503, LAWS 3603, LAWS 3604, LAWS 3509, LAWS 4006, LAWS 4309, LAWS 4604, LAWS 4605, LAWS 4607, PSCI 3600, PSCI 4109, SOWK 3206

*Contexts of Inequality and Power*

EURR 4002, EURR 4008, GEOG 2200, GEOG 2301, GEOG 3307, HIST 2801 [1.0], HIST 3106, HIST 3200 [1.0], HIST

3305 [1.0], HIST 3504, HIST 3506, HIST 3705, HIST 3706, DIST 4401, PSCI 1104, PSCI 2600, PSCI 2601, PSCI 2602, PSCI 3006, PSCI 3100, PSCI 3101 [1.0], PSCI 3104, PSCI 3105 [1.0], PSCI 3204, PSCI 3502, PSCI 4105, PSCI 4203, PSCI 4205, PSCI 4206, PSCI 4500, PSCI 4505, SOWK 2101, SOWK 3101, SOWK 3205, SOWK 4102, SOWK 4104, SOWK 4300, SOAN 2002 [1.0], ANTH 2007, SOAN 2200 [1.0], SOAN 2304, SOCI 2407 [1.0], ANTH 2409, SOAN 3007, SOAN 3103, ANTH 3109, SOCI 3201, SOCI 3405, SOCI 3407, SOCI 3408, SOAN 3601, SOAN 4200, SOAN 4404, SOAN 4601, SOAN 4605, ANTH 4700, ANTH 4706, SOAN 4707, SOAN 4709, WOMN 2800

*Ethics and Political Theory*

PHIL 1804, PHIL 2101, PHIL 2102, PHIL 2104, PHIL 2306, PHIL 2804, PHIL 2900 [1.0], PHIL 3101, PHIL 3102, PHIL 3103, PHIL 3300 [1.0], PHIL 3408, PHIL 4105, PHIL 4106, PHIL 4403, PHIL 4404, PHIL 4407, PHIL 4408, PSCI 3109, PSCI 4306, PSCI 4307, LAWS 3101, LAWS 3102, LAWS 4101, LAWS 4102, LAWS 4103, LAWS 4104, LAWS 4800

*Cultural and Cross-cultural Contexts:*

HIST 1700 [1.0], HIST 2307 [1.0], HIST 2600 [1.0], HIST 2705 [1.0], HIST 2708 [1.0], HIST 2805 [1.0], HIST 2806 [1.0], HIST 3406, HIST 3407, HIST 3503 [1.0], RELI 1000, RELI 1001, RELI 2005, RELI 2106, RELI 2305 [1.0], RELI 2509, RELI 2702, RELI 2708, FYSM 1401 [1.0], ANTH 2007, ANTH 2409, SOAN 3601, ANTH 4706, SOAN 4709

---

## Humanities

College of the Humanities  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Bachelor of Humanities**
- **Humanities - B.Hum. Combined Honours**

In addition to the requirements listed below, students must satisfy the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),

Students should consult the College and its Web site when planning their program and selecting courses.

### Academic Performance Evaluation

The Bachelor of Humanities degree specifies that all credits are included in the Major CGPA, making this average identical to the Overall CGPA. Students are evaluated on the basis of their Overall CGPA and their Core CGPA.

Students are in Good Standing if the Overall CGPA = 7.00 and the Core CGPA = 7.0.

A student who is not in Good Standing but has Overall CGPA = 6.00 and Core CGPA = 6.00 is on Academic Warning.

A student is required to leave the program with the status *Ineligible to Return* if either:

1. the student was on Academic Warning and does not achieve Good Standing at the next Academic Performance Evaluation, *or*
2. the student has Overall CGPA < 6.00 or Core CGPA < 6.00 at any Academic Performance Evaluation.

### The Humanities Core

HUMS 1000 [1.0], HUMS 2000 [1.0],

HUMS 3000 [1.0], HUMS 4000 [1.0]

### Requirement for full-time study

Students in the Humanities program must complete a minimum of 4.0 credits by the end of the summer session. The College may permit students to study abroad for a year while remaining registered in the program. For those students permitted to study abroad, Carleton credits commensurate to studies taken abroad will be determined by the College and awarded towards the student's degree. In exceptional circumstances (usually financial need or sickness) the College may also permit students to take a leave of absence for one year while remaining registered in the program.

### Humanities - B. Humanities (20.0 credits)

This program is offered in two streams, which share Requirements 1 - 5.

*Requirements (20.0 credits)*

1. 4.0 credits in Humanities Core: HUMS 1000 [1.0], HUMS 2000 [1.0], HUMS 3000 [1.0], HUMS 4000 [1.0];
2. 3.5 credits in HUMS 1005, HUMS 3200 [1.0], HUMS 4100 [1.0], HUMS 4101, HUMS 4102;
3. 3.5 credits in RELI 1402, RELI 2208 [1.0], CLCV 2000 [1.0], ENGL 3300 [1.0];
4. 1.0 credit from ENGL 1000 [1.0], ENGL 1602 [1.0], HIST 1001 [1.0], PHIL 1600 [1.0];
5. 1.0 credit fulfilling the Language Requirement;

**for Stream A:**

6. 2.0 credits from CLCV 2009 [1.0], CLCV 2900 [1.0], CLCV 2901 [1.0], HIST 2201 [1.0], PSCI 2300 [1.0];



7. 1.0 credit from HUMS 3205 [1.0], PHIL 2009, PHIL 3004, ENGL 3304 [1.0], HIST 2203 [1.0];
8. 1.0 credit from PSCI 4306, PSCI 4307, PHIL 3006, PHIL 3007, HIST 3100 [1.0], HIST 3808 [1.0], ENGL 3601, ENGL 3603, ENGL 4607, ENGL 4608;
9. 3.0 credits in free electives.

**for Stream B (with Minor):**

6. 1.0 credits from CLCV 2009 [1.0], CLCV 2900 [1.0], CLCV 2901 [1.0], HIST 2201 [1.0], PSCI 2300 [1.0];
7. 6.0 credits in approved electives.

**Note**

For Stream B, the courses taken to satisfy Requirement 7 require the approval of the College Academic Adviser. These credits must normally fulfil the requirements for a Minor in some discipline. An exception may be made for students wishing to include science courses as preparation for a subsequent professional program. Credits used to satisfy Requirements 1 through 6 may also be used to satisfy up to 2.0 credits of the requirements of the Minor.

**Humanities - B.Hum. Combined Honours**

Students already admitted to the B.Hum. may register for a Combined Honours degree in Humanities and any other discipline offered within the B.A. Honours degree as a Combined Honours. Credits used to satisfy Requirements 1 through 6 may also be used to satisfy up to 2.0 credits of the requirements of the other discipline under Requirement 7.

*Requirements (20.0 credits)*

1. 4.0 credits in Humanities Core: HUMS 1000 [1.0], HUMS 2000 [1.0], HUMS 3000 [1.0], HUMS 4000 [1.0];
2. 3.5 credits in HUMS 1005, HUMS 3200 [1.0], HUMS 4100 [1.0], HUMS 4101, HUMS 4102;
3. 3.5 credits in RELI 1402, RELI 2208 [1.0], CLCV 2000 [1.0], ENGL 3300 [1.0];
4. 1.0 credit from ENGL 1000 [1.0], ENGL 1602 [1.0], HIST 1001 [1.0], PHIL 1600 [1.0];
5. 1.0 credit fulfilling the Language Requirement;
6. 1.0 credits from CLCV 2009 [1.0], CLCV 2900 [1.0], CLCV 2901 [1.0], HIST 2201 [1.0], PSCI 2300 [1.0];
7. 6.0 credits including the requirements for the other discipline of the combined degree.

**Language Requirement**

Normally GREK 2200 and GREK 2201, or LATN 2200 and LATN 2201, or FREN 1405 [1.0], FREN 1600 [1.0], FREN 2405 [1.0], FREN 2600 [1.0], or GERM 2105 [1.0], or ITAL 2000 [1.0], or RELI 2902 [1.0], or RUSS 1201 [1.0], or SPAN 2105 [1.0], chosen in consultation with the College Academic Adviser. Student may need to fulfil a prerequisite before taking these courses.

## Industrial Design

School of Industrial Design  
Faculty of Engineering and Design

This section presents the requirements for:

• **Bachelor of Industrial Design**

In addition to the requirements listed below, students must satisfy the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),

Students should consult the School when planning their program and selecting courses.

**Academic Performance Evaluation**

Students in Industrial Design are subject to the standard Academic Performance Evaluation process with the following additions and amendments:

1. The Industrial Design program does not define a Major CGPA. Students are assessed at each Academic Performance Evaluation using their Overall CGPA and the Core minimum defined in 2 below.
2. The courses in the Industrial Design Core are as follows:  
*Industrial Design Core*  
IDES 1300, IDES 1301, IDES 2300, IDES 2302, IDES 3300 [1.0], IDES 3301 [1.0], IDES 4300 [2.0], IDES 4301, IDES 4302  
Good Standing requires a grade of C- or better in each course of the Industrial Design Core.
3. Students in Industrial Design are either in Good Standing or on Academic Warning. Students who satisfy the conditions for Suspension at an Academic Performance Evaluation must leave the Industrial Design program with the status *Ineligible to Return* (ITR).

**Prerequisites**

The following broad course prerequisites specify requirements for access to upper year project courses.

Registration in IDES 3300 [1.0] requires successful completion of all course requirements of first and second years.

Registration in IDES 4300 [2.0] requires successful completion of all Industrial Design courses of third year (Item 5 below).

**Absence and Readmission**

Students in Industrial Design who intend to be absent for a fall/winter session must request permission from the School in advance. Students who are absent for a fall/winter session without permission will be required to apply for readmission to the program in advance of registration.

**Industrial Design – B.I.D. (22.0 credits)**

*Requirements*

**First Year**

1. 6.0 credits in: ECON 1000 [1.0], PSYC 1001, PSYC 1002, MATH 1007, MATH 1107, PHYS 1003, PHYS 1004, IDES 1000, IDES 1001, IDES 1300, IDES 1301;

**Second Year**

2. 4.0 credits in: PSYC 3702, IDES 2101, IDES 2102, IDES 2105, IDES 2203, IDES 2300, IDES 2302, IDES 2600;
3. 1.0 credit in: Architecture, Business, Computer Science, Engineering, Psychology or Technology, Society, Environmental Studies;
4. 0.5 credit in free electives;

### Third Year

5. 3.0 credits in: IDES 3300 [1.0], IDES 3301[1.0], IDES 3502, IDES 3601;
6. 0.5 credit in BUSI 2204;
7. 1.5 credits in free electives;

### Fourth Year

8. 4.5 credits in: IDES 4000, IDES 4001, IDES 4300 [2.0], IDES 4301, IDES 4302, IDES 4400;
9. 1.0 credits in approved electives at the 3000-level or above.

### Notes:

1. Although the Industrial Design Seminar IDES 4001 takes place in the winter term, the preparatory work that students are required to do must be completed in the fall term, and therefore requires registration in the course in that term.
2. The electives under Requirement 9 above must be chosen in consultation with the School on the following principles:
  - a) the electives chosen should serve to deepen the student's understanding of fields related to Industrial Design or disciplines that are relevant for industrial designers;
  - b) the electives chosen should preferably be related to the Industrial Design projects and provide basic and/or actual information for these projects.

---

## Integrated Science

Institute of Integrated Science  
Faculty of Science

This section presents the requirements for:

- **Integrated Science – B.Sc. Honours**
- **Integrated Science – B.Sc. General**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.Sc. programs including those relating to Science Continuation and Breadth requirements (see the *Academic Regulations for the Bachelor of Science Degree*),

### General Information

The Integrated Science (IS) programs offered by the Faculty of Science provide undergraduate students an opportunity to design a program of study that blends a concentration in science with a linked area of specialization in another Faculty. The science concentration can be in any one of the following areas: physical, earth, life, or mathematical (including computer) science. In the associated specialty area outside of the Faculty of Science, a pattern of courses is selected that corresponds to one of the Fields of Study listed below. In this way, the student acquires a depth of understanding of a particular branch of science integrated with knowledge that will aid in the application of that understanding in a professional or employment context.

First-year students must submit their proposed course selection to the IS Director for approval before commencing second year. The progress of all students is monitored by the IS Committee.

An Honours program and a General program are available. Both require a course of independent study (ISCS 4908 [1.0], ISCS 3909) as an important element in the program.

### Academic Performance Evaluation for IS

The Academic Performance Evaluation for students in Integrated Science is based on the Major CGPA and the Overall CGPA. The Major CGPA is calculated over the combined credits in the Science Sequence and the Non-Science Sequence (13.0 credits for Honours, 9.0 credits for General.)

### Integrated Science – B.Sc. Honours (20.0 credits)

Detailed programs in IS are constructed and approved on an individual basis. All IS Honours programs adhere to the following structure.

#### *Introductory Credits (5.0 credits)*

1. 1.0 credit in MATH 1007 and MATH 1107;
2. 2.0 experimental Science credits chosen from two of Biology, Chemistry, Geology, Physics;
3. 2.0 credits chosen from Science, Mathematics, Arts, Social Sciences, Computer Science (except COMP 1001 or COMP 1001) or Engineering;

#### *Science Sequence (9.0 credits)*

4. 5.0 credits selected from the Faculty of Science at the 2000-level or above;
5. 3.0 credits from the Faculty of Science at the 3000-level or above;
6. 1.0 credit in ISCS 4908 [1.0];

*Non-Science Sequence (4.0 credits)*

7. 4.0 credits in an inter-related specialized area selected from outside the Faculty of Science;

*Additional Requirements*

8. 2.0 credits in free electives;
9. At least 2.0 credits in Items 1 to 8 above must be chosen from the Faculties of Arts and Social Sciences or Public Affairs and Management.

**Note**

Item 4 above may include up to 1.0 credit 1000-level computer science.

**Integrated Science – B.Sc. General**

Detailed programs in IS are constructed and approved on an individual basis. All IS General programs adhere to the following structure.

*Introductory Credits (5.0 credits)*

1. 1.0 credit in MATH 1007 and MATH 1107;
2. 2.0 experimental Science credits chosen from two of Biology, Chemistry, Geology, Physics;
3. 2.0 credits chosen from Science, Mathematics, Arts, Social Sciences, Computer Science (except COMP 1000 or COMP 1001) or Engineering;

*Science Sequence (6.0 credits)*

4. 3.5 credits selected from the Faculty of Science at the 2000-level or above;
5. 2.0 credits from the Faculty of Science at the 3000-level or above;
6. 0.5 credit in ISCS 3909;

*Non-Science Sequence (3.0 credits)*

7. 3.0 credits in an inter-related specialized area selected from outside the Faculty of Science;

*Additional Requirements*

8. 1.0 credits in free electives;
9. At least 2.0 credits in Items 1 to 8 must also be chosen from the Faculties of Arts and Social Sciences or Public Affairs and Management.

**Note**

Item 5 above may include up to 1.0 credit 1000-level computer science.

In IS programs, all Technology, Society, Environment (TSE) Studies courses are considered Non-Science credits.

**Fields of Study**

**1. Health Science** — preparation for Medicine, Dentistry, Nursing Science, Pharmacy, Veterinary Medicine.

A program in Health Science comprises a science sequence drawn from the life sciences (biology, biochemistry and chemistry, psychology) and a non-science sequence from the social sciences (psychology, sociology, and/or business).

**2. Science Education** — preparation for teaching at the primary or secondary school levels.

A program in Science Education combines a science sequence in any one of the science areas of concentration with an appropriate non-science sequence.

**3. Forensic Science** — preparation for a career or graduate study in forensic analysis (such as DNA analysis, trace evidence techniques, drug testing and toxicology). A program in Forensic Science has a science sequence that emphasizes analytical laboratory techniques and provides a sound basis in

fundamental biology and chemistry. The non-science sequence is drawn from a list of relevant courses in anthropology, sociology (criminology), law and psychology.

**4. Science and Business** — preparation for a career involving the management of innovation in either the private or public sectors or for post-graduate studies in business administration. A program in Science and Business consists of a science sequence in any one of the science areas of concentration and a non-science sequence developed in consultation with the School of Business of the Faculty of Public Affairs and Management. The non-science sequence meets the requirements for the Minor in Business degree designation.

**5. Science and Policy** — preparation for a career in the public service and/or non-governmental organizations or for post-graduate studies in the administration and regulation of innovation, science and technology. A program in Science and Policy consists of a science sequence in any one of the science areas of concentration and a non-science sequence of courses in Business, Economics and Political Science (including those courses required by the Faculty of Engineering for the Concentration in Management designation).

**6. Science and Communication** — preparation for a career in media communications and public relations. A program in Science and Communication combines a science sequence in any one of the science areas of concentration with a non-science sequence developed in consultation with the School of Journalism and Communication of the Faculty of Public Affairs and Management. The non-science sequence meets the requirements for the Minor in Mass Communication degree designation.

**7. Science and Ethics** — preparation for a career as an analyst and/or publicist in either the private or public sectors or for post-graduate studies in either science or philosophy. A program in Science and Ethics links a science sequence in any one of the science areas of concentration to a non-science sequence of philosophy, ethics and public affairs credits that meets the requirements of the Minor in Philosophy degree designation. Because of the complementary presence of Environment Canada's National Wildlife Research Centre on Carleton's campus, exceptional opportunities exist for directed study in the area of environmental ethics.

**8. Science and the Arts** — preparation for any career that requires a breadth of scientific and humanistic knowledge, this field offers an individualized but coherent program that instills the literacy, critical, analytical and problem solving skills that can only be acquired through the study of both the sciences and the humanities and social sciences. A program in Science and the Arts consists of a science sequence in one or more areas of concentration and a non-science sequence of arts and social science credits developed by the student in consultation with an Integrated Science Studies adviser.

**9. Science and Technology** — A program in Science and Technology consists of a science sequence in one or more areas of concentration and a non-science sequence of credits drawn from courses offered by the Faculty of Engineering and Design and by Technology, Society, Environment Studies.

**10. Information Science** — A program in Information Science consists of a science sequence selected from computer science and mathematics & statistics; non-science sequence consisting of an appropriate selection of courses in Arts & Social Sciences (particularly recommended are courses in mass communication, Art & Culture, Psychology, and Sociology) and TSE.

**11. Information Technology** — The science sequence is selected from computer science and mathematics & statistics; non-science sequence consisting of an appropriate selection of courses in Engineering and TSE. Career opportunities for graduates are in software development, user interface design, web applications, communications, advertising, computer-assisted design applications, etc.

## Journalism

School of Journalism and Communication  
Faculty of Public Affairs and Management

This section presents the requirements for:

- **Journalism – B.J. Honours**
- **Journalism with Concentration in Psychology – B.J. Honours**
- **Journalism – B.J. or B.A. Combined Honours**

In addition to the requirements listed below, students must satisfy the University regulations including the process of Academic Performance Evaluation (see Academic Regulations section of this Calendar).

Students should consult with the School when planning their program and selecting courses.

### Note

Students who already hold an undergraduate degree in another field are not eligible to apply for the B.J. (Honours) program. These students should consult the information on the Master of Journalism or the Master of Arts in Communication in the *Graduate Calendar*.

### Academic Performance Evaluation in Journalism

Students in the Journalism degree are subject to the standard process of Academic Performance Evaluation for Honours programs with the following exceptions and additions.

#### 1. Continuation to Second Year

Continuation in Good Standing after the first Academic Performance Evaluation will be guaranteed only to First-year Journalism students who achieve a B+ or better in JOUR 1000 [1.0] and an Overall CGPA of at least 8.00 in first year on 5.0 full credits. The School also maintains a number of places in second year for students who wish to transfer from Carleton or elsewhere. Normally offers are made to students with an overall CGPA equivalent to 10.00 (A-) or better.

#### 2. Continuation in Good Standing at subsequent Academic Performance Evaluations requires a minimum CGPA of 6.50 and an Overall CGPA of 5.00.

### General Prerequisite

Students may not continue into 3000-level or higher courses unless the following three minimum requirements are met:

- a) at least C standing in JOUR 2201 [1.0];
- b) a CGPA of at least 6.50 over the courses JOUR 1000 [1.0], JOUR 2201 [1.0], JOUR 2205 and JOUR 2501;
- c) an Overall CGPA of at least 5.00.

### Graduation

In addition to the graduation requirements of the Faculty, a candidate for the degree of Bachelor of Journalism with Honours must have:

- a) a Major CGPA of at least 6.50,
- b) a grade of C or better in the reporting courses,
- c) a grade of C- or better in each other Journalism course,
- d) an Overall CGPA of at least 5.00, and
- e) be recommended for graduation by the School.

### Prohibited Courses

Courses below the 1000-level may not be used for credit in Journalism programs.

## Journalism – B.J. Honours (20.0 credits)

*Credits Included in the Major CGPA (8.0 credits)*

1. 1.0 credit in JOUR 1000 [1.0];
2. 2.0 credits in JOUR 2201 [1.0], JOUR 2205 and JOUR 2501;
3. 2.0 credits in JOUR 3205 [1.0] and JOUR 3206 [1.0];
4. 2.0 credits in JOUR 4000 [1.0] and JOUR 4201 [1.0];
5. 1.0 credit from: JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207 or JOUR 4208;

*Credits Not Included in the Major CGPA (12.0 credits)*

6. 5.0 credits must be taken in a field other than Journalism, with at least 1.0 of these credits at the 3000-level or higher;
7. 1.0 credit from: FREN 1007 [1.0], FREN 1405 [1.0] or FREN 1600 [1.0];
8. 1.0 credit from: HIST 1300 [1.0], HIST 2303 [1.0], HIST 2304 [1.0] or HIST 2305 [1.0];
9. 5.0 credits in free electives.

### Notes

1. No more than two of JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207 and JOUR 4208 may be used to fulfil requirements for the degree. No course from this list may be taken more than once and two courses from this list may not be taken simultaneously.
2. Requirement 7 may be satisfied by an alternate French language credit approved by the School.

Those who already have capacity in French may fulfil this requirement by passing a language test administered on an ad hoc basis by the School of Journalism, but will be required to take an approved optional credit. Students who have completed French Immersion in High School, or who have obtained a Bilingual Diploma or Certificate will be regarded as having met this French language requirement, but will be required to take an approved optional credit.

Students from abroad whose mother tongue is other than English or students whose research interests require another language may obtain permission from the Supervisor of Undergraduate Studies to substitute this language for French.

## Journalism with Concentration in Psychology – B.J. Honours (20.0 credits)

*Credits Included in the Major CGPA (14.0 credits)*

1. 7.0 credits in JOUR 1000 [1.0], JOUR 2201 [1.0], JOUR 2205, JOUR 2501, JOUR 3205 [1.0], JOUR 3206 [1.0], JOUR 4000 [1.0] and JOUR 4201 [1.0];
2. 1.0 credit from: JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207, or JOUR 4208;
3. 2.0 credits in PSYC 1001, PSYC 1002, PSYC 2000 [1.0];
4. 1.0 credit from: PSYC 2100, PSYC 2200, PSYC 2300, PSYC 2500, PSYC 2600 or PSYC 2700;
5. 2.0 credits in Psychology chosen in consultation with members of the Department from Psychology courses in the areas of behavioral neuroscience, community and social psychology, perception and cognition, developmental psychology, or personality and assessment;
6. 1.0 credit in Psychology;

*Credits Not Included in the Major CGPA (6.0 credits)*

7. 1.0 credit from: FREN 1007 [1.0], FREN 1405 [1.0] or FREN 1600 [1.0];
8. 1.0 credit from: HIST 1300 [1.0], HIST 2303 [1.0], HIST 2304 [1.0] or HIST 2305 [1.0];
9. 4.0 credits in free electives.

## Bachelor of Journalism – Combined Honours

Honours programs may be taken by students in the four-year undergraduate program in which Journalism is combined with other disciplines. Such programs are available with the following subjects:

Canadian Studies, Economics, English, French, History, Mass Communication, Political Science, Law, Philosophy, Sociology and Women's Studies. Details of the specific requirements for those programs may be obtained from the Department concerned. Special arrangements may be made for other combinations in consultation with the Supervisor of Undergraduate Studies (Journalism). The Journalism requirements for the Combined Honours program are normally the same as those for the Bachelor of Journalism with Honours listed above. The requirements of the other discipline are the same as those listed for the Combined Honours program in that discipline. Students are advised to consult the Combined Honours entry of their second discipline in this calendar for details. Combined Honours programs in Journalism and other disciplines are available only to students registered in Journalism.

## Bachelor of Arts – Combined Honours

Upon application procedures described below, students combining Journalism with another discipline may elect to graduate with the degree Bachelor of Arts (Combined Honours) in lieu of the Bachelor of Journalism (Combined Honours). The Journalism requirements for this degree are the same as those for the Bachelor of Journalism with Honours listed above. The requirements of the other discipline are the same as those listed for Combined Honours programs in the other discipline. Students are advised to consult the Combined Honours entry of their second discipline in this calendar for details. All students who elect to receive the Bachelor of Arts (Combined Honours) must (i) write the Honours Research Essay, if required, in the other discipline and (ii) must transfer to the Bachelor of Arts Honours program as a Combined Honours student. Students who are not required to present an Honours Research Essay by the other discipline, but who prefer to graduate as a Bachelor of Arts student, must also transfer to the Bachelor of Arts Honours program. Such students cannot request an Internal Degree Transfer until at least 60 days before the completion of the final courses required for their degree to assure their graduation at the next convocation.

Combined Honours programs in Journalism and other disciplines are available only to students registered in Journalism.

## Journalism – B.J. or B.A. Combined Honours (20.0 credits)

*Credits Included in the Journalism CGPA (8.0 credits)*

- 1.0 credit in JOUR 1000 [1.0];
- 2.0 credits in JOUR 2201 [1.0], JOUR 2205 and JOUR 2501;
- 2.0 credits in JOUR 3205 [1.0] and JOUR 3206 [1.0];
- 2.0 credits in JOUR 4000 [1.0] and JOUR 4201 [1.0];
- 1.0 credit from: JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207 or JOUR 4208;

### *Additional Requirements*

- 1.0 credit from: FREN 1007 [1.0], FREN 1405 [1.0] or FREN 1600 [1.0];
- 1.0 credit from: HIST 1300 [1.0], HIST 2303 [1.0], HIST 2304 [1.0] or HIST 2305 [1.0];
- The requirements from the other discipline, including where required an Honours Research Essay;
- Sufficient free electives to make 20.0 credits for the whole program.

### **Note**

Requirements 6 and/or 7 above may be satisfied by courses simultaneously fulfilling requirements of the other discipline.

## Law

Department of Law  
Faculty of Public Affairs and Management  
Web site: [carleton.ca/law/](http://carleton.ca/law/)

This section presents the requirements for:

- Law - B.A. Honours
- Law - B.A. Honours with Concentration in Law, Policy and Government Business Law
- Law - B.A. Combined Honours
- Law - B.A. Combined Honours with Concentration in Law, Policy and Government Business Law
- Law - B.A. Combined Honours with Human Rights
- Law - B.A. General
- Minor in Law
- Carleton University/Algonquin College Articulation Agreement – B.A. (Carleton)/Police Foundations (Algonquin)
- Study Abroad Option

In addition to the requirements listed below, students must satisfy:

- the University regulations including those concerning Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the Department when planning their program and selecting courses.

## Proscribed Courses

Students in any Law program cannot include LAWS 2301, LAWS 2302, BUSI 2601 or BUSI 2602 towards the fulfilment of their degree requirements, even as electives.

## Law Honours Core

Good Standing in any Honours or Combined Honours program in Law requires that a minimum CGPA of 6.00 be maintained in the Law Core courses.

## Courses Defining the Law Core

Law Honours: LAWS 1000, LAWS 2003, LAWS 2004, LAWS 2005

Law Combined Honours: LAWS 1000 and 2 of LAWS 2003, LAWS 2004, LAWS 2005

## Law - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

- 1.0 credit in LAWS 1000 [1.0];
- 3.0 credits in LAWS 2003 [1.0], LAWS 2004 [1.0], LAWS 2005 [1.0];
- 0.5 credit in LAWS 3907;
- 3.0 credits in Law at the 4000-level or above;
- 1.5 credits in Law;

*Credits Not Included in the Major CGPA (11.0 credits)*

- 8.0 credits in electives not in Law;
- 3.0 credits in free electives.

**Note**

Students with a Major in Law are encouraged, but not required, to consider completing a Minor in another discipline in order to broaden their exposure to that discipline.

**Law - B.A. Combined Honours**

*Credits Included in the Law Major CGPA ( 6.0 credits)*

1. 1.0 credit in LAWS 1000 [1.0];
2. 2.0 credits from LAWS 2003 [1.0], LAWS 2004 [1.0], LAWS 2005 [1.0];
3. 0.5 credit in LAWS 3907;
4. 0.5 credits in Law at the 3000-level or above;
5. 2.0 credits in Law at the 4000-level or above;

*Additional Requirements (14.0 credits)*

6. The requirements for B.A. Combined Honours in the other Discipline;
7. 5.0 credits in electives not in Law or the other discipline;
8. Sufficient free electives to make up 20.0 credits total for the program.

**Law and Human Rights –  
B.A. Combined Honours (20.0 credits)**

Students may complete a B.A.(Honours) in Law and Human Rights. Students must complete the Law - B.A. Combined Honours requirements stated above. The Human Rights requirements are offered jointly by the Departments of Law, Philosophy, Political Science and Sociology: please consult the Human Rights program entry for details concerning the Human Rights component of the program.

**Law with Concentration in Law, Policy and Government - B.A. Honours (20.0 credits)**

Continuation in this concentration requires a minimum CGPA of 6.50 over credits in the concentration.

The courses defining the Concentration in Law, Policy and Government are those in items 2, 5, 6, 7 below.

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in LAWS 1000 [1.0];
2. 1.0 credit in LAWS 2005 [1.0];
3. 2.0 credits in LAWS 2003 [1.0], LAWS 2004 [1.0];
4. 0.5 credit in LAWS 3907;
5. 1.5 credits in LAWS 3506, LAWS 3005, LAWS 4801;
6. 1.5 credits chosen from LAWS 3000, LAWS 3106, LAWS 3405, LAWS 3500, LAWS 3502, LAWS 3503, LAWS 3504, LAWS 3509, LAWS 3800;
7. 1.5 credits chosen from LAWS 4101, LAWS 4102, LAWS 4501, LAWS 4507, LAWS 4509 [1.0], LAWS 4607, LAWS 4800, LAWS 4900 [1.0], LAWS 4901, LAWS 4902;
8. 1.0 credits in Law at the 4000-level or above;

*Credits Not Included in the Major CGPA (10.0 credits)*

9. 8.0 credits in electives not in Law;
10. 2.0 credits in free electives.

**Internship Option**

Full-time students in the B.A. (Honours) in Law with a Concentration in Law, Policy and Government may apply for an Internship Option of the Concentration. The Internship Option requires the completion of the Internship course LAWS 4509. Students who complete the Concentration with an Internship will receive the notation on their transcript and degree: B.A. (Honours) in Law with a Concentration in Law, Policy and Government: Internship. The Internship is a one-

term full-time employment arrangement in which students work for a government department or a governmental or non-governmental organization in an area that enables the integration of academic and practical aspects of law relating to policy in government decision-making. Eligibility to enrol in this Option is limited, as only a limited number of internships are available. Students wishing to complete this Option must apply to the Law Department no later than the date specified by the Department before entering their fourth year of studies. Students normally must be eligible for fourth year standing to register in the Internship, and must have a Law Major CGPA of 8.00 or better. Acceptance into the Internship Option is competitive. Only students eligible to work in Canada can be considered for an internship. The Internship counts as 1.0 credit towards the degree, and requires the submission of a written project report to be evaluated by the Internship supervisor, in addition to the completion of the work component. Students normally are expected to complete at least one term of full-time studies following the completion of the Internship. Students may register in only 0.5 additional credits while completing the Internship requirement. Students normally will be entitled to complete only one internship.

**Notes**

1. Students in the Internship Option must complete LAWS 4509 [1.0] and 0.5 additional credit listed in Req. 7 above.
2. Students who count LAWS 4900 [1.0], LAWS 4901 or LAWS 4902 towards the requirements of Req. 7 above must complete an approved topic related to the theme of the Concentration.
3. Students completing the B.A. (Honours) in Law with a Concentration in Law, Policy and Government are encouraged, but not required, to consider completing a Minor in another discipline (e.g. Political Science) in order to broaden their exposure to that discipline.

**Law with Concentration in Law, Policy and Government -  
B.A. Combined Honours (20.0 credits)**

Continuation in this concentration requires a minimum CGPA of 6.50 over credits in the concentration. The courses defining the Concentration in Law, Policy and Government are those in items 2, 5, 6, 7 below.

*Credits Included in the Law Major CGPA ( 7.0 credits)*

1. 1.0 credits in LAWS 1000 [1.0];
2. 1.0 credit in LAWS 2005 [1.0];
3. 1.0 credit from LAWS 2003 [1.0], LAWS 2004 [1.0];
4. 0.5 credit in LAWS 3907;
5. 1.5 credit in LAWS 3005, LAWS 3506, and LAWS 4801;
6. 0.5 credit from LAWS 3000, LAWS 3106, LAWS 3405, LAWS 3500, LAWS 3502, LAWS 3503, LAWS 3504, LAWS 3509, LAWS 3800;
7. 1.5 credits from LAWS 4101, LAWS 4102, LAWS 4501, LAWS 4507, LAWS 4607, LAWS 4800, LAWS 4900 [1.0], LAWS 4901, LAWS 4902;

*Additional Requirements ( 13.0 credits)*

8. The requirements for B.A. Combined Honours in the other Discipline;
9. 5.0 credits in electives not in Law or the other discipline;
10. Sufficient free electives to total 20.0 credits for the program.

**Notes**

1. Students who count LAWS 4900 [1.0], LAWS 4901 or LAWS 4902 towards Req. 7 above must complete an approved topic related to the theme of the Concentration.
2. Where the Combined Honours is with the School of Journalism and Communication, the degree awarded will be the Bachelor of Journalism with Law with a

Concentration in Law, Policy and Government. Students are directed to the regulations of the School of Journalism and Communication in this Calendar.

### **Law with Concentration in Business Law - B.A. Honours (20.0 credits)**

Continuation in this concentration requires a minimum CGPA of 6.50 over credits in the concentration.

The courses defining the Concentration in Business Law are those in items 2, 5, 6, 7 below.

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in LAWS 1000 [1.0];
2. 1.0 credit in LAWS 2003 [1.0];
3. 2.0 credits in LAWS 2004 [1.0], LAWS 2005 [1.0];
4. 0.5 credits in LAWS 3907;
5. 1.5 credits in LAWS 3003, LAWS 3201, and LAWS 3206;
6. 1.0 credit from LAWS 3202, LAWS 3205, LAWS 3207, LAWS 3208, LAWS 3401, LAWS 3405;
7. 2.0 credits from LAWS 4200, LAWS 4202, LAWS 4208, LAWS 4209, LAWS 4302, LAWS 4402, LAWS 4801, LAWS 4900 [1.0], LAWS 4901, LAWS 4902;
8. 1.0 credits in Law at 4000 level or above;

*Credits Not Included in the Major CGPA (10.0 credits)*

9. 8.0 credits in electives not in Law;
10. 2.0 credits in free electives.

#### **Field Placement Option**

Full-time students in the B.A. (Honours) in Law program with a Concentration in Business Law may apply to complete a 0.5 credit field placement in Business Law, LAWS 4208. The field placement is with an approved business organization or in an approved business environment that enables students to integrate academic and practical aspects of law relating to business. The field placement may require up to eight hours of paid or unpaid work per week for a term. Registration in this Option is restricted, as only a limited number of field placements are available. Students wishing to complete this option must apply to the Law Department no later than a date yet to be specified before entering their fourth year of studies. Students normally must be eligible for fourth-year Honours standing before registering in the field placement, and have a Law Major CGPA of 8.00 or better. Acceptance into the Field Placement is competitive.

#### **Notes**

1. Students who count LAWS 4900 [1.0], LAWS 4901 or LAWS 4902 towards Req. 7 above must complete an approved topic related to the theme of the Concentration.
2. Students completing the B.A. (Honours) in Law with a Concentration in Business Law are encouraged, but not required, to consider completing a Minor in another discipline (e.g. Business) in order to broaden their exposure to that discipline.

### **Law with Concentration in Business Law – B.A. Combined Honours (20.0 credits)**

Continuation in this concentration requires a minimum CGPA of 6.50 over credits in the concentration.

The courses defining the Concentration in Business Law are those in items 2, 5, 6 below.

*Credits Included in the Law Major CGPA (7.0 credits)*

1. 1.0 credits in LAWS 1000 [1.0];
2. 1.0 credits in LAWS 2003 [1.0];
3. 1.0 credit from LAWS 2004 [1.0], LAWS 2005 [1.0];

4. 0.5 credits in LAWS 3907;
5. 1.5 credits in LAWS 3003, LAWS 3201, LAWS 3206;
6. 2.0 credits from LAWS 4200, LAWS 4202, LAWS 4208, LAWS 4209, LAWS 4302, LAWS 4402, LAWS 4801, LAWS 4900 [1.0], LAWS 4901, LAWS 4902;

*Additional Requirements (13.0 credits)*

7. The requirements for B.A. Combined Honours in the other Discipline;
8. 5.0 credits in electives not in Law or the other discipline;
9. Sufficient free electives to make up 20.0 credits total for the program.

#### **Notes**

1. Students counting LAWS 4900 [1.0], LAWS 4901 or LAWS 4902 towards Req. 6 above must complete an approved topic related to the theme of the Concentration.
2. Where the Combined Honours is with the School of Journalism and Communication, the degree awarded will be the Bachelor of Journalism with Law with a Concentration in Business Law. Students are directed to the regulations of the School of Journalism and Communication.

### **Law – B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in LAWS 1000 [1.0];
2. 2.0 credits from LAWS 2003 [1.0], LAWS 2004 [1.0] or LAWS 2005 [1.0];
3. 1.0 credit in Law at the 3000-level or above;
4. 2.0 credits in Law;

*Credits Not Included in the Major CGPA (9.0 credits)*

5. 7.0 credits in electives not in Law;
6. 2.0 credits in free electives.

#### **Note**

Students with a Major in Law are encouraged, but not required, to consider completing a Minor in another discipline in order to broaden their exposure to that discipline.

#### **Minor in Law**

The Minor in Law is open to all students registered in undergraduate programs, with the exception of students registered in the B.A. in Law or in Criminology and Criminal Justice.

1. 1.0 credit in LAWS 1000 [1.0];
2. 2.0 credits from LAWS 2003 [1.0], LAWS 2004 [1.0], LAWS 2005 [1.0];
3. 1.0 credit in Law at the 3000-level or higher.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Carleton University/Algonquin College Articulation Agreement B.A. (Carleton)/Police Foundations (Algonquin)**

An articulation agreement between Carleton University and Algonquin College of Applied Arts and Technology permits graduates with a Diploma in Police Foundations from Algonquin College to apply for admission into the B.A. program at Carleton University. Successful applicants will be granted 5.0 credits on admission towards the completion of a B.A. in either Criminology, or Law, or Psychology, or Sociology.

Course transfers: 2.0 credits in Law; 2.0 credits in Sociology, and 0.5 in Political Science and 0.5 in Psychology.

To be eligible for admission according to this Articulation Agreement, students must have completed the Diploma in

## Program Information

Police Foundations at Algonquin College with an overall B average (Algonquin Grade Point Average of 3.0). They will then be admitted to a B.A. program at Carleton in either Criminology, or Law, or Psychology, or Sociology.

Further information may be obtained from the Undergraduate Supervisor or Coordinator of the appropriate B.A. program:

**Criminology:** B. Wright

**Law:** L. Campbell

**Psychology:** R. Coplan and/or J. Logan

**Sociology:** C. Gordon

## Study Abroad Option

### Certificate in Social Science and Law

The Department participates in an International Exchange with the School of Social Science and Law at Sheffield Hallam University in the U.K. The Exchange provides an opportunity for students in the B.A. (Honours) in Law program to study law in a comparative setting within a professional law school firmly rooted in the social scientific study of law. Students accepted into the Exchange select courses from the LL.B. and Social Science syllabi of the School of Social Science and Law program at Sheffield Hallam University. Students are eligible to apply to participate in the Exchange for their third or fourth year of study. Third-year standing in Law and completion of LAWS 1000 and two of LAWS 2003, LAWS 2004, and LAWS 2005 are the minimum requirements to be accepted into the Exchange. Students interested in the Exchange should contact the Department as early as possible, and no later than March 1. Selection will be made by the Department of Law based on GPA overall program performance and potential for success in the Exchange.

In addition to receiving credits toward their B.A. (Honours), students who successfully complete 6 units in the School of Social Science and Law at Level 2 or above will receive a Certificate of Social Science and Law from Sheffield Hallam University. Interested students should contact the Department.

---

## Linguistics and Applied Language Studies

School of Linguistics and Applied Language Studies

Faculty of Arts and Social Sciences

This section presents the requirements for

- **General Linguistics – B.A. Honours**
- **General Linguistics – B.A. Combined Honours**
- **General Linguistics – B.A. General**
- **Applied Language Studies – B.A. Honours**
- **Applied Language Studies – B.A. Combined Honours**
- **Applied Language Studies – B.A. General**
- **Minor in Educational Linguistics**
- **Minor in German**
- **Minor in Italian**
- **Minor in Japanese Language**
- **Minor in Russian**
- **Minor in Spanish**
- *Mention: français*
- **Certificate in Teaching of English as a Second Language**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the regulations common to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the School when planning their program and selecting courses.

### School Language Proficiency Requirement

Students in B.A. Honours, General or Combined Honours programs of the School are required, at graduation, to have a working knowledge of a language other than English. Proficiency is determined by successful completion of a university course in the language or by an oral or written test given by the School.

#### General Linguistics – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.5 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 2.0 credits in LALS 2001, LALS 2003, LALS 3002, LALS 3004;
3. 1.0 credit from: LALS 2203, LALS 2401, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3401, LALS 3705, LALS 3706, LALS 3903;
4. 1.0 credit from LALS 4001, LALS 4002 or LALS 4009;
5. 1.5 credits in Linguistics and Applied Language Studies at the 4000-level;
6. 3.0 credits in Linguistics and Applied Language Studies, chosen in consultation with the School;

*Credits Not Included in the Major CGPA (10.5 credits)*

7. 8.0 credits not in Linguistics and Applied Language Studies;
8. 2.5 credits in free electives;

*Additional Requirements*

9. School Language Proficiency Requirement must be satisfied.

#### General Linguistics – B.A. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];



2. 2.0 credits in LALS 2001, LALS 2003, LALS 3002, LALS 3004;
  3. 1.0 credit from: LALS 4001, LALS 4002 or LALS 4009;
  4. 0.5 credits in Linguistics and Applied Language Studies at the 4000-level;
  5. 1.5 credits in Linguistics and Applied Language Studies;
- Additional Requirements*
6. The requirements of the other discipline must be satisfied;
  7. 5.0 credits not in Linguistics and Applied Language Studies or the other discipline;
  8. Sufficient free electives to make a total of 20.0 credits for the program;
  9. School Language Proficiency Requirement must be satisfied.

**General Linguistics –  
B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.5 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 2.0 credits in LALS 2001, LALS 2003, LALS 3002, LALS 3004;
3. 1.0 credit from: LALS 2203, LALS 2401, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3401, LALS 3705, LALS 3706, LALS 3903;
4. 2.5 credits in Linguistics and Applied Language Studies, chosen in consultation with the School;

*Credits Not Included in the Major CGPA (8.5 credits)*

5. 7.0 credits not in Linguistics and Applied Language Studies;
  6. 1.5 credits in free electives;
- Additional Requirement*
8. School Language Proficiency Requirement must be satisfied.

**Applied Language Studies –  
B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.5 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 1.0 credit in LALS 2003, and one of LALS 2001, LALS 3002, or LALS 3004;
3. 2.0 credits from LALS 2203, LALS 2401, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3401, LALS 3705, LALS 3706, LALS 3903;
4. 1.0 credit from: LALS 4201, LALS 4207, LALS 4401, LALS 4402, LALS 4602, LALS 4801;
5. 1.5 credits in Linguistics and Applied Language Studies at the 4000-level;
6. 3.0 credits in Linguistics and Applied Language Studies, chosen in consultation with the School;

*Credits Not Included in the Major CGPA (10.5 credits)*

7. 8.0 credits not in Applied Language Studies;
  8. 2.5 credits in free electives;
- Additional Requirement*
9. School Language Proficiency Requirement must be satisfied.

**Applied Language Studies –  
B.A. Combined Honours (20.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 1.0 credit in LALS 2003, and one of LALS 2001, LALS 3002, or LALS 3004;

3. 1.5 credits in Linguistics and Applied Language Studies at the 4000-level;
  4. 2.5 credits in Linguistics and Applied Language Studies;
- Additional Requirements*
5. The requirements for the other discipline must be met;
  6. 5.0 credits not in Linguistics and Applied Language Studies or the other discipline;
  7. Sufficient free electives to make a total of 20.0 credits for the program;
  8. School Language Proficiency Requirement must be satisfied.

**Applied Language Studies –  
B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.5 credits)*

1. 1.0 credit in either LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 1.0 credit in LALS 2003, and one of LALS 2001, LALS 3002, or LALS 3004;
3. 2.0 credits from LALS 2203, LALS 2401, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3401, LALS 3705, LALS 3706, LALS 3903;
4. 2.5 credits in Linguistics and Applied Language Studies, chosen in consultation with the School;

*Credits Not Included in the Major CGPA (8.5 credits)*

5. 7.0 credits not in Linguistics and Applied Language Studies;
  6. 1.5 credits in free electives;
- Additional Requirements*
7. School Language Proficiency Requirement must be satisfied.

**Minor in Educational Linguistics**

Open to all undergraduate degree students in programs other than Linguistics and Applied Language Studies.

*Requirements*

1. 4.0 credits from: LALS 2203, LALS 2401, LALS 2603, LALS 2604, LALS 2701, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3401, LALS 3601, LALS 3705, LALS 3706, LALS 4207, LALS 4402, LALS 4602;
2. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Minor in German**

Open to all undergraduate degree students.

*Requirements*

1. 4.0 credits in German.
2. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Minor in Italian**

Open to all undergraduate degree students.

*Requirements*

1. 1.0 credit in ITAL 1000 [1.0] or ITAL 1700 [1.0];
2. 2.0 credits in ITAL 2000 [1.0], ITAL 3000 [1.0];
3. 1.0 credit in approved Italian literature courses.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Minor in Japanese Language**

Open to all undergraduate degree students.

## Program Information

### Requirements

1. 4.0 credits from JAPA 1200 [2.0], JAPA 2200 [1.0], JAPA 3200 [1.0], JAPA 4200 [1.0].
2. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Minor in Russian

Open to all undergraduate degree students.

### Requirements

1. 4.0 credits in Russian.
2. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Minor in Spanish

Open to all undergraduate degree students.

### Requirements

1. 4.0 credits in Spanish;
2. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Mention: français**

Students in the B.A. Honours or B.A. General program in Linguistics may qualify for the notation *Mention: français* by fulfilling the requirements outlined below. Those wishing to pursue this path should consult with the School's *Mention: français* adviser.

Linguistics courses presented in fulfilment of the *Mention: français* requirements can double as courses to satisfy Linguistics B.A. Honours or B.A. General requirements.

Students enrolling in courses at the University of Ottawa will do so through the University of Ottawa Exchange Program. To enrol in courses in French at another university, students must first obtain a Letter of Permission from Registrarial Services.

### *B.A. Honours and B.A. Combined Honours (4.0 credits)*

To graduate with the notation *Mention: français* students in the B.A. Honours must include in their program the following:

1. 1.0 credit in French language chosen in consultation with the Department of French, for perfecting the students' command of French;
2. 1.0 credit linked to the study of the heritage and culture of French Canada taught in French at Carleton or the University of Ottawa. At Carleton: FREN 3702, FREN 3803; at the University of Ottawa: FRA 3799, LIN 2505, LIN 3502, LIN 3503;
3. 1.0 credit in the area of linguistics taught in French at Carleton, at the University of Ottawa or at another university. At Carleton, 1.0 credit chosen from FREN 3800, FREN 3801, FREN 3802, FREN 4800, FREN 4801, FREN 4802, FREN 4803, LALS 3907 [1.0];
4. 1.0 credit at the 4000-level in the area of linguistics taught in French at Carleton, at the University of Ottawa or at another university. At Carleton, 1.0 credit chosen from FREN 4800, FREN 4801, FREN 4802, FREN 4803 (if not taken during the third year), LALS 3907 [1.0];

The focus of the tutorials (LALS 3907 [1.0] and LALS 4907 [1.0]) may be on any of the following topics: American Indian languages, sociolinguistique, bilinguisme, dialectologie, développement de la langue maternelle pendant les années scolaires, problèmes du bilinguisme scolaire, pragmatique, grammaire du texte, sémiotique, sémantique. All written work must be submitted in French;

5. Combined Honours students must meet the *Mention: français* requirements of both Honours disciplines.

### *B.A. General Programs (3.0 credits)*

To graduate with the notation *Mention: français* students in B.A. General must include in their program the following:

1. 1.0 credit in French language chosen in consultation with the Department of French, for perfecting the students' command of French;
2. 1.0 credit linked to the study of the heritage and culture of French Canada taught in French at Carleton or the University of Ottawa. At Carleton: FREN 3702, FREN 3803; At the University of Ottawa: FRA 3799, LIN 2505, LIN 3502, LIN 3503;
3. 1.0 credit in the area of linguistics taught in French at Carleton, at the University of Ottawa or at another university. At Carleton, 1.0 credit chosen from FREN 3800, FREN 3801, FREN 3802, FREN 4800, FREN 4801, FREN 4802, FREN 4803, LALS 3907 [1.0].

### **Certificate in Teaching of English as a Second Language (CTESL)**

#### *Admission*

1. The Certificate in Teaching English as a Second Language (CTESL) has restricted enrolment. Admission is at the discretion of the School of Linguistics and Applied Language Studies.
2. As part of the application process, a written submission is required and an interview may be required.
3. In addition, students in the CTESL program must be fluent in English, proficiency to be determined by an oral or written test given by the School.
4. Students may seek admission to the CTESL program after having completed a first degree in another discipline.
5. Students may also earn the CTESL through concurrent studies with a B.A. Honours program in any discipline. Applicants for concurrent studies must be registered in an Honours program and have an Overall CGPA of 7.00 or better. Students registered in the concurrent CTESL program who fail to complete their degree cannot receive the CTESL.

#### *Graduation*

A candidate for the CTESL must obtain a grade of C or better in all courses taken at Carleton University under the CTESL program.

#### *Requirements*

1. 1.0 credit in LALS 1000 [1.0] or FYSM 1206 [1.0];
2. 3.0 credits in LALS 4205 [1.0] and LALS 4206 [1.0] taken concurrently; LALS 4602; LALS 4801.
3. 1.0 credit chosen from: LALS 2001, LALS 2003, LALS 2203, LALS 2401, LALS 2603, LALS 2604, LALS 2701, LALS 2703, LALS 2704, LALS 2705, LALS 2706, LALS 3400 [1.0], LALS 3601, LALS 3705, LALS 3706, LALS 4201, LALS 4207, LALS 4802, LALS 4906, or any other course approved by the Supervisor of CTESL.

#### **Note**

The courses LALS 1000 [1.0] or FYSM 1206 [1.0] must be taken before or concurrently with all other required courses.

## Mass Communication

School of Journalism and Communication  
Faculty of Public Affairs and Management

This section presents the requirements for the programs:

- **Mass Communication – B.A. Honours**
- **Mass Communication – B.A. Combined Honours**
- **Journalism and Mass Communication – B.J. Combined Honours**
- **Mass Communication – B.A. General**
- **Minor in Mass Communication**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the School when selecting courses and planning their program.

### Academic Performance Evaluation for Mass Communication

Students in Mass Communication are subject to the standard process of Academic Performance Evaluation, with the following additions:

#### 1. Continuation to Second Year in the Mass Communication program

Continuation to second year in Good Standing requires that students complete 5.0 credits in first year, achieve a grade of B- or better in MCOM 1101 or FYSM 1207 and have an Overall CGPA of at least 7.00.

A student who is not in Good Standing at the first academic performance evaluation must leave the program, with status Ineligible to Return.

The School also maintains a number of places in second year for students who wish to transfer from Carleton University or elsewhere. These spaces are limited and it may not be possible to grant admission to all applicants. Admission therefore will be on a selective basis with preference given to those candidates who show the highest promise of success. Normally, offers are made to students with an Overall CGPA of 10.00 or better.

**2. Continuation in Good Standing** at subsequent Academic Performance Evaluations requires the standard minimum Major CGPA and Overall CGPA (see the Academic Regulations section of this Calendar for details).

### Mass Communication - B.A. Honours

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit in MCOM 1101 [1.0] or FYSM 1207 [1.0];
2. 3.0 credits in MCOM 2001 [1.0], MCOM 2101 [1.0], MCOM 3101 [1.0];
2. 2.0 credits from MCOM 2300, MCOM 2302, MCOM 2501, MCOM 2504, MCOM 2900 [1.0], MCOM 3000 [1.0], MCOM 3005, MCOM 3006, MCOM 3402, MCOM 3403, MCOM 3404, MCOM 3406, MCOM 3408, MCOM 3502, MCOM 3504, MCOM 3505, MCOM 3507;
3. 3.0 credits from MCOM 4000, MCOM 4002, MCOM 4100, MCOM 4102, MCOM 4200, MCOM 4305, MCOM 4500, MCOM 4501, MCOM 4907 [1.0];

*Credits Not Included in the Major CGPA (11.0 credits)*

4. 8.0 credits in electives not in Mass Communication;
5. 3.0 credits in free electives.

### Mass Communication – Combined Honours

*Credits Included in the Mass Communication Major CGPA (7.0 credits)*

1. 1.0 credit in MCOM 1101 [1.0] or FYSM 1207 [1.0];
2. 3.0 credits in MCOM 2001 [1.0], MCOM 2101 [1.0], MCOM 3101 [1.0];
3. 1.0 credit at the 2000- or 3000-level in Mass Communication;
4. 2.0 credits from MCOM 4000, MCOM 4002, MCOM 4100, MCOM 4102, MCOM 4200, MCOM 4305, MCOM 4500, MCOM 4501, MCOM 4907;

*Additional Requirements*

5. The requirements from the other discipline must be satisfied;
6. 5.0 credits not in Mass Communication or the other discipline;
7. Sufficient credits in free electives to total 20.0 credits for the program.

### Journalism and Mass Communication – B.J. Combined Honours

This program is available only to students registered in the Bachelor of Journalism program.

*Credits Included in the Mass Communication Major CGPA (7.0 credits)*

1. 3.0 credits in MCOM 2001 [1.0], MCOM 2101 [1.0], MCOM 3101 [1.0];
2. 2.0 credits from MCOM 4000, MCOM 4002, MCOM 4100, MCOM 4102, MCOM 4200, MCOM 4305, MCOM 4500, MCOM 4501, MCOM 4907 [1.0];

3. 1.0 credit in approved Canadian history;

*Credits Included in the Journalism Major CGPA (8.0 credits)*

4. 7.0 credits in JOUR 1000 [1.0], JOUR 2201 [1.0], JOUR 2205, JOUR 2501, JOUR 3205 [1.0], JOUR 3206 [1.0], JOUR 4000 [1.0], JOUR 4201 [1.0];
5. 1.0 credit from JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207, JOUR 4208;

*Additional requirements*

6. 1.0 credit in FREN 1007 [1.0], FREN 1405 [1.0], or FREN 1600 [1.0];
7. 5.0 credits not in Journalism or Mass Communication.

#### Notes

1. Item 6 above may be satisfied by an alternate French language credit approved by the School;
2. With reference to Item 4 above, students expecting to practise journalism in another country may be advised to choose a different history course and must seek permission to do so from the Supervisor of Undergraduate Studies, Journalism.

### Mass Communication – B.A. General

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in MCOM 1101 [1.0] or FYSM 1207 [1.0];
2. 3.0 credits in MCOM 2001 [1.0], MCOM 2101 [1.0], MCOM 3101 [1.0];
3. 2.0 credits from MCOM 2300, MCOM 2302, MCOM 2501, MCOM 2504, MCOM 2900 [1.0], MCOM 3000 [1.0], MCOM 3005, MCOM 3006, MCOM 3402, MCOM 3403, MCOM 3404, MCOM 3406, MCOM 3408, MCOM 3502, MCOM 3504, MCOM 3505, MCOM 3507;

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 7.0 credits in electives not in Mass Communication;
5. 2.0 credits in free electives.

### **Minor in Mass Communication**

This Minor is open to students in B.A Honours and General programs. Admission requires that students have completed MCOM 1101 [1.0] or FYSM 1207 [1.0] with a grade of B- or better and have completed at least 5.0 credits with Overall CGPA of 7.00 or better.

*Requirements (4.0 credits)*

1. 1.0 credit in MCOM 1101 [1.0] or FYSM 1207 [1.0];
2. 2.0 credits in MCOM 2101 [1.0] and MCOM 3101 [1.0];
3. 1.0 credit in Mass Communication at the 2000- or 3000-level;
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

---

## **Mathematics and Statistics**

School of Mathematics and Statistics  
Faculty of Science

This section presents the requirements for:

- **Mathematics – B.Math. Honours Specialization in Applied Analysis Specialization in Stochastics**
- **Computer Mathematics – B.Math. Honours**
- **Computer Mathematics Information Technology – B.Math. Honours**
- **Computer Statistics – B.Math. Honours**
- **Statistics – B.Math. Honours**
- **Mathematics – B.Math. General Specialization in Applied Analysis**
- **Computer Mathematics – B.Math. General**
- **Statistics – B.Math. General**
- **Mathematics and Computer Science – B.Math. Combined Honours**
- **Mathematics and Physics – B.Sc. Double Honours**
- **Mathematics and Economics – B. Math. Combined Honours**
- **Statistics and Economics – B. Math. Combined Honours**
- **Mathematics – Combined B.Math./M.Sc.**
- **Statistics – Combined B.Math./M.Sc.**
- **Minor in Mathematics**
- **Minor in Statistics**

A Co-operative Education Option is available for Honours programs in the B.Math. degree.

In addition to the requirements listed below, students must satisfy the University regulations common to all undergraduate students (see the Academic Regulations section of this Calendar).

Students should consult with the School when planning their program and selecting courses.

### **Academic Performance Evaluation for Bachelor of Mathematics**

The standard procedures for Academic Performance Evaluation are followed with the following additions.

1. Good Standing at the first Academic Performance Evaluation (0.0 - 5.0 Included Credits) requires that the Major CGPA be at least 5.00 for Honours programs and at least 4.00 for General programs.
2. Good Standing at any Academic Performance Evaluation requires that the CGPA over the courses MATH 1007, MATH 1107, MATH 2007, MATH 2107 be at least 7.00 for Honours programs and at least 5.00 for General programs.

### **Course Prerequisites**

The following courses central to B. Math. programs have grade requirements in their prerequisites:

- MATH 2000 requires C+ in (MATH 1002 or MATH 2007), and C+ in (MATH 1102 or MATH 1107)
- MATH 2100 requires C+ in (MATH 1102 or MATH 2107)
- MATH 2454 requires C+ in (MATH 1002 or MATH 2007), and C+ in (MATH 1102 or MATH 1107)
- STAT 2655 requires C+ in (MATH 1002 or MATH 2007), and C+ in (MATH 1102 or MATH 1107)
- MATH 2007 requires MATH 1004 or C- in (MATH 1007 or MATH 1009)
- MATH 2107 requires MATH 1104 or C- in (MATH 1107 or MATH 1109)

## Program Requirements

In B.Math. programs the following selections for first year courses are permitted substitutions:

1. MATH 1002 [1.0] may be replaced with (MATH 1007 and MATH 2007)
2. MATH 1102 [1.0] may be replaced with (MATH 1107 and MATH 2107)

A higher standard must be achieved in the courses MATH 1007, MATH 1107, MATH 2007, MATH 2107 if these are used to fulfil the requirements of the program. See Academic Performance Evaluation Item 2.

### Mathematics – B.Math. Honours (20.0 credits)

*Credits Included in the Major CGPA (11.0 credits)*

1. 2.0 credits in MATH 1002 [1.0], MATH 1102 [1.0];
2. 3.5 credits in MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2559, STAT 2655;
3. 2.0 credits in MATH 3001, MATH 3057, MATH 3106, MATH 3158;
4. 0.5 credit from: MATH 3002 or MATH 3008;
5. 1.0 credit from the 3000-level Honours Sequence;
6. 1.5 credits in Mathematics (MATH) or Statistics (STAT) at the 4000-level or above;
7. 0.5 credit in MATH 4905;

*Credits Not Included in the Major CGPA (9.0 credits)*

8. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
9. 5.0 credits of free electives.

### Mathematics with Specialization in Applied Analysis - B.Math. Honours

Items 3, 4, 5 and 6 in the Mathematics program requirements are replaced by:

- i) 3.0 credits in MATH 3002, MATH 3057, MATH 3008, MATH 3406, STAT 3506, MATH 4700;
- ii) 1.0 credit from MATH 3801, MATH 3804, MATH 3806, the 3000-level Honours Sequence or courses in Mathematics or Statistics at the 4000-level or above;
- iii) 0.5 credit from: MATH 4701, MATH 4702;
- iv) 0.5 credit in Mathematics or Statistics at the 4000-level or above.

### Mathematics with Specialization in Stochastics - B.Math. Honours

Items 3, 4, 5 and 6 in the Mathematics degree requirements are replaced by:

- i) 3.0 credits in MATH 3001, MATH 3008, STAT 3506, STAT 3558, STAT 3559, STAT 4501;
- ii) 0.5 credit from: STAT 3505, MATH 3801;
- iii) 0.5 credit in Statistics (STAT) at the 4000-level;
- iv) 1.0 credit in Mathematics or Statistics at the 4000-level or above.

### Computer Mathematics – B.Math. Honours (20.0 credits)

*Credits Included in the Major CGPA (14.0 credits)*

1. 7.5 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2559,

STAT 2655, MATH 3001, MATH 3804, MATH 4806, MATH 4905;

2. 1.0 credit in either (MATH 3106 and MATH 3158) or (MATH 3805 and MATH 3801);
3. 1.0 credit from: MATH 3705, MATH 3801, MATH 3802, MATH 3806, MATH 3807, MATH 3809, the 3000-level Honours Sequence, and Mathematics or Statistics at the 4000-level and above;
4. 0.5 credit from: STAT 3506, STAT 3558;
5. 0.5 credit from: MATH 4802, MATH 4803;
6. 0.5 credit from: MATH 4801, MATH 4802, MATH 4803, MATH 4805, MATH 4808;
7. 2.5 credits in COMP 1402, COMP 1405, COMP 1406, COMP 2402, COMP 2404;
8. 0.5 credit in Computer Science at the 2000-level or above;

*Credits Not Included in the Major CGPA (6.0 credits)*

9. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - (a) 1.0 credit in Natural Science Electives;
  - (b) 2.0 credits in Approved Arts or Social Science;
  - (c) 1.0 credit not in Mathematics, Statistics or Computer Science;
10. 2.0 credits of Free Electives.

### Computer Mathematics Information Technology – B.Math. Honours (20.0 credits)

*Credits Included in the Major CGPA (13.5 credits)*

1. 2.0 credits in MATH 1002 [1.0], and MATH 1102 [1.0];
2. 2.5 credits in COMP 1402, COMP 1405, COMP 1406, COMP 2402, COMP 2404;
3. 3.0 credits in MATH 2008, STAT 2507, STAT 2605, MATH 3804, MATH 3805; MATH 4905;
4. 0.5 credit from: MATH 2108 or MATH 3101;
5. 0.5 credit from: MATH 3801 or MATH 3806;
6. 1.0 credit in Mathematics or Statistics at the 3000-level (excluding STAT 3502);
7. 0.5 credit in Computer Science (COMP) at the 2000-level or above;
8. 0.5 credit in Mathematics, Statistics or Computer Science at the 2000-level or above;
9. 1.0 credit in Mathematics or Statistics at the 3000-level or above;
10. 1.0 credit in Computer Science (COMP) at the 3000-level or above;
11. 1.0 credit in Mathematics or Statistics at the 4000-level or above;

*Credits Not Included in the Major CGPA (6.5 credits)*

12. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
13. 2.5 credits in Free Electives.

**Computer Statistics –  
B.Math. Honours (20.0 credits)**

*Credits Included in the Major CGPA (13.5 credits)*

1. 2.0 credits in MATH 1002 [1.0], and MATH 1102 [1.0];
2. 2.5 credits in COMP 1402, COMP 1405, COMP 1406, COMP 2402, COMP 2404;
3. 1.0 credit in Computer Science at the 2000-level or above;
4. 0.5 credit in STAT 2655 or STAT 2605;
5. 4.5 credits in STAT 2559, STAT 3558, STAT 3559, STAT 3505, STAT 3506, MATH 2008, MATH 3804, MATH 3806, MATH 4905;
6. 0.5 credit in MATH 2108 or MATH 3101;
7. 1.5 credits in Statistics (STAT) at the 4000-level;
8. 1.0 credit in Computer Science (COMP) at the 3000-level or above;

*Credits Not Included in the Major CGPA (6.5 credits)*

9. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
10. 2.5 credits in Free Electives.

**Notes**

1. The course STAT 2559 may be replaced by STAT 2507 and STAT 2509, with a minimum grade of B in each.
2. The courses STAT 3558 and STAT 3559 may be replaced by STAT 3508 and STAT 3509, with a minimum grade of B in each.

**Statistics – B.Math. Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

1. 2.0 credits in MATH 1002 [1.0], MATH 1102 [1.0];
2. 1.0 credit in COMP 1005, COMP 1006;
3. 6.0 credits in MATH 2000 [1.0], MATH 2454, STAT 2559, STAT 2655, STAT 3505, STAT 3506, STAT 3558, STAT 3559, MATH 3806, STAT 4500, MATH 4905;
4. 1.0 credit in either:
  - a) MATH 2100 [1.0]or
  - b) MATH 3107 and 0.5 credit from: 3000-level Honours Sequence, MATH 3705, MATH 3801, MATH 3807, MATH 3809 or Mathematics or Statistics at the 4000-level or above;
5. 0.5 credit from the 3000-level Honours Sequence or Mathematics or Statistics at the 4000-level or above;
6. 1.5 credits in Statistics at the 4000-level;

*Credits Not Included in the Major CGPA (8.0 credits)*

7. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
8. 4.0 credits in Free Electives.

**Mathematics – B.Math. General (15.0 credits)**

*Credits Included in the Major CGPA (7.0 credits)*

1. 2.0 credits in MATH 1002 [1.0], MATH 1102 [1.0];
2. 2.0 credits in MATH 2008, MATH 2108, MATH 2404, STAT 2507;
3. 3.0 credits from: STAT 2509 or Mathematics or Statistics at the 3000-level or above, excluding MATH 3101 and STAT 3502;

*Credits Not Included in the Major CGPA (8.0 credits)*

4. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
5. 4.0 credits in Free Electives.

**Mathematics with Specialization in Applied Analysis - B.Math. General (15.0 credits)**

*Credits Included in the Major CGPA (7.0 credits)*

1. 2.0 credits in MATH 1002 [1.0], MATH 1102 [1.0];
2. 2.5 credits in MATH 2008, MATH 2404, STAT 2507, MATH 3007, MATH 3705;
3. 0.5 credit from MATH 3404, MATH 3801, MATH 3806 or PHYS 3801;
4. 1.0 credit in MATH or STAT at the 3000-level excluding MATH 3101 and MATH 3502;
5. 1.0 credit at the 2000- or 3000-level in MATH, STAT or COMP;

*Credits Not Included in the Major CGPA (8.0 credits)*

6. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
7. 4.0 credits in Free Electives.

**Computer Mathematics –  
B.Math. General (15.0 credits)**

*Credits Included in the Major CGPA (10.0 credits)*

1. 2.0 credits in MATH 1002 [1.0], and MATH 1102 [1.0];
2. 2.5 credits in COMP 1002, COMP 1005, COMP 1006, COMP 2002, COMP 2004;
3. 2.5 credits in MATH 2008, STAT 2507, STAT 2605; MATH 3804, MATH 3805;
4. 0.5 credit from MATH 2108 or MATH 3101;
5. 0.5 credit from MATH 3801 or MATH 3806;
6. 1.0 credit in Mathematics or Statistics at the 3000-level (excluding STAT 3502);
7. 0.5 credit in Computer Science at the 2000-level or above;
8. 0.5 credit in Mathematics, Statistics or Computer Science at the 2000-level or above;

*Credits Not Included in the Major CGPA (5.0 credits)*

9. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:

- a) 1.0 credit in Natural Science Electives;
- b) 2.0 credits in Approved Arts or Social Science;
- c) 1.0 credit not in Mathematics, Statistics or Computer Science;

10. 1.0 credit Free Electives.

### Statistics – B.Math. General (15.0 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 2.0 credits MATH 1002 [1.0], MATH 1102 [1.0];
2. 4.0 credits MATH 2008, STAT 2507, STAT 2509, STAT 3503, STAT 3504, STAT 3507, STAT 3508, STAT 3509;
3. 1.0 credit at the 2000-level or above;

*Credits Not Included in the Major CGPA (8.0 credits)*

4. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;
5. 4.0 credits Free Electives.

#### Note

Students are advised to include at least 1.0 credit in computer science (COMP) in this program.

### Computer Science and Mathematics – B.Math. Combined Honours (20.0 credits)

Students must register in one of two concentrations, each of which adds 5.0 credits to the Major CGPA.

*Credits Included in the Major CGPA (15.0 credits)*

1. 4.0 credits in MATH 1002 [1.0], MATH 1107, MATH 2107, MATH 2000 [1.0], MATH 2100 [1.0];
2. 5.5 credits in COMP 1402, COMP 1405, COMP 1406; COMP 2402, COMP 2003, COMP 2404, COMP 3004, COMP 3000, COMP 3005, COMP 3804, COMP 3805;
3. 0.5 credit in MATH 4905 or COMP 4905;
 

and for the concentration in Computing Theory and Numerical Methods:

  4. 2.5 credits in MATH 2454, STAT 2655; MATH 3801, MATH 3806, COMP 4804;
  5. 0.5 credit from: MATH 3001, MATH 3002, MATH 3057, MATH 3008;
  6. 1.0 credit from MATH 4801, MATH 4802, MATH 4803, MATH 4805, MATH 4806, MATH 4808;
  7. 1.0 credit in Computer Science at the 3000-level or above.

and for the concentration in Statistics and Computing:

  4. 2.5 credits in MATH 2454, STAT 2559, STAT 2655, STAT 3558, STAT 3559;
  5. 0.5 credit in STAT 3505 or STAT 3506;
  6. 1.0 credit in Statistics at the 4000-level;
  7. 1.0 credit in Computer Science at the 4000-level.

*Credits Not Included in the Major CGPA (5.0 credits)*

8. 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - a) 1.0 credit in Natural Science Electives;
  - b) 2.0 credits in Approved Arts or Social Science;
  - c) 1.0 credit not in Mathematics, Statistics or Computer Science;

9. 1.0 credit Free Electives.

#### Note:

1. The following courses offered by the School of Business and the Faculty of Engineering are treated as Computer Science courses in this program:

#### Business

BUSI 2400, BUSI 4400, BUSI 4402, BUSI 4406, BUSI 4407

#### Engineering

SYSC 3303, SYSC 4005, SYSC 4507

2. Students who wish to keep open the choice of other Honours programs in Mathematics and Statistics are advised to take MATH 1102 [1.0] instead of MATH 1107 and MATH 2107.

### Mathematics and Physics – B.Sc. Double Honours (21.5 credits)

Continuation in the program after first year requires an average of at least 9.00 on MATH 1002 and MATH 1102 and at least 9.00 on PHYS 1001 and PHYS 1002 or the equivalent mathematics and physics courses.

*Credits Included in the Major CGPA (17.0 credits)*

1. 7.5 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2655, MATH 3705, MATH 3001, MATH 3002, MATH 3057, MATH 3106;
2. 1.0 credit in Mathematics (MATH, STAT) at the 4000-level or above;
3. 1.0 credits in either (PHYS 1001 and PHYS 1002) or (PHYS 1003 and PHYS 1004);
4. 4.5 credits in PHYS 2202, PHYS 2604, PHYS 3802, PHYS 3007, PHYS 3606, PHYS 3701, PHYS 4409, PHYS 4707, PHYS 4708;
5. 1.0 credit in Physics at the 4000-level or above;
6. 1.0 credit in ELEC 3105, ELEC 3909;
7. 1.0 credit in either:
  - a) MATH 4905 or PHYS 4907 or PHYS 4908, and 0.5 credit Free Elective;
  - or
  - b) PHYS 4909 [1.0];

*Credits Not Included in the Major CGPA (4.5 credits)*

8. 1.0 credit from BIOL 1003 and BIOL 1004, or CHEM 1000 [1.0], or GEOL 1005 [1.0], or GEOL 1006 and one of GEOL 1007 or GEOL 1008;
9. 0.5 credit in COMP 1005 or COMP 1007;
10. 0.5 credit in Computer Science;
11. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
12. 1.5 credits in Approved Arts or Social Science Electives;
13. 0.5 credit in Free Elective.

#### Note

In Requirement 2 above, MATH 4003 is highly recommended.

### Mathematics and Economics – B. Math. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (15.0 credits)*

1. 7.0 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2655, STAT 2559, MATH 3001, STAT 3558, STAT 3559;
2. 0.5 credit in MATH 3002 or MATH 3008;
3. 0.5 credit in Mathematics or Statistics at the 3000- or 4000-level;

## Program Information

- 1.0 credit in Mathematics or Statistics at the 4000-level;
  - 4.0 credits in ECON 1000 [1.0]; ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 4200, ECON 4201;
  - 1.0 credit in ECON 4900 [1.0] or ECON 4908 [1.0];
  - 1.0 credit in Economics at the 4000-level;
- Credits Not Included in the Major CGPA (5.0 credits)*
- 1.0 credit in COMP 1005, COMP 1006;
  - 1.0 credit in Natural Science Electives;
  - 3.0 credits in Free Electives.

### Note

ECON 2400 does not count for credit in this program.

## Statistics and Economics –

### B. Math. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (14.5 credits)*

- 8.0 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2454, STAT 2655, STAT 2559, MATH 3107, STAT 3505, STAT 3506, STAT 3558, STAT 3559; STAT 4502, STAT 4503;
- 0.5 credit from: MATH 4905 or Statistics at the 4000-level;
- 4.0 credit in ECON 1000 [1.0], ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 4200, ECON 4201;
- 1.0 credit in ECON 4900 [1.0] or ECON 4908 [1.0];
- 1.0 credit in Economics at the 4000-level;

*Credits Not Included in the Major CGPA (5.5 credits)*

- 1.0 credit in COMP 1005, COMP 1006;
- 1.0 credit in Natural Science Electives;
- 3.5 credits in Free Electives.

### Note

- The course MATH 2100 [1.0] may replace MATH 3107 and 0.5 credit in Free Electives in this program.
- ECON 2400 does not count for credit in this program.

## Combined B.Math./M.Sc.

This program combines the requirements for Bachelor of Mathematics in Mathematics or Statistics, and Master of Science in Mathematics, into a sequence that can be completed in four years of study.

Admission, continuation and graduation from the undergraduate portion of the program requires a Major CGPA of 11.0 or better and Overall CGPA of 10.00 or better.

Before entry into the fourth year of this program, students must: obtain a recommendation from the School of Mathematics and Statistics to continue, apply to graduate with a B.Math. General degree, by the end of January of their third year, and submit an application for graduate studies to the School by mid-February.

## Undergraduate Portion

Students may apply for admission to either the Mathematics or the Statistics versions of the program.

### Mathematics – B.Math. (15.0 credits)

*Credits Included in the Major CGPA (9.5 credits)*

- 7.0 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2655, MATH 3001, MATH 3057, MATH 3106, MATH 3158;
- 0.5 credit in MATH 3002 or MATH 3008;
- 0.5 credit from the 3000-level Honours Sequence or Mathematics or Statistics at the 4000-level or above;

- 1.5 credits at the 4000-level or above in Mathematics or Statistics;

*Credits Not Included in the Major CGPA (5.5 credits)*

- 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - 1.0 credit in Natural Science Electives;
  - 2.0 credits in Approved Arts or Social Science;
  - 1.0 credit not in Mathematics, Statistics or Computer Science;
- 1.5 credits in Free Electives.

Students wishing to specialize in Stochastics may, with the permission of the School, replace Items 1 - 4 of the Mathematics version by:

- 5.5 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2559, STAT 2655;
- 2.0 credits in MATH 3001, STAT 3506, STAT 3558, STAT 3559;
- 0.5 credit from MATH 3002, MATH 3057, MATH 3008;
- 1.5 credits at the 4000-level or above in Mathematics or Statistics.

### Statistics – B.Math. (15.0 credits)

*Credits Included in the Major CGPA (9.5 credits)*

- 8.0 credits in MATH 1002 [1.0], MATH 1102 [1.0], MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2559, STAT 2655, MATH 3001, STAT 3505, STAT 3506, STAT 3558, STAT 3559;
- 1.5 credits at the 4000-level or above in Mathematics or Statistics;

*Credits Not Included in the Major CGPA (5.5 credits)*

- 4.0 credits with at least 1.0 credit at the 2000-level or above consisting of:
  - 1.0 credit in Natural Science Electives;
  - 2.0 credits in Approved Arts or Social Science;
  - 1.0 credit not in Mathematics, Statistics or Computer Science;
- 1.5 credits in Free Electives.

## Graduate Portion – M.Sc.

During the graduate portion of the program, the student is registered as a graduate student and is covered by the regulations of the Faculty of Graduate Studies.

- 1.5 credits at the 5000-level or above in Mathematics or Statistics;
- 1.0 credits at the 5000-level or above in Mathematics or Statistics or from another department or school;
- Either
  - MATH 4905 and 1.5 credits in Mathematics or Statistics at the 5000-level or above
  - an M.Sc. thesis in Mathematics.

## Minor in Mathematics

This minor is open to students in all undergraduate programs except programs of the School of Mathematics and Statistics.

*Requirements (4.0 credits)*

- 1.0 credit in either:



- a) MATH 2007 or MATH 1005, and 0.5 credit from MATH 1004, MATH 1007, or MATH 1009;
- or
- b) MATH 1002 [1.0];
2. 1.0 credit in either:
- a) MATH 2107 and 0.5 credit from MATH 1104, MATH 1107, or MATH 1109
- or
- b) MATH 1102 [1.0]
3. 1.0 credit in Mathematics or Statistics at the 2000-level or above;
4. 1.0 credit in Mathematics or Statistics at the 3000-level or above;
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Minor in Statistics

This minor is open to students in all undergraduate programs except programs of the School of Mathematics and Statistics.

*Requirements (4.0 credits)*

1. 0.5 credit from; MATH 1004, MATH 1007, MATH 1009;
2. 0.5 credit from: MATH 1104, MATH 1107, MATH 1109;
3. 1.0 credit in either:
- a) 0.5 credit from: STAT 2507, STAT 2606, STAT 3502; and 0.5 credit from: STAT 2509, STAT 2607
- or
- b) ECON 2200 [1.0]
4. 1.5 credits in STAT 3503, STAT 3504, STAT 3507;
5. 0.5 credit from COMP 1005, COMP 1007, BUSI 1402, ECOR 1606;
6. The remaining requirements of the major discipline(s) and degree must be satisfied.

### Note

1. Item 1 above may be satisfied by credit in MATH 1002 [1.0]. Item 2 may be satisfied by credit in MATH 1102 [1.0].
2. With approval an alternate introductory statistics course may be used to satisfy Item 3 above.

### Course Categories for B. Math. Programs

The following categories of courses are used in the specification of the programs.

#### 2000-level Honours Sequence

The following courses constitute the 2000-level Honours Sequence:

MATH 2000 [1.0], MATH 2100 [1.0], MATH 2454, STAT 2559, STAT 2655, MATH 2907

#### 3000-level Honours Sequence

The following courses constitute the 3000-level Honours Sequence:

MATH 3001, MATH 3002, MATH 3057, MATH 3008, MATH 3106, MATH 3158, MATH 3256, MATH 3306, MATH 3406, MATH 3805, STAT 3505, STAT 3506, STAT 3558, STAT 3559

#### Natural Science Electives

All courses with subject codes:

BIOC, BIOL, BIOT, CHEM, ENSC, GEOL, ISCI, NSCI, PHYS

### Approved Arts or Social Sciences Electives

All courses offered by the Faculty of Arts and Social Sciences and the Faculty of Public Affairs and Management are acceptable as Arts or Social Science Electives except for the following courses, which are only accepted for credit as free electives in any program of the School. See Item (iii) under Prohibited and Restricted Courses below concerning Computer Mathematics programs.

#### *Business*

BUSI 1001, BUSI 1002, BUSI 1004, BUSI 1005, BUSI 1402, BUSI 2001, BUSI 2002, BUSI 2300, BUSI 2402, BUSI 2700, BUSI 3001, BUSI 3008, BUSI 4000, BUSI 4001, BUSI 4002

#### *Economics*

ECON 4005, ECON 4706, ECON 4707

#### *Geography*

GEOG 2007, GEOG 2100, GEOG 3002, GEOG 3005, GEOG 3006, GEOG 3007, GEOG 3101, GEOG 3102, GEOG 3103, GEOG 3105, GEOG 3108, GEOG 3109, GEOG 4000, GEOG 4002, GEOG 4003, GEOG 4005, GEOG 4006, GEOG 4008, GEOG 4101 (GEOL 4105), GEOG 4103 (ENVE 3003, GEOL 4109), GEOG 4104, GEOG 4107 (CIVE 4204, GEOL 4204), GEOG 4108

#### *Interdisciplinary Social Sciences*

ISSC 3000

#### *Psychology*

PSYC 2002, PSYC 2200, PSYC 2700, PSYC 3200 [1.0], PSYC 3201, PSYC 3202, PSYC 3203, PSYC 3204, PSYC 3205, PSYC 3206, PSYC 3207, PSYC 3506, PSYC 3700 [1.0], PSYC 3702, PSYC 3800 [1.0], PSYC 4001

### Prohibited and Restricted Courses

- The course MATH 1805/COMP 1805 can be counted only as a half-credit "Free Elective" in Mathematics and Statistics programs.
- The following courses may not be counted for academic credit (even as free electives) in any program offered by the School of Mathematics and Statistics:
 

ECON 2200 [1.0], ECON 2400, ECON 4004; BUSI 2300; GEOG 2006, GEOG 3003; PSCI 2700 [1.0]; PSYC 2000 [1.0], PSYC 3000 [1.0]; ISSC 4001, ISSC 4002; SOWK 2500 [1.0], SOWK 3501, SOWK 3502; SOCI 2003 [1.0], ANTH 2003 [1.0], SOCI 3700 [1.0], SOCI 4003, SOCI 4004, SOAN 4500

A student who has successfully completed one or more of these courses prior to September 1, 1996 will retain credit for these courses.

Students who have completed ECON 2200 [1.0], and wish to enter a B.Math. General program may be exempted from taking STAT 2507 and STAT 2509 only with permission of the School of Mathematics and Statistics, and provided the grade in ECON 2200 [1.0] is B- or better.

- The courses BUSI 1402, BUSI 2402 and COMP 1001 may not count for credit in the Computer Mathematics Honours or General program, even as free electives.
- Only one of MATH 3806, COMP 3806, CMPS 3800 may count for credit in a B.Math. program.

## Music

School for Studies in Art and Culture  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Bachelor of Music – B.Mus.**
- **Music – B.A. Honours**
- **Music – B.A. Combined Honours**
- **Music – B.A. General**
- **Minor in Music**
- **Diploma in Sonic Design**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations, including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) in the case of B.A. programs, the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth Requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult the School when planning their program and selecting courses.

### Course Categories for Music Programs

#### *Music History and Musicology*

MUSI 1001, MUSI 1002, MUSI 2005, MUSI 2006, MUSI 2007, MUSI 2008, MUSI 2009, MUSI 2100, MUSI 2101, MUSI 2102, MUSI 2103, MUSI 2104, MUSI 2105, MUSI 2106, MUSI 3102, MUSI 3103, MUSI 3104, MUSI 3106, MUSI 3302, MUSI 3400, MUSI 3401, MUSI 3402, MUSI 3403, MUSI 3404, MUSI 4006, MUSI 4103, MUSI 4104, MUSI 4303, MUSI 4402 [1.0], MUSI 4703, MUSI 4908 [1.0]

#### *Theory and Composition*

MUSI 1106, MUSI 1107, MUSI 1701, MUSI 1702, MUSI 2601, MUSI 2602, MUSI 2700, MUSI 2701, MUSI 2702, MUSI 2703, MUSI 3600 [1.0], MUSI 3700, MUSI 3701, MUSI 4300, MUSI 4600 [1.0], MUSI 4700, MUSI 4701, MUSI 4906 [1.0]

#### *Performance*

MUSI 1900, MUSI 1901, MUSI 2900, MUSI 2901, MUSI 3900, MUSI 3901, MUSI 4900 [1.0], MUSI 4907 [1.0]

#### *Ensemble*

These courses are graded Sat/Uns.

MUSI 1902 [0.0], MUSI 1903 [0.0], MUSI 2902 [0.0], MUSI 2903 [0.0], MUSI 3902 [0.0], MUSI 3903 [0.0], MUSI 4902 [0.0], MUSI 4903 [0.0]

#### *Practicum Courses*

MUSI 4800, MUSI 4801

#### *Special Topics*

MUSI 4109 [1.0], MUSI 4200, MUSI 4201, MUSI 4205, MUSI 4206, MUSI 4209 [1.0]

#### *Sonic Design*

MUSI 4909 [1.0], MUSI 3603, MUSI 3604

#### *Prohibited and Restricted Courses*

Performance and Ensemble courses are open only to students in the B.Mus. program.

### Academic Performance Evaluation

Academic Performance Evaluation for students in the B.Mus. degree is applied as follows:

1. The minimum requirements for Good Standing are:
  - a) If at most 15.0 credits are included in the Overall CGPA, the Major CGPA must be at least 6.00 and the Overall CGPA must be at least 5.00.
  - b) If more than 15.0 credits are included in the Overall CGPA, the Major CGPA must be at least 6.50 and the Overall CGPA must be at least 5.00.

2. Students in the B.Mus. Program who obtain a grade of F in any Performance course or a grade of Uns in any Ensemble course will be required to withdraw from the program with status Ineligible to Return.

### Bachelor of Music – B.Mus. Honours (20.0 credits)

*Credits Included in the Major CGPA (13.0 credits)*

#### 1. Performance:

3.0 credits in MUSI 1900, MUSI 1901, MUSI 2900, MUSI 2901, MUSI 3900, MUSI 3901;

#### 2. Music Theory:

a) 2.5 credits in MUSI 1701, MUSI 1702, MUSI 2700, MUSI 2701, MUSI 2702;

b) 0.5 credit from MUSI 3700, MUSI 3701, MUSI 4700 or MUSI 4701;

#### 3. Music History and Musicology:

a) 1.0 credit in MUSI 1001, MUSI 1002;

b) 1.0 credit in Music History and Musicology at the 2000-level;

c) 1.0 credit in Music History and Musicology at the 3000-level;

#### 4. Choice:

a) 1.0 credit in Music at the 2000-level;

b) 1.0 credit in Music at the 3000-level;

c) 2.0 credits in Music at the 4000-level;

*Credits Not Included in the Major CGPA (7.0 credits)*

5. 7.0 credits in free electives;

*Additional Non-credit Requirements*

#### 6. Ensembles:

a) Satisfactory performance in MUSI 1903 [0.0] and MUSI 2903 [0.0];

b) Satisfactory performance in two of: MUSI 1902 [0.0], MUSI 2902 [0.0], MUSI 3902 [0.0], MUSI 3903 [0.0], MUSI 4902 [0.0] or MUSI 4903 [0.0].

### Music – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in MUSI 1001, MUSI 1002;

2. 1.0 credit in Music History and Musicology at the 2000-level;

3. 1.0 credit in Music History and Musicology at the 3000-level;

4. 2.0 credits in Music at the 2000-level;

5. 2.0 credits in Music at the 3000-level;

6. 2.0 credits in Music at the 4000-level;

7. 1.0 credit in Music;

*Credits Not Included in the Major CGPA (10.0 credits)*

8. 8.0 credits in electives not in Music;

9. 2.0 credits in free electives.

### Music– B.A. Combined Honours

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit in MUSI 1001, MUSI 1002;

2. 2.0 credits in Music at the 2000-level;

3. 2.0 credits in Music at the 3000-level;

4. 1.0 credit in Music at the 4000-level;

5. 1.0 credit in Music;

*Additional Requirements*

6. The requirements from the other discipline must be satisfied;
7. 5.0 credits in electives not in Music or the other discipline;
8. Sufficient free electives to make 20.0 credits total for the program.

**Music – B.A. General***Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credit in MUSI 1001, MUSI 1002;
2. 1.0 credit in Music History and Musicology at the 2000-level;
3. 2.0 credits in Music at the 2000-level;
4. 2.0 credits in Music at the 3000-level;
5. 1.0 credit in Music;

*Credits Not Included in the Major CGPA (8.0 credits)*

6. 7.0 credits in electives not in Music;
7. 1.0 credit in free electives.

**Minor in Music**

Open to all undergraduate degree students not in Music programs.

*Requirements (4.0 credits)*

1. 1.0 credit in MUSI 1001, MUSI 1002;
2. 1.0 credit in Music at the 2000-level;
3. 1.0 credit in Music at the 3000-level;
4. 1.0 credit in Music.
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

**Diploma in Sonic Design****Admission**

Applicants must have completed successfully the OSSD, including six OACs at High School or equivalent. Admission may be screened and/or restricted. Students should have at least a 75% average in OACs.

Students may complete this diploma in concurrent studies for a B.A., or follow the program independently.

**Graduation**

The minimum CGPA for graduation is 6.00.

*Requirements (5.0 credits)*

1. 2.0 credits in ACUL 1105 [1.0]. ACUL 2105 [1.0];
2. 3.0 credits in MUSI 3603, MUSI 3604, MUSI 4800, MUSI 4801, MUSI 4909 [1.0].

The Diploma in Sonic Design is a 5.0-credit diploma that endeavours to provide students with a focused training in musical applications in the computing field. Areas covered include basic materials and techniques of the MIDI workstation and interfaces, multi-timbral sound modules, applications in standard software applications such as the sequencer, librarian, Open Music System, and MIDI Manager. In addition there are modules in analog synthesis, classic audio synthesis techniques including waveforms, additive and subtractive synthesis and the application of filters and signal modulation sources. Students gain practical hands-on experience in the use of particular software programs as well as general principles of synthesizer systems. At a more advanced level there is in-depth examination of Cubase VST, digital audio logic as applied to film and television production in a multi-track environment. As well there are applications in MIDI Orchestration, Opcode MAX, Softsynth and Opcode Cycling, digital editing and mastering, and automated mixing. The diploma features Practica in established studios to provide practical experience. The object is to prepare students to build and customize a variety of sonic design devices within a software environment.

---

**Philosophy**

Department of Philosophy  
Faculty of Arts and Social Sciences

This section presents the programs in:

- **Philosophy - B.A. Honours**
- **Philosophy with Specialization in Philosophy, Ethics and Public Affairs - B.A. Honours**
- **Philosophy - B.A. Combined Honours**
- **Philosophy - B.A. General**
- **Minor in Philosophy**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including those concerned with Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree*).

Students should consult with the department or committee responsible for their program when planning their program and selecting courses.

**Philosophy Courses Open to First-Year Students**

PHIL 1100 [1.0], PHIL 1500 [1.0], PHIL 1600 [1.0], PHIL 1001, PHIL 1002, PHIL 1501, PHIL 1804, PHIL 2001, PHIL 2003. Please note that not all of these courses are offered each year.

**Course Categories for Philosophy**

For purposes of program description the Philosophy courses are classified as follows.

*History of Philosophy:*

PHIL 2006, PHIL 2007, PHIL 2008, PHIL 2009,  
PHIL 2202, PHIL 2203, PHIL 3001, PHIL 3004,  
PHIL 3006, PHIL 3007, PHIL 3008, PHIL 3104

*Ethics, Society and Aesthetics (ESA):*

PHIL 2101, PHIL 2102, PHIL 2103, PHIL 2104,  
PHIL 2106, PHIL 2201, PHIL 2306, PHIL 2307,  
PHIL 2804, PHIL 2806, PHIL 2807, PHIL 3101,  
PHIL 3102, PHIL 3103, PHIL 3300 [1.0],  
PHIL 3400 [1.0], PHIL 3401, PHIL 3402, PHIL 3408

*Language, Mind and World (LMW):*

PHIL 2001, PHIL 2300, PHIL 2301, PHIL 2302,  
PHIL 2405, PHIL 2501, PHIL 2502, PHIL 2504,  
PHIL 3301, PHIL 3306, PHIL 3501, PHIL 3502,  
PHIL 3504, PHIL 3506

**Philosophy - B.A. Honours (20.0 credits)***Credits Included in the Major CGPA (10 credits)*

1. 2.0 credits in PHIL 2006, PHIL 2009, PHIL 3004, and PHIL 3006;
2. 1.0 credit in the History of Philosophy;
3. 2.0 credits in Ethics, Society and Aesthetics;
4. 2.0 credits in Language, Mind and World;
5. 1.0 credit in Philosophy;
6. 2.0 credits in Philosophy at the 4000-level or above;

*Credits Not Included in the Major CGPA (10 credits)*

7. 8.0 credits not in Philosophy;
8. 2.0 credits in free electives.

**Philosophy: Specialization in Philosophy, Ethics and Public Affairs - B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (12.0 credits)*

1. 2.0 credits in Philosophy: PHIL 2101, PHIL 2102, PHIL 3103, PHIL 3300 [1.0];
2. 2.0 credits in Philosophy from: PHIL 1500 [1.0], PHIL 1804, PHIL 2103, PHIL 2104, PHIL 2201, PHIL 2202, PHIL 2306, PHIL 2307, PHIL 2804, PHIL 2900 [1.0], PHIL 3101, PHIL 3102, PHIL 3408;
3. 1.5 credits in History of Philosophy;
4. 1.0 credit in Language, Mind and World;
5. 2.0 credits in Philosophy at the 4000-level or above;
6. 3.5 credits in Philosophy;

*Credits Not Included in the Major CGPA (8.0 credits)*

7. 1.0 credits in PSCI 2300 [1.0];
8. 2.0 credits chosen from: PSCI 3109, PSCI 3303 [1.0], PSCI 3304 [1.0], PSCI 3305, PSCI 4301, PSCI 4302, PSCI 4304 [1.0], PSCI 4306, PSCI 4307;
9. 2.0 credits not in Philosophy;
10. 3.0 credits in free electives.

**Note**

Students intending to take this Specialization are strongly encouraged to include either a First Year Seminar in Philosophy or 1.0 credit in Philosophy at the 1000-level (especially PHIL 1500 [1.0]) in their first year program.

**Philosophy - B.A. Combined Honours (20.0 credits)**

Combined Honours programs are available in Philosophy with the following subjects: Art History, Biology, Economics, English, French, History, Human Rights, Journalism, Law, Linguistics and Applied Language Studies, Political Science, Psychology, Religion, Sociology-Anthropology and Women's Studies. Special arrangements may be made for combining with other subjects.

Students taking any of the above programs or proposing other combinations must consult the Supervisor of Undergraduate Studies.

*Requirements*

*Credits Included in the Philosophy CGPA (7.0)*

1. 2.0 credits in the History of Philosophy;
2. 1.0 credit in Language, Mind, and World;
3. 1.0 credit in Ethics, Society and Aesthetics;
4. 1.0 credits in Philosophy at the 2000-level or above;
5. 1.0 credit in Philosophy at the 4000-level or above;
6. 1.0 credit in Philosophy;

*Additional Credit Requirements (13.0 credits)*

7. The requirements of the other discipline must be satisfied;
8. 5.0 credits in electives not in Philosophy or the other discipline;
9. Sufficient free electives to make 20.0 credits in total for the program.

**Philosophy - B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credits in History of Philosophy;
2. 1.0 credits in Philosophy;
3. 4.0 credits in Philosophy above the 1000-level;

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 7.0 credits not in Philosophy;
5. 2.0 credits free electives.

**Minor in Philosophy**

*Requirements (4.0 credits)*

1. 2.0 credit in Philosophy at the 2000-level or above;
2. 1.0 credit in Philosophy at the 3000-level or above;
3. 1.0 credit in Philosophy;
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

The Department of Philosophy has identified patterns of courses that satisfy the requirements of the Minor in Philosophy and focus the student's studies in the following areas:

**History of Philosophy**

**Philosophy, Ethics and Public Affairs**

**Philosophy of Journalism and Mass Communication**

**Philosophy of Language**

**Philosophy of Mind**

**Ethics and Technology**

Consult the Supervisor of Undergraduate Studies for details.

*Mention: français*

Students in the B.A. (Honours) or B.A. (General) program in Philosophy may qualify for the notation *Mention: français* by fulfilling the requirements outlined. Those wishing to pursue this path should consult with the Department's Undergraduate Supervisor, whose approval is required for all courses under *Mention: français*.

Philosophy courses presented in fulfilment of *Mention: français* requirements can double as courses to satisfy Philosophy B.A. (General) or B.A. (Honours) requirements.

To graduate with the notation *Mention: français*, Philosophy students must include in their program the following:

1. 1.0 credit in French language chosen in consultation with the Department of French to perfect the student's French language skills.
2. 1.0 credit from the following list of courses taught in French at Carleton and concerned with the study of the heritage and culture of French Canada: FREN 2700, FREN 3702, FREN 3703.
3. 1.0 credit from among PHIL 3901, PHIL 3901, PHIL 3903, PHIL 3906, PHIL 3907, PHIL 3908 (Independent Study) with philosophical works read in French and papers submitted in French to be assessed by two members of the Department of Philosophy knowledgeable in the language, or 1.0 credit in Philosophy at the 3000-level taught in French at another university and acceptable to the Department of Philosophy

In addition, Philosophy students in B.A. Honours or Combined Honours must include:

4. 1.0 credit from among special projects (PHIL 4900, PHIL 4901, PHIL 4902, PHIL 4903, PHIL 4904, PHIL 4906 Tutorial) in French, supervised by a member of the Department of Philosophy, or earned in a Philosophy seminar or seminars at the 4000-level taught in French at another university and acceptable to the Department of Philosophy. Students must, in addition, satisfy the Honours requirement of 2.0 Carleton credits at the 4000-or 5000-level in Philosophy (1.0 for Combined Honours).
5. Combined Honours students must meet the *Mention: français* requirements of both Honours disciplines.

## Physics

Department of Physics  
Faculty of Science

This section presents the requirements for:

- **Applied Physics – B.Sc. Honours**
- **Mathematics and Physics – B.Sc. Double Honours**
- **Biology and Physics – B.Sc. Combined Honours**
- **Chemistry and Physics – B.Sc. Combined Honours**

The Department of Physics also offers the program: **Engineering Physics – B.Eng.** Consult the Engineering program section for details about this program.

The Co-operative Education Option is available in conjunction with the programs of the Department of Physics (see the Co-operative Education section of this Calendar for details).

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.Sc. programs including those relating to Breadth requirements (see the *Academic Regulations for the Bachelor of Science*).

Students should consult with the Department when planning their program and selecting courses.

### Course Categories for Physics

The program descriptions below make use of the following course categories, that are defined in the *Academic Regulations for the Bachelor of Science* section of this Calendar:

#### Approved Arts or Social Science

##### Free Elective

#### Applied Physics – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (11.5 credits)*

1. 1.0 credit in either (PHYS 1001 and PHYS 1002) or (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008 with an average grade of B- or better);
2. 1.0 credit in PHYS 2202 and PHYS 2604;
3. 1.5 credits in ECOR 2606, ELEC 2501 and ELEC 2507;
4. 4.0 credits in PHYS 3007, PHYS 3606, PHYS 3701, PHYS 3802, PHYS 3807, PHYS 4409, PHYS 4008 and PHYS 4707;
5. 1.5 credits in ELEC 3105, ELEC 3908 and ELEC 3909;
6. 1.0 credits in one of:
  - a) PHYS 4907 plus 0.5 credit in Free Elective
  - b) PHYS 4908 plus 0.5 credit in Free Elective
  - c) PHYS 4909[1.0]

7. 1.0 credit in Physics at the 4000-level;

8. 0.5 credit from: COMP 3005, ELEC 3509 or Physics at the 4000-level;

*Credits Not Included in the Major CGPA (8.5 credits)*

9. 1.0 credit from: (BIOL 1003 and BIOL 1004), CHEM 1000[1.0], or any two of GEOL 1006, GEOL 1007 or GEOL 1008;
10. 3.0 credits in MATH 1004, MATH 1005, MATH 1104; MATH 2004, STAT 3502 and MATH 3705;

11. 0.5 credit in COMP 1005;

12. 1.0 credit in either:

- a) COMP 1006, and (COMP 2002 or COMP 2004), or
- b) SYSC 2002 and SYSC 2004;

13. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;

14. 1.5 credits in Approved Arts or Social Science Electives;

15. 1.0 credit in Free Electives.

#### Mathematics and Physics – B.Sc. Double Honours (21.5 credits)

Continuation in the program after first year requires an average of at least 9.00 on MATH 1002 and MATH 1102 and at least 9.00 on PHYS 1001 and PHYS 1002 or the equivalent mathematics and physics courses.

*Credits Included in the Major CGPA (17.0 credits)*

1. 7.5 credits in MATH 1002[1.0], MATH 1102[1.0], MATH 2000[1.0], MATH 2100[1.0], MATH 2454, STAT 2655, MATH 3705, MATH 3001, MATH 3002, MATH 3057, MATH 3106;
2. 1.0 credit in Mathematics (MATH, STAT) at the 4000-level or above;
3. 1.0 credits in either (PHYS 1001 and PHYS 1002) or (PHYS 1003 and PHYS 1004);
4. 4.5 credits in PHYS 2202, PHYS 2604, PHYS 3802, PHYS 3007, PHYS 3606, PHYS 3701, PHYS 4409, PHYS 4707, PHYS 4708;
5. 1.0 credit in Physics at the 4000-level or above;
6. 1.0 credit in ELEC 3105, ELEC 3909;
7. 1.0 credit in either:
  - a) MATH 4905 or PHYS 4907 or PHYS 4908, and 0.5 credit Free Elective;
  - or
  - b) PHYS 4909[1.0];

*Credits Not Included in the Major CGPA (4.5 credits)*

8. 1.0 credit from BIOL 1003 and BIOL 1004, or CHEM 1000[1.0], or GEOL 1005[1.0], or GEOL 1006 and one of GEOL 1007 or GEOL 1008;
9. 0.5 credit in COMP 1005 or COMP 1007;
10. 0.5 credit in Computer Science;
11. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
12. 1.5 credits in Approved Arts or Social Science Electives;
13. 0.5 credit in Free Elective.

#### Note

In Requirement 2 above, MATH 4003 is highly recommended.

#### Biology and Physics – B.Sc. Combined Honours

*Credits Included in the Major CGPA (13.0 credits)*

1. 1.0 credit in (PHYS 1001 and PHYS 1002), or (PHYS 1003 and PHYS 1004), or (PHYS 1007 and PHYS 1008);
2. 2.5 credits in PHYS 2604, PHYS 2202, PHYS 4409, ECOR 2606, ELEC 3105;
3. 2.0 credits in PHYS 3007, PHYS 3207, PHYS 3606, PHYS 3701;
4. 1.0 credit from PHYS 3802, PHYS 4007, PHYS 4203, PHYS 4508, PHYS 4707, ELEC 3909;

## Program Information

5. 4.0 credits in BIOL 1003, BIOL 1004; BIOL 2200, BIOL 2104, BIOL 2001, BIOL 3201, BIOL 3104, BIOL 3305;
6. 1.0 credit from BIOL 4106, BIOL 4109, BIOL 4202, BIOL 4301, BIOL 4302, BIOL 4306;
7. 1.5 credits in BIOL 4901 and BIOL 4908[1.0], or PHYS 4909[1.0] and 0.5 credit in free elective;

*Credits Not Included in the Major CGPA (7.0 credits)*

8. 1.0 credit in CHEM 1000[1.0];
9. 0.5 credit in MATH 1004 or MATH 1007;
10. 0.5 credit in MATH 1104 or MATH 1107;
11. 2.0 credit in STAT 2507, MATH 1005, MATH 2004, MATH 3705;
12. 0.5 credit in COMP 1005 or COMP 1007;
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Science;
14. 1.5 credits in Approved Arts or Social Science;
15. 0.5 credit in Free Elective.

### Note

1. In items 3 and 4 above, PHYS 3008 may replace PHYS 3007, PHYS 4008 may replace PHYS 4007.

## Chemistry and Physics – B.Sc. Combined Honours (20.0 credits)

*Credits Included in the Major CGPA (12.5 credits)*

1. 1.0 credit in (PHYS 1001 and PHYS 1002) or (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
2. 3.0 credits in PHYS 2202, PHYS 2604, PHYS 3007, PHYS 3606, PHYS 3701, PHYS 4707;
3. 1.0 credit in Physics at the 4000-level;
4. 4.5 credits in CHEM 1000[1.0], CHEM 2101, CHEM 2102, CHEM 2203, CHEM 3102, CHEM 3503, CHEM 3504, CHEM 4102;
5. 0.5 credit from: CHEM 2204 or CHEM 2206;
5. 0.5 credit from: CHEM 3105 or CHEM 3106;
6. 0.5 credit in Chemistry at the 4000-level;
7. 1.0 credit from: CHEM 4908[1.0], PHYS 4909[1.0];
8. 0.5 credit in ELEC 3105;

*Credits Not Included in the Major CGPA (7.5 credits)*

9. 3.0 credits in MATH 1004, MATH 1005, MATH 1104, MATH 2004, MATH 3502, MATH 3705;
10. 0.5 credit in ECOR 2606;
11. 0.5 credit in COMP 1007;
12. 0.5 credit in NSCI 1000 or Approved Arts or Social Science;
13. 0.5 credit in Chemistry, Physics, Mathematics, Statistics, Computer Science, or Engineering excluding CHEM 0100, CHEM 1003, PHYS 1900, MATH 1805, COMP 1805;
14. 1.5 credits in Approved Arts or Social Science;
15. 1.0 credit in Free Electives.

---

## Political Science

Department of Political Science  
Faculty of Public Affairs and Management

This section presents the requirements for the programs:

- **Political Science – B.A. Honours**
- **Political Science – B.A. Combined Honours, with Concentration in Canadian Politics Comparative Politics and Area Studies International Relations Political Theory Public Affairs and Policy Analysis**
- **Journalism and Political Science – B.A. or B.J. Combined Honours**
- **Political Science and Economics – B.A. Combined Honours**
- **Political Science and Sociology – B.A. Combined Honours**
- **Political Science and Human Rights – B.A. Combined Honours**
- **Political Science – B.A. General**
- **Minor in Political Science**

Co-operative Education Option is available in Political Science. Consult the *Co-operative Education* section of this Calendar.

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see *The Academic Regulations of the University* in this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *The Academic Regulations of the University* in this Calendar).

Students should consult with the Department when selecting courses and planning their program.

### Departmental Language Requirement

The Department requires Honours students to demonstrate proficiency in at least one language other than English, normally French. Honours students are required to demonstrate such proficiency, normally through the completion of any first-year course (or its approved equivalent) in a language offered at Carleton.

For students who consider that they already have proficiency in a second language, the Department conducts a French language examination once a year in November. For other languages, the onus is on the student to provide suitable documentary evidence of proficiency to the Department.

### Categories of Courses

The following categories of Political Science courses are used in the program descriptions:

*Canadian Government and Politics:*

PSCI 2001 [1.0], PSCI 2002, PSCI 2003, PSCI 3000, PSCI 3001, PSCI 3002, PSCI 3003, PSCI 3004, PSCI 3005, PSCI 3006, PSCI 3007, PSCI 3305, PSCI 3306, PSCI 3400 [1.0], PSCI 3401, PSCI 3402, PSCI 3406, PSCI 3606, PSCI 3607, PSCI 4000 [1.0], PSCI 4001 [1.0], PSCI 4002, PSCI 4003, PSCI 4006, PSCI 4007, PSCI 4008, PSCI 4009, PSCI 4101, PSCI 4106, PSCI 4107, PSCI 4108, PSCI 4109, PSCI 4401

*Comparative Politics and International Relations:*

PSCI 2101, PSCI 2102, PSCI 2601, PSCI 2602, PSCI 3009, PSCI 3100, PSCI 3101 [1.0], PSCI 3101, PSCI 3102, PSCI 3103, PSCI 3104 [1.0], PSCI 3105 [1.0], PSCI 3106, PSCI 3107, PSCI 3200 [1.0], PSCI 3202 [1.0], PSCI 3203 [1.0], PSCI 3203, PSCI 3204, PSCI 3205, PSCI 3206, PSCI 3207, PSCI 3208, PSCI 3209, PSCI 3302, PSCI 3307, PSCI 3404, PSCI 3405, PSCI 3408, PSCI 3500, PSCI 3501, PSCI 3502, PSCI 3600, PSCI 3601, PSCI 3602, PSCI 3603, PSCI 3605,

PSCI 3606, PSCI 3703, PSCI 4005, PSCI 4102, PSCI 4103, PSCI 4104, PSCI 4105, PSCI 4200, PSCI 4201, PSCI 4202, PSCI 4203, PSCI 4400, PSCI 4500, PSCI 4505, PSCI 4600 [1.0], PSCI 4601, PSCI 4602, PSCI 4603, PSCI 4604, PSCI 4605, PSCI 4606, PSCI 4607, PSCI 4802, PSCI 4803, PSCI 4804

*4000-level Seminar:*

All courses in the range PSCI 4000 [1.0] to PSCI 4809 [1.0]

### Related Courses

Subject to prior approval by the department, a student in the B.A. Honours or B.A. General program may use one course in a related discipline as a political science credit. This permission will be granted only if the content of the transfer course is very closely related to political science and if the Department of Political Science does not itself offer a comparable course. Students in the combined B.A. Honours programs may not use related courses as political science credits.

### Political Science - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

- 1.0 credit in Political Science at the 1000-level, or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
- 2.0 credits in Political Science PSCI 2300 [1.0] and PSCI 2700 [1.0];
- 1.0 credit in Canadian Government and Politics;
- 1.0 credit in Comparative Politics and International Relations;
- 1.0 credit in PSCI 4908 [1.0] (with a grade of B- or better) or 4000-level Seminars;
- 1.0 credit in a 4000-level Seminar;
- 2.0 credits in Political Science;

*Credits Not Included in the Major CGPA (11.0 credits)*

- 8.0 credits in electives not in Political Science;
- 3.0 credits in free electives;

*Additional Requirements*

- Departmental Language Requirement must be met.

### Notes

- At least 1.0 credit in 4000-level Seminars must be completed at Carleton University.
- Req. 5: Candidates with fourth-year Honours standing in Political Science and a Major CGPA of 9.00 or better are strongly encouraged to present an Honours essay on some topic involving independent investigation (PSCI 4908 [1.0]); they may be examined orally on this essay and must receive a B- or better in this course. PSCI 4908 [1.0] must be taken at Carleton University. Any Honours student with a Major CGPA below 9.00 who wishes to present an Honours essay may do so with the agreement of a faculty supervisor and the permission of the Supervisor of Undergraduate Studies. Students who do not write an Honours essay are required to complete 1.0 replacement credit in Political Science in the form of one or more 4000-level Seminars.

### Political Science - B.A. Combined Honours (20.0 credits)

*Credits Included in the Political Science Major CGPA (7.0 credits)*

- 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
- 2.0 credit in PSCI 2300 [1.0] and PSCI 2700 [1.0];
- 1.0 credits from the 4000-level Seminars in Political Science;

- 3.0 credits in Political Science satisfying:

- at least 1.0 credit from the 4000-level Seminars in Political Science;
- at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Additional Credit Requirements*

- The requirements as stated for Combined Honours in the other discipline must be met;
- 5.0 credits not in Political Science or the other discipline;
- Sufficient free electives credits to make a total of 20.0 credits for the program;

*Additional Requirements*

- Departmental Language Requirement must be met.

### Concentrations in Political Science Programs

The Concentrations described below are open to all students in Political Science Honours, Combined Honours or General programs. The maximum number of Political Science credits that can be counted towards the degree is 12.0 credits for an Honours program, 8.0 for a General program and 9.0 for a Combined Honours program. Concentrations are open to students in the General program in Political Science though it may be difficult to meet the requirements of the Concentrations within the 15.0 credits required for the General degree, so that courses extra to the primary degree may have to be taken.

#### Concentration in Canadian Politics

- 1.0 credit in PSCI 2001 [1.0] or PSCI 2002 and PSCI 2003;
- 2.5 credits, including at least 0.5 credits at the 4000-level, in Canadian Politics chosen from: PSCI 3000, PSCI 3001, PSCI 3002, PSCI 3003, PSCI 3004, PSCI 3005, PSCI 3006, PSCI 3007, PSCI 3305, PSCI 3306, PSCI 3401, PSCI 3402, PSCI 3406, PSCI 3606, PSCI 3607, PSCI 4000 [1.0] (Section C), PSCI 4002, PSCI 4003, PSCI 4006, PSCI 4007, PSCI 4008, PSCI 4009, PSCI 4101, PSCI 4106, PSCI 4107, PSCI 4108, PSCI 4109, PSCI 4401, PSCI 4908 [1.0] (for qualified Honours students on an accepted Canadian Politics theme).

#### Concentration in Comparative Politics and Area Studies

- 1.0 credit in PSCI 2101 and PSCI 2102;
- 2.5 credits, including at least 0.5 credits at the 4000-level, in Comparative Politics and Area Studies chosen from: PSCI 3009, PSCI 3100, PSCI 3101, PSCI 3102, PSCI 3103, PSCI 3104 [1.0], PSCI 3105 [1.0], PSCI 3106, PSCI 3109, PSCI 3202 [1.0], PSCI 3203, PSCI 3204, PSCI 3205, PSCI 3206, PSCI 3207, PSCI 3208, PSCI 3209, PSCI 3302, PSCI 3404, PSCI 3405, PSCI 3408, PSCI 3500, PSCI 3501, PSCI 3502, PSCI 3703, PSCI 4005, PSCI 4102, PSCI 4103, PSCI 4104, PSCI 4105, PSCI 4200, PSCI 4201, PSCI 4202, PSCI 4203, PSCI 4204, PSCI 4205, PSCI 4206, PSCI 4207, PSCI 4500, PSCI 4505, PSCI 4601, PSCI 4606, PSCI 4802, PSCI 4803, PSCI 4804, PSCI 4908 [1.0] (for qualified Honours students on an accepted Comparative Politics and Area Studies theme).

#### Concentration in International Relations

- 1.0 credit in PSCI 2601 and PSCI 2602;
- 2.5 credits, including at least 0.5 credits at the 4000-level, in International Relations chosen from: PSCI 3009, PSCI 3107, PSCI 3600, PSCI 3601, PSCI 3603, PSCI 3605, PSCI 3606, PSCI 3607, PSCI 3703, PSCI 4600 [1.0], PSCI 4601 [1.0], PSCI 4602, PSCI 4603, PSCI 4604, PSCI 4605, PSCI 4606, PSCI 4607, PSCI 4802, PSCI 4803, PSCI 4804, PSCI 4908 [1.0] (for qualified Honours students on an accepted International Relations theme).

### Concentration in Political Theory

1. 1.0 credit in PSCI 2300 [1.0];
2. 2.5 credits, including at least 0.5 credits at the 4000-level, in Political Theory credits chosen from: PSCI 3300, PSCI 3302, PSCI 3304 [1.0], PSCI 3305, PSCI 3306, PSCI 3307, PSCI 3308, PSCI 3309, PSCI 4301, PSCI 4302, PSCI 4304 [1.0], PSCI 4305 [1.0], PSCI 4306, PSCI 4307, PSCI 4908 [1.0] (for qualified Honours students on an accepted Political Theory theme).

### Concentration in Public Affairs and Policy Analysis

1. 1.0 credit in PSCI 2700 [1.0];
2. 2.5 credits, including at least 0.5 credits at the 4000-level, in Public Affairs and Policy Analysis chosen from: PSCI 2400 [1.0], PSCI 3401, PSCI 3402, PSCI 3404, PSCI 3405, PSCI 3406, PSCI 3407, PSCI 4002, PSCI 4003, PSCI 4007, PSCI 4008, PSCI 4200, PSCI 4000 [1.0]C [1.0], PSCI 4107, PSCI 4204, PSCI 4401, PSCI 4406, PSCI 4407, PSCI 4408, PSCI 4701, PSCI 4702, PSCI 4908 [1.0] (for qualified Honours students on an accepted Public Affairs and Policy Analysis theme).

### Journalism and Political Science – B.A. or B.J. Combined Honours

Students who successfully complete the Combined Honours program in Journalism and Political Science graduate with a B.J. degree unless they complete the Honours Essay PSCI 4908 [1.0] in which case they may graduate with a B.A.

*Credits Included in the Political Science Major CGPA (7.0 credits)*

1. 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
2. 2.0 credits in PSCI 2300 [1.0], PSCI 2700 [1.0];
3. 1.0 credits from the 4000-level Seminars in Political Science;
4. 3.0 credits in Political Science satisfying:
  - a) at least 1.0 credit from the 4000-level Seminars in Political Science;
  - b) at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Credits Included in the Journalism Major CGPA (8.0 credits)*

5. 1.0 credits in JOUR 1000 [1.0];
6. 6.0 credits in JOUR 2201 [1.0], JOUR 2205, JOUR 2501, JOUR 3205 [1.0], JOUR 3206 [1.0], JOUR 4000 [1.0], JOUR 4201 [1.0];
7. 1.0 credit from JOUR 4204, JOUR 4205, JOUR 4206, JOUR 4207, JOUR 4208;

*Credits Not Included in Either Major (5.0 credits)*

8. 1.0 credit in approved Canadian history: HIST 1300 [1.0], HIST 2303 [1.0], HIST 2304 [1.0] or HIST 2305 [1.0];
9. 4.0 credits in free electives.

#### Additional Requirements

10. Departmental Language Requirement in Political Science must be satisfied.

#### Notes

1. Students admitted to Journalism prior to 1995-96 should consult the School of Journalism and Communication for requirements.
2. Students who wish to practise journalism in another country may be advised to choose a different history course in Requirement 8 above.

### Economics and Political Science – B.A. Combined Honours

*Credits Included in the Economics Major CGPA (7.0 credits)*

1. 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
2. 5.5 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2200 [1.0], ECON 2400, ECON 4200, ECON 4201, ECON 4900 [1.0];
3. 0.5 credit in Economics at the 4000-level.

*Credits Included in the Political Science Major CGPA (7.0 credits)*

4. 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
5. 2.0 credits in PSCI 2300 [1.0] and PSCI 2700 [1.0];
6. 1.0 credits from the 4000-level Seminars in Political Science;
7. 3.0 credits in Political Science satisfying:
  - a) at least 1.0 credit from the 4000-level Seminars in Political Science;
  - b) at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Credits Not Included in Either Major CGPA (6.0 credits)*

8. 1.0 credit in MATH 1009 and MATH 1109;
9. 5.0 credits in electives not in Economics or Political Science;

#### Additional Requirements

10. The Political Science Departmental language requirement must be satisfied.

### Political Science and Sociology – B.A. Combined Honours (20.0 credits)

*Credits Included in the Political Science Major (7.0 credits)*

1. 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
2. 1.0 credit in PSCI 2300 [1.0];
3. 1.0 credits from the 4000-level Seminars in Political Science;
4. 3.0 credits in Political Science satisfying:
  - a) at least 1.0 credit from the 4000-level Seminars in Political Science;
  - b) at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Credits Included in the Sociology Major CGPA (5.0 credits)*

5. 1.0 credit in SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
6. 1.0 credit in SOAN 2005 [1.0] or SOCI 4006 [1.0];
7. 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
8. 1.0 credit in Sociology and/or Anthropology beyond the 1000-level;

*Credits Included in the Political Science or Sociology Major CGPA (2.0 credits)*

9. 2.0 credits in a methodology sequence, either:
  - a) PSCI 2700 [1.0] and SOCI 3700 [1.0];or
  - b) SOCI 2003 [1.0] (or ANTH 2003 [1.0]) and PSCI 4701 and PSCI 4702;



*Credits Not Included in Either Major CGPA (6.0 credits)*

10. 5.0 credits in electives not in Political Science or Sociology;
11. 1.0 credits in free electives;

*Additional Requirements*

12. The Political Science Departmental Language Requirement must be satisfied.

**Note**

Political Science PSCI 4701 and PSCI 4702 may not be offered every year.

**Political Science and Human Rights –  
B.A. Combined Honours (20.0 credits)**

*Students in this program are required to complete at least 7.0 credits in Political Science including:*

1. 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
2. 2.0 credits in PSCI 2300 [1.0], PSCI 2700 [1.0];
3. 1.0 credits from the 4000-level Seminars in Political Science;
4. 3.0 credits in Political Science satisfying:
  - a) at least 1.0 credit from the 4000-level Seminars in Political Science;
  - b) at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;
5. Political Science Departmental Language Requirement must be satisfied.

**Note**

For Human Rights requirements, see the Human Rights Program section of this Calendar.

**Political Science - B.A. General (15.0 credits)**

*Credits included in the Major CGPA (6.0 credits)*

1. 1.0 credit in Political Science at the 1000-level, or a First-Year Seminar in Political Science (FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0]);
2. 1.0 credit in PSCI 2300 [1.0] or PSCI 2700 [1.0];
3. 4.0 credits in Political Science.

*Credits Not Included in the Major CGPA (9.0 credits)*

4. 2.0 credits in free electives;
5. 5.0 credits not in Political Science.

**Notes**

1. First-year students intending to enter a B.A. General or Honours program in Political Science may take a 2000-level course concurrently with a first-year credit in Political Science.
2. B.A. General students should take a number of courses in related disciplines. Final-year B.A. General students with the required standing may, with permission, be admitted to 4000-level Honours courses, provided space is available. The entire program must be approved by the Department.

**Minor in Political Science**

1. 1.0 credit in Political Science at the 1000-level, or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
2. 1.0 credit from PSCI 2001 [1.0], (PSCI 2002 and PSCI 2003), (PSCI 2101 and PSCI 2102), PSCI 2300 [1.0], PSCI 2400 [1.0], (PSCI 2601 and PSCI 2602), PSCI 2700 [1.0];

3. 2.0 credits in Political Science.

4. The remaining requirements of the major discipline(s) and degree must be satisfied.

*Mention: français*

Students who wish to qualify for the *Mention: français* notation in Political Science may do so by taking the following pattern of courses in their degree program:

1. 1.0 credit in the advanced study of the French language (a minimum of FREN 1600 [1.0]).
2. 1.0 credit in French-Canadian culture and heritage (two of FREN 2607, FREN 2608, FREN 2801 or FREN 2700 [1.0]).
3. One of PSCI 2001 [1.0] or PSCI 3900. PSCI 2001 [1.0] is recommended.
4. Honours students are required to take PSCI 4909 [1.0] or one of PSCI 2001 [1.0] or PSCI 3900 [1.0], whichever was not used to meet requirement 3.

With the prior approval of the Department, students may substitute appropriate courses taught in French at the University of Ottawa for Requirements 2 and 4.

## Psychology

Department of Psychology  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Psychology – B.A. Honours**
- **Psychology with Concentration in Human-Computer Interaction - B.A. Honours**
- **Psychology – B.A. Combined Honours**
- **Psychology – B.A. General**
- **Psychology – B.Sc. Honours**
- **Neuroscience – B.Sc. Honours**
- **Minor in Psychology**
- *Mention: français*
- **Carleton University/Algonquin College Articulation Agreement**

The Cooperative Education Option is available to Honours students in Psychology.

In addition to the requirements listed below, students must satisfy:

- i) the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar),
- ii) for B.A. programs, the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth Requirements (see *Academic Regulations for the Bachelor of Arts Degree*),
- (iii) for B.Sc. programs the common regulations applying to all B.Sc. students (see *Academic Regulations for the Bachelor of Science Degree*).

Students should consult with the Department when planning their program and selecting courses.

### Psychology – B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credits in PSYC 1001 and PSYC 1002,
2. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
3. 1.0 credit from: PSYC 2200, PSYC 2500 or PSYC 2700;
4. 1.0 credit from: PSYC 2100, PSYC 2300, PSYC 2400 PSYC 2600 or PSYC 2800;
5. 1.0 credit in PSYC 3000[1.0];
6. 2.0 credits in either:
  - a) Thesis Stream:
    - i) 1.0 credit from PSYC 3100[1.0], PSYC 3200[1.0], PSYC 3400[1.0], PSYC 3500[1.0], PSYC 3600[1.0], PSYC 3700[1.0], PSYC 3800[1.0];
    - ii) 1.0 credit in PSYC 4908[1.0];
  - or
  - b) Essay Stream
    - i) 1.0 credit in Psychology at 3000-level or higher;
    - ii) 1.0 credit in PSYC 4905[1.0];
7. 1.0 credit in Psychology at 3000-level or higher;
8. 1.0 credit in Psychology;

*Credits Not Included in the Major CGPA (11.0 credits)*

10. 2.0 credits from Biology, Chemistry, Computer Science, Geology, Mathematics, Statistics or Physics;

11. 2.0 credits from a discipline other than Psychology in the Faculty of Arts and Social Sciences or the Faculty of Public Affairs and Management;
12. 3.0 credits at the 2000-level and above, not in Psychology;
13. 1.0 credit not in Psychology;
14. 3.0 credits in free electives.

#### Note

Registration in the seminars in Requirement 6 a) i) requires a Major CGPA of at least 8.00. Registration in the thesis course PSYC 4908[1.0] requires a Major CGPA of at least 9.00.

### Psychology with Concentration in Human-Computer Interaction – B.A. Honours

*Credits Included in the Major CGPA (11.0 credits)*

1. 1.0 credits in PSYC 1001 and PSYC 1002;
2. 3.5 credits in Human-Computer Interaction: PSYC 2100, PSYC 2700, PSYC 2800, PSYC 3800[1.0], PSYC 4800, PSYC 4805;
3. 1.5 credit from: PSYC 2200, PSYC 2300, PSYC 2400, PSYC 2500 or PSYC 2600;
4. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
5. 1.0 credit in PSYC 3000[1.0];
6. 0.5 credit in Psychology at 3000-level or higher;
7. 1.5 credit in Psychology at 2000-level or higher;
8. 1.0 credit in PSYC 4905[1.0] or PSYC 4908[1.0] with a topic in Human-Computer Interaction;

*Credits Not Included in the Major CGPA (9.0 credits)*

9. 2.0 credits from Biology, Chemistry, Computer Science, Geology, Mathematics, Statistics or Physics;
10. 2.0 credits from a discipline other than Psychology in the Faculty of Arts and Social Sciences or the Faculty of Public Affairs and Management;
11. 3.0 credits at the 2000-level and above, not in Psychology;
12. 1.0 credit not in Psychology;
13. 1.0 credit in free electives (may be Psychology).

### Psychology – B.A. Combined Honours (20 credits)

*Credits Included in the Major CGPA (7.0 credits)*

1. 1.0 credits in PSYC 1001 and PSYC 1002;
2. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
3. 1.0 credit from: PSYC 2200, PSYC 2500 or PSYC 2700;
4. 1.0 credit from: PSYC 2100, PSYC 2400, PSYC 2300, PSYC 2600 or PSYC 2800;
5. 1.0 credit in PSYC 3000[1.0];
6. 1.0 credit in PSYC 3100[1.0], PSYC 3200[1.0], PSYC 3400[1.0], PSYC 3500[1.0], PSYC 3600[1.0], PSYC 3700[1.0], PSYC 3800[1.0];
7. 1.0 credit in PSYC 4905[1.0] or PSYC 4908[1.0];

*Additional Requirements*

8. The requirements for Combined Honours in the other discipline must be satisfied;
9. 5.0 credits not in Psychology or the other discipline;
10. 2.0 credits from Biology, Chemistry, Computer Science, Geology, Mathematics, Statistics or Physics;

11. Sufficient free electives to make 20.0 credits total for the program.

#### Notes

1. All students in B.A. Combined Honours Psychology must complete an Honours Research Essay in either Psychology or the other discipline. If the Honours Research Essay is completed in the other discipline, Req. 2, 5 and 7 may be replaced by credits from the other discipline (see below). In this case, replacement credits in Psychology must be taken so that a minimum of 7.0 credits in Psychology is presented at graduation.
2. Requirement 2 above may be replaced with one of ANTH 2003, MCOM 2001, PSCI 2700 or SOCI 2003.
3. Requirement 5 above may be replaced with SOCI 3700, ECON 2200, or both MCOM 4000 and MCOM 4002.
4. For Requirement 7 above, acceptable alternatives to PSYC 4905 and PSYC 4908 in combined programs include ANTH 4905, ARTH 4909, BIOL 4907, BIOL 4908, ECON 4908, ENGL 4908, FILM 4905, (GEOG 4901 and GEOG 4902), GEOG 4909, GERM 4909, HIST 4909, MCOM 4907, MUSI 4908, PSCI 4905, RELI 4909, RUSS 4909, SOCI 4905, EURR 4908, WOMN 4908.

#### Psychology – B.A. General

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credits in PSYC 1001 and PSYC 1002;
2. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
3. 1.0 credits from: PSYC 2200, PSYC 2500 and PSYC 2700;
4. 1.0 credits from: PSYC 2100, PSYC 2300, PSYC 2400, PSYC 2600 and PSYC 2800;
5. 1.0 credit in Psychology at 3000-level or above;
6. 1.0 credit in Psychology;

*Credits Not Included in the Major CGPA (9.0 credits)*

7. 2.0 credits from a discipline other than Psychology in the Faculty of Arts and Social Sciences or the Faculty of Public Affairs and Management;
8. 3.0 credits at the 2000-level or above, not in Psychology;
9. 2.0 credits not in Psychology;
10. 2.0 credit in free electives.

#### Course Categories for B.Sc. Programs

The program descriptions for B.Sc. Psychology and for Neuroscience make use of the course categories defined for all B.Sc. programs (see *Academic Regulations for the Bachelor of Science Degree*):

##### Science Faculty Electives

##### Science Continuation Courses

##### Free Elective

#### Psychology – B.Sc. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

1. 4.0 credits in PSYC 1001, PSYC 1002, PSYC 2200, PSYC 2300, PSYC 2500, PSYC 2700 and PSYC 4907[1.0];
2. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
3. 1.0 credit from PSYC 3200[1.0], PSYC 3500[1.0], PSYC 3700[1.0], or PSYC 3800[1.0];
4. 1.0 credit from: PSYC 3202, PSYC 3203, PSYC 3204, PSYC 3205, PSYC 3207, PSYC 3506, PSYC 3702, PSYC 4001, PSYC 4207;
5. 2.0 credits in Psychology;

*Credits Not Included in the Major CGPA (11.0 credits)*

6. 1.0 credit in MATH 1007 and MATH 1107;
7. 2.0 credits from BIOL 1003 and BIOL 1004, CHEM 1000[1.0], GEOG 1005[1.0] or GEOL 1005[1.0], GEOL 1006, GEOL 1007 or GEOL 1008, (PHYS 1003 and PHYS 1004) or (PHYS 1007 and PHYS 1008);
8. 1.0 credit from Science Faculty Electives or from a discipline other than Psychology in the Division of Arts and Social Sciences (NSCI 1000 recommended);
9. 1.0 credit in (STAT 2507 and STAT 2509) or (MATH 2107 and STAT 2507). (PSYC 3000[1.0] may be substituted, in which case the student must offer 1.0 credit above 1000-level in Biology, Mathematics, Chemistry or Physics chosen with approval of the Department of Psychology);
10. 2.0 credits from a discipline other than Psychology in the Division of Arts and Social Sciences;
11. 1.0 credit in Science Continuation (not Psychology);
12. 1.0 credit in Biology, Chemistry, Geology, Mathematics, Statistics or Physics at the 2000-level or above;
13. 2.0 credits in Free Electives.

#### Neuroscience – B.Sc. Combined Honours

*Credits Included in the Major CGPA (11.0 credits)*

1. 3.5 credit in BIOL 1003, BIOL 1004; BIOL 2001, BIOL 2200, BIOL 2104, BIOL 3305, BIOL 4306;
2. 1.0 credit in Biology or Biochemistry;
3. 1.5 credit in Biology or Biochemistry at the 3000-level or above;
4. 1.0 credit in either PSYC 1001 and PSYC 1002, or PSYC 1000[1.0];
5. 2.0 credit in PSYC 2000[1.0], PSYC 2200 and PSYC 2700;
6. 1.0 credit in PSYC 3200[1.0] or PSYC 3700[1.0];
7. 1.0 credit in PSYC 4907[1.0] or BIOL 4908[1.0];

*Credits Not Included in the Major CGPA (9.0 credits)*

8. 1.0 credit in MATH 1007, MATH 1107;
9. 1.0 credit in either STAT 2507 and STAT 2509 or PSYC 3000[1.0];
10. 2.0 credit in CHEM 1000[1.0], CHEM 2203, CHEM 2204;
11. 1.0 credit in either PHYS 1001 and PHYS 1002, or PHYS 1007 and PHYS 1008;
12. 2.0 credit from Science Psychology excluding PSYC 3000;
13. 0.5 credits in NSCI 1000 or Approved Arts or Social Science, not in Psychology;
14. 0.5 credit in Approved Arts or Social Science not in Psychology;
15. 1.0 credit in Free Electives.

#### Note

1. The topic for item 7 above must be in neurophysiology, animal behaviour, neuropsychology or a related topic.

#### Minor in Psychology

Open to all undergraduate students in programs other than Psychology.

##### Requirements

1. 1.0 credit in PSYC 1001 and PSYC 1002;
2. 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000[1.0];
3. 2.0 credits in Psychology at the 2000-level or above.

4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Mention: français**

Students other than those in the B. Sc. Honours program in Neuroscience who wish to qualify for the *Mention: français* notation in Psychology may do so. To qualify, students must undergo placement testing by the Department of French in order to satisfy the language requirement and to protect the integrity of the initiative.

To graduate with the notation *Mention: français* students must include in their program the following:

#### **Year 1**

1.0 credit in the advanced study of the French language. This credit will be one of FREN 1405[1.0], FREN 1600[1.0], FREN 1609[1.0], FREN 2405[1.0], FREN 2600[1.0], FREN 2609[1.0] or FREN 3600[1.0]. This credit will fulfil Requirement 12 of the B.A. (Honours) in Psychology program, Requirement 8 of the B.A. in Psychology program and Requirement 4 in the B.Sc. (Honours) in Psychology program.

#### **Years 2 and 3**

1.0 credit at the 2000- or 3000-level offered entirely in French and approved by the Department of Psychology. This credit will fulfil 1.0 credit of Requirement 10 of the B.A. Psychology program and Requirement 13 of both the B.A. and B.Sc. (Honours) in Psychology programs.

1.0 credit at the 2000- or 3000-level in Psychology taken entirely in French to satisfy one of the elective requirements in the relevant Psychology degree program. This credit must be approved by the Department of Psychology and must be taken at the University of Ottawa under the Exchange Agreement or at a francophone institution on a Letter of Permission obtained from the Registrarial Services office.

#### **Year 4 (Honours)**

1.0 credit at the 4000-level in Psychology taken entirely in French at Carleton University. Normally this will be PSYC 4900 and PSYC 4902 or one of PSYC 4905[1.0], PSYC 4907[1.0] or PSYC 4908[1.0].

To obtain the notation, students in a B.A. degree program with combined majors must fulfil the requirements for *Mention français* of both Departments. The *Mention: français* option is not available in combined degree programs in which the other Department does not offer the notation.

---

## **Public Affairs and Policy Management**

Arthur Kroeger College of Public Affairs  
Faculty of Public Affairs and Management

This section presents the requirements for:

- **Public Affairs and Policy Management – B.P.A.P.M. with Specialization in:**
  - Public Policy and Administration**
  - Human Rights**
  - Development Studies**
  - International Studies**
  - Communication and Information Technology Policy**
  - Strategic Public Opinion and Policy Analysis**
  - Social Policy**

A Co-operative Education Option is available with the B.P.A.P.M. degree (consult the Co-operative Education section of this Calendar for details.)

In addition to the requirements listed below, students must satisfy the University regulations (see the *Academic Regulations of the University* section of this Calendar.)

Students should consult the College when planning their program and selecting courses.

### **Academic Performance Evaluation**

Students in the B.P.A.P.M. are subject to the standard Academic Performance Evaluation (APE) process with the following additions and amendments:

1. Continuation to second year will be guaranteed only to those students who have an Overall CGPA of 7.00 or better and a grade of B- or better in PAMP 1000.
2. A Good Standing decision at any subsequent Academic Performance Evaluation requires a Major CGPA of at least 6.50 and an Overall CGPA of at least 6.50.
3. Students who do not receive Good Standing status at any Academic Performance Evaluation will be required to withdraw from the program with the status *Ineligible to Return (ITR)*.

### **Language Requirement for B.P.A.P.M.**

Prior to graduation, students must satisfy a language proficiency requirement in one of the following ways:

- i) successful completion of an approved French language credit (FREN 1405 [1.0] or FREN 1600 [1.0]);
- ii) placement at a demonstrated competency level equivalent to satisfactory completion of FREN 1405 [1.0] or FREN 1600 [1.0] following a self-assessment questionnaire and interview administered by the Department of French (for students who already possess demonstrated capacity in French);
- (iii) successful completion of French Immersion in high school or possession of a Bilingual Diploma or Certificate.

Students should note that they will be required to use one of their elective credits if they choose to satisfy the language requirement through an approved French language credit.

For students whose first language is not English, or for students whose Specialization interests require a language other than French, the Language Requirement may be met by substituting another language for French. Permission for substitution may be sought from the Program Coordinator. Students registering in the Specialization in International Studies should note the additional language requirement within that program of study.

## Bachelor of Public Affairs and Policy Management – B.P.A.P.M.

Before the second year of study, students in this program must register in one of the seven Specializations:

### Public Policy and Administration

#### Human Rights

#### Development Studies

#### International Studies

#### Communication and Information Technology Policy

#### Strategic Public Opinion and Policy Analysis

#### Social Policy

### B.P.A.P.M. with Specialization in Public Policy and Administration (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

- 4.0 credits in PADM 1000 [1.0], PADM 2000 [1.0], PADM 3000, PADM 4000, PADM 4908 [1.0];
- 1.5 credits in LAWS 3506, ECON 3407 and ECON 3408;
- 1.0 credit in PADM 3105, PADM 4703;
- 1.0 credit in either (BUSI 1001 and BUSI 1002) or (ECON 2001 and ECON 2101);
- 1.0 credit in PSCI 3401 and either PSCI 3404 or PSCI 3405;
- 1.0 credit from: PADM 4008, PADM 4009, PADM 4509, PADM 4600, PADM 4604, PADM 4701, PADM 4704, PADM 4806, PADM 4807, or PADM 4809;
- 1.0 credit from: BUSI 3102, BUSI 4105, BUSI 4107, BUSI 4108, BUSI 4400, BUSI 4607; ECON 3507; PSCI 3406, PSCI 4106, PSCI 4408; LAWS 3005, LAWS 3401, LAWS 3405, LAWS 3503, LAWS 4402, or LAWS 4507;

*Credits Not Included in the Major CGPA (9.5 credits)*

- 1.0 credit from: PSCI 2700 [1.0], MCOM 2001 [1.0] or ECON 2200 [1.0];
- 1.0 credit in LAWS 2005 [1.0];
- 1.5 credits in ECON 1000 [1.0], BUSI 3602;
- 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
- 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
- 4.0 credits in free electives;

*Additional Requirement*

- The language requirement of the B.P.A.P.M. must be satisfied.

#### Note

As the courses in Item 6 are also taken by M.A. students, undergraduate enrolment in each one normally will be limited to five B.P.A.P.M. students who are in the P.P.A. Specialization.

### B.P.A.P.M. with Specialization in Human Rights (20.0 credits)

*Credits Included in the Major CGPA(10.5 credits)*

- 4.0 credits in PADM 1000 [1.0], PADM 2000 [1.0], PADM 3000, PADM 4000, PADM 4908 [1.0];
- 3.0 credits in LAWS 2105, PHIL 2103, LAWS 3503, LAWS 4604, PSCI 3307; SOWK 3207;
- 0.5 credit in LAWS 3604 or PSCI 3600;
- 0.5 credit in PSCI 4109 or LAWS 3509;

- 0.5 credit in LAWS 3101/PHIL 3101, PHIL 2101, PHIL 2102, PHIL 3103, PSCI 3109;
  - 1.0 credit in Human Rights Electives at the 3000-level or above;
  - 1.0 credit in Human Rights Electives;
- Credits Not Included in the Major CGPA(9.5 credits)*
- 1.0 credit from: PSCI 2700 [1.0] or MCOM 2001 [1.0];
  - 1.0 credit in LAWS 2005 [1.0];
  - 1.5 credits in ECON 1000 [1.0], BUSI 3602;
  - 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
  - 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
  - 4.0 credits in free electives;

*Additional Requirement*

- The language requirement of the B.P.A.P.M. must be satisfied.

#### Human Rights Electives

*Human Rights: Theories and Approaches*  
LAWS 4101; LAWS 4102, SOAN 1001 [1.0]

*Human Rights Practice and Organizations*  
EURR 4002, GEOG 3307, LAWS 4800, PSCI 3006; PSCI 4205; PSCI 4505, SOWK 3205, SOCI 3408

*Human Rights Law*  
LAWS 3401; LAWS 3501; LAWS 3603; LAWS 4006; LAWS 4309; LAWS 4605; LAWS 4607

*Social, Cultural and Ethical Dimensions of Human Rights*  
ECON 3204, EURR 4008, HIST 2801 [1.0], LAWS 3101/PHIL 3101, PHIL 1500 [1.0], PHIL 2101; PHIL 2102, PHIL 2104, PHIL 3103, PHIL 3300 [1.0], PHIL 2900 [1.0]/MCOM 2900 [1.0], PSCI 3109; PSCI 4206, SOWK 4300, SOCI 3405; SOCI 3407, SOAN 2002 [1.0]; SOAN 2304; SOAN 2108; SOAN 4605, WOMN 2800

### B.P.A.P.M. with Specialization in Development Studies (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

- 4.0 credits in PADM 1000 [1.0], PADM 2000 [1.0], PADM 3000, PADM 4000, PADM 4908 [1.0];
- 3.0 credit in ECON 3603, SOWK 3206, ECON 3604, PSCI 4104, PSCI 4105, INAF 4202/PSCI 4409;
- 1.0 credit in Development Studies Electives at the 4000-level;
- 2.5 credits in Development Studies Electives;

*Credits Not Included in the Major CGPA(9.5 credits)*

- 1.0 credit from: PSCI 2700 [1.0], MCOM 2001 [1.0] or ECON 2200 [1.0];
- 1.0 credit in either LAWS 2005 [1.0] or (LAWS 3603 and LAWS 3604);
- 1.5 credits in ECON 1000 [1.0], BUSI 3602;
- 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
- 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
- 4.0 credits in free electives;

*Additional Requirement*

- The language requirement of the B.P.A.P.M. must be satisfied.

## Development Studies Electives

### Regional Foci

#### A. Central and Eastern Europe

ECON 3700 [1.0], GEOG 3600, GEOG 4600, PSCI 3208, PSCI 3209, PSCI 3704, PSCI 3705, EURR 4002, EURR 4006, EURR 4007, EURR 4100, EURR 4101, HIST 3600 [1.0]

#### B. Latin America and the Caribbean

PSCI 3204, PSCI 3205, PSCI 4607, HIST 2307 [1.0], HIST 3704, HIST 3705, HIST 3706

#### C. Africa

PSCI 3100, PSCI 3101, PSCI 4203, PSCI 4207, PSCI 4802, GEOG 3300, GEOG 3602, HIST 2705 [1.0]

#### D. Asia/Middle East

PSCI 3102, PSCI 3103, PSCI 3700, PSCI 3701, PSCI 3203, PSCI 3302, HIST 2805 [1.0], ECON 4807, SOAN 4709

### Thematic Foci

#### D. Environment and Development

ECON 3806, GEOG 2101, GEOG 3209, GEOG 3300, GEOG 3306, GEOG 4004, EURR 4007, LAWS 4800

#### E. Indigenous Peoples and Development

ANTH 2007, SOAN 3007, ANTH 3109, SOAN 4200, ANTH 4700, HIST 3503 [1.0], SOWK 4102, PSCI 4206

#### F. Gender and Development

ANTH 2408, ANTH 2409, SOAN 4709, PSCI 3502, PSCI 4500, HIST 3705

#### G. Social and Political Development Issues

SOWK 2100, SOWK 3101, SOWK 4104, SOAN 3601, ANTH 4706, PSCI 4505, INAF 4102

### B.P.A.P.M. with Specialization in International Studies (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 4.0 credits in PAMP 1000 [1.0], PAMP 2000 [1.0], PAMP 3000, PAMP 4000, PAMP 4908 [1.0];
2. 3.0 credits in PSCI 2601, PSCI 2602, INAF 3000 [1.0], ECON 3601 and ECON 3602;
3. 1.0 credit from PSCI 4104, PSCI 4105, PSCI 4603, PSCI 4604 and PSCI 4600 [1.0];
4. 0.5 credit from INAF 4101, INAF 4102, INAF 4103;
5. 2.0 credits in International Studies Electives;

*Credits Not Included in the Major CGPA (9.5 credits)*

6. 1.0 credit from: PSCI 2700 [1.0], MCOM 2001 [1.0] or ECON 2200 [1.0];
7. 1.0 credit in LAWS 3603 and LAWS 3604;
8. 1.5 credits in ECON 1000 [1.0], BUSI 3602;
9. 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
10. 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
11. 4.0 credits in free electives;

#### Additional Requirement

12. The language requirement of the B.P.A.P.M. is modified as follows. The language requirement will be fulfilled with 2.0 credits in one or two languages (or equivalent level of proficiency as demonstrated by successful performance on a language test at the intermediate level if one language is used, or two tests at the introductory level if two languages are selected). Students will be required to use two of their free elective credits if they choose to satisfy the language requirement through course work.

## International Studies Electives

### International Conflict, War and Strategic Studies

INAF 4101, PSCI 3107, PSCI 3603, PSCI 4008, PSCI 4602

### Global Political Economy

ECON 3700, ECON 3806, ECON 4806, ECON 4807, EURR 4006, INAF 4103, PSCI 3703, PSCI 4603, PSCI 4604, BUSI 3703

### International Development

ECON 3603, ECON 3604, INAF 4102, INAF 4202, PSCI 3100, PSCI 4104, PSCI 4105, PSCI 4409, SOAN 3602, GEOG 3209, GEOG 3300

### International Law and Organization

LAWS 3207, LAWS 3208, LAWS 4604, LAWS 4605, PSCI 3600

### International Theory and Miscellaneous International Studies

PSCI 3502, PSCI 3601, PSCI 3605, PSCI 4505, PSCI 4600 [1.0], PSCI 4605, GEOG 3307, GEOG 4400, HIST 3800, HIST 3801

### Area Studies

(Some of the area courses are listed in the themes above)

#### North and South America

PSCI 3200, PSCI 3201, PSCI 3204, PSCI 3205, PSCI 3606, PSCI 3607, PSCI 4606, PSCI 4607, HIST 3306, HIST 3704, HIST 3705, HIST 3706

#### Africa

PSCI 3101, PSCI 4203, PSCI 4207, PSCI 4802, GEOG 3602

#### Asia

PSCI 3102, PSCI 3103, PSCI 3203, PSCI 3700, PSCI 3701, PSCI 4803, PSCI 4804

#### European and Russian Studies

EURR 4005, EURR 4008, EURR 4101, PSCI 3206, PSCI 3207, PSCI 3208, PSCI 3209, PSCI 3704, PSCI 3705, PSCI 4601, PSCI 4903, HIST 3605

### B.P.A.P.M. with Specialization in Communication and Information Technology Policy (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 4.0 credits in PAMP 1000 [1.0], PAMP 2000 [1.0], PAMP 3000, PAMP 4000, PAMP 4908 [1.0];
2. 0.5 credit from MCOM 2300 or MCOM 2302;
3. 0.5 credit from: BUSI 2400, ECON 2001, MCOM 2300, MCOM 2302, MCOM 2501;
4. 1.0 credit from LAWS 3202, LAWS 3501 or LAWS 3502;
5. 0.5 credit from PSCI 3401 or PSCI 3406;
6. 1.5 credits from: ECON 3200, LAWS 3005, LAWS 3506, MCOM 3005, MCOM 3006, MCOM 3403, or PSCI 3006;
7. 0.5 credit in MCOM 4305;
8. 2.0 credits from: BUSI 4400, BUSI 4404, ECON 4205, LAWS 4507, PSCI 4003, PSCI 4401, PSCI 4407, or PADM 5608;

*Credits Not Included in the Major CGPA(9.5 credits)*

9. 1.0 credit from: PSCI 2700 [1.0], MCOM 2001 [1.0] or ECON 2200 [1.0];
10. 1.0 credit in LAWS 2005 [1.0];
11. 1.5 credits in ECON 1000 [1.0], BUSI 3602;
12. 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
13. 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
14. 4.0 credits in free electives;

*Additional Requirement*

15. The Language Requirement of the B.P.A.P.M. must be satisfied.

**B.P.A.P.M. with Specialization in Strategic Public Opinion and Policy Analysis (20.0 credits)**

*Credits Included in the Major CGPA (10.5 credits)*

1. 4.0 credits in PAPM 1000 [1.0], PAPM 2000 [1.0], PAPM 3000, PAPM 4000, PAPM 4908 [1.0];
2. 1.5 credits in JOUR 2205 and MCOM 3000 [1.0];
3. 0.5 credit in BUSI 2204 or BUSI 2400;
4. 2.0 credits from: BUSI 3205, BUSI 3207 MCOM 3406, PSCI 3004, PSCI 3306, PSCI 3402, PSCI 3405, PSCI 3406, or PSCI 3407;
5. 1.0 credit from: PSCI 4701, MCOM 4000, or MCOM 4002;
6. 1.5 credits from: JOUR.4000 [1.0], PSCI 4000 [1.0]C, PSCI 4003, PSCI 4204, PSCI 4401, or PSCI 4407;

*Credits Not Included in the Major CGPA(9.5 credits)*

7. 1.0 credit from: PSCI 2700 [1.0] or MCOM 2001 [1.0];
8. 1.0 credit in either LAWS 2005 [1.0] or (LAWS 3603 and LAWS 3604);
9. 1.5 credits in ECON 1000 [1.0], BUSI 3602;
10. 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
11. 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
12. 4.0 credits in free electives;

*Additional Requirement*

13. The language requirement of the B.P.A.P.M. must be satisfied.

**B.P.A.P.M. with Specialization in Social Policy (20.0 credits)**

*Credits Included in the Major CGPA(10.5 credits)*

1. 4.0 credits in PAPM 1000 [1.0], PAPM 2000 [1.0], PAPM 3000, PAPM 4000, PAPM 4908 [1.0];
2. 1.0 credit from: ECON 3407 and ECON 3408;
3. 2.0 credits in SOWK 2100, SOWK 3100, SOWK 4105, SOCI 4403;
4. 0.5 credit from: PSCI 3006 or PSCI 3401;
5. 1.0 credit in Social Policy Law Electives;
6. 0.5 credit in Social Policy Political Science Electives;
7. 0.5 credit in Social Policy Business Electives;
8. 0.5 credit in Social Policy Business or Sociology Electives;
9. 0.5 credit in Social Policy Electives of any type;

*Credits Not Included in the Major CGPA(9.5 credits)*

10. 1.0 credit from: PSCI 2700 [1.0], MCOM 2001 [1.0] or ECON 2200 [1.0];
11. 1.0 credit in LAWS 2005 [1.0];
12. 1.5 credits in ECON 1000 [1.0], BUSI 3602;
13. 1.0 credit in either (PSCI 2002 and PSCI 2003) or (PSCI 2101 and PSCI 2102);
14. 1.0 credit from: HIST 1300 [1.0], HIST 1002 [1.0] or HIST 1700 [1.0];
15. 4.0 credits in free electives;

*Additional Requirement*

16. The language requirement of the B.P.A.P.M. must be satisfied.

## Social Policy Electives

*Business*

BUSI 3102, BUSI 3107, BUSI 4105, BUSI 4203

*Economics*

ECON 3206, ECON 3401, ECON 3506, ECON 3507, ECON 4306, ECON 4405, ECON 4605

*Law*

LAWS 3000, LAWS 3001, LAWS 3005, LAWS 3006, LAWS 3303, LAWS 3305, LAWS 3306, LAWS 3307, LAWS 3401, LAWS 3402, LAWS 3405, LAWS 3504, LAWS 3800, LAWS 4001, LAWS 4307, LAWS 4308, LAWS 3506, LAWS 3508, LAWS 4402, LAWS 4504, LAWS 4507, LAWS 4607

*Political Science*

PSCI 3006, PSCI 3109, PSCI 3401, PSCI 3402, PSCI 3404, PSCI 3405, PSCI 3500, PSCI 4103, PSCI 4106, PSCI 4107, PSCI 4109, PSCI 4205, PSCI 4407

*Social Work*

SOWK 3101, SOWK 4202, SOWK 3205, SOWK 4204, SOWK 3206, SOWK 4300, SOWK 3207, SOWK 4102, SOWK 4103, SOWK 4104

*Sociology*

SOCI 3703, SOCI 4001;

*Sociology-Anthropology*

SOAN 3003

---

## Certificate in Public Service Studies

School of Public Policy and Administration

The Certificate program is designed primarily for public employees who seek special training in public service subjects at the undergraduate level.

Courses taken for the Certificate may be credited towards a Bachelor of Arts degree. A student transferring into a Bachelor of Arts program will normally be required to take at least 9.0 further credits. At least 5.0 of the credits required for the degree must be completed after the awarding of the Certificate.

Full-time candidates for the Certificate are invited to inquire about possible financial aid.

### Admission Requirements

The basic admission requirement is the completion of the OSSD including six OACs or equivalent, with an overall average of 60 percent or better. Special consideration will be extended to other applicants under Mature Applicant regulations.

Candidates may be admitted with advanced standing, but must complete at least 4.0 credits, including all core courses, for the Certificate at Carleton University.

Students who have completed an undergraduate degree are not eligible for admission to the Certificate program. They are encouraged, however, to investigate the undergraduate and graduate degree and diploma programs offered by the School.

### Academic Standing

To qualify for the Certificate, the candidate must obtain a grade of C or better in at least half of the credits taken at Carleton University for the certificate.

### Course Requirements (6.0 credits)

The following courses are required and the following order is suggested:

1. 1.0 credit in Political Science (PSCI 1001 and PSCI 1002) or PSCI 1000[1.0];
2. 1.0 credit in Economics ECON 1000[1.0];
3. 1.0 credit from History HIST 1300[1.0], HIST 2303[1.0], HIST 2304[1.0] or HIST 2305[1.0];
4. 1.0 credit in Political Science (PSCI 2002 and PSCI 2003), or PSCI 2000[1.0];
5. 0.5 credit in Political Science PSCI 3401;
6. 1.5 credits chosen in consultation with the Director according to the needs of the student.

---

## Social Work

School of Social Work  
Faculty of Public Affairs and Management

This section presents the requirements for

### • Bachelor of Social Work – B.S.W.

In addition to the requirements listed below, students must satisfy the University regulations including the process of Academic Performance Evaluation (see the *Academic Regulations of the University* section of this Calendar).

Students should consult with the School when planning their program and selecting courses.

### Academic Performance Evaluation for Social Work

Students in the Bachelor of Social Work program are assessed by the standard process of Academic Performance Evaluation with the following exception:

Good Standing in the B.S.W. requires:

1. If the number of credits included in the Overall CGPA is at most 15.0, the Overall CGPA must be at least 6.00 and the Major CGPA must be at least 6.00.
2. If the number of credits included in the Overall CGPA is at least 15.5, the Overall CGPA must be at least 6.00 and the Major CGPA must be at least 6.50.

### Social Work – B.S.W. (20.0 credits)

*Credits Included in the Major CGPA (10.5 credits)*

1. 4.5 credits in SOWK 1000 [1.0], SOWK 2000 [1.0], SOWK 2100, SOWK 3100, SOWK 3200, SOWK 3201 and SOWK 4200;
2. 1.0 credit in SOWK 2500 [1.0] or approved substitute.
3. 2.0 credits SOWK 3600 [2.0],
4. 2.0 credits in either SOWK 4600 [2.0] or (SOWK 4601 [1.0] and SOWK 4602 [1.0]);
5. 1.0 credit in SOWK 4908 or in Social Work at the 4000-level or higher;

*Credits Not Included in the Major CGPA (9.5 credits)*

6. 1.0 credit in Psychology;
7. 1.0 credit in Sociology;
8. 6.0 credits not in Social Work;
9. 1.5 credits in free electives.

### Work Experience and Credit for Field Practice I (SOWK 3600)

On admission to the B.S.W. program, students who have four or more years of human service may apply to the B.S.W. Field Co-ordinator for waiver of the requirement for SOWK 3600. If successful, they will be granted 1.0 elective credit in Social Work and will be required to take 1.0 additional elective credit in Social Work in lieu of SOWK 3600. Applications must be received by September 1 of each year.

### Challenge for Credit

The School of Social Work accepts challenge for credit on elective courses in the B.S.W. program (except for SOWK 3009, SOWK 4209, SOWK 4900 and SOWK 4902). Challenge for credit is not accepted for required B.S.W. courses. (See **Challenge for Credit** in the *Academic Regulations of the University* section of this Calendar.)



## Sociology and Anthropology

Department of Sociology and Anthropology  
Faculty of Arts and Social Science

This section presents the requirements for:

- **Sociology - B.A. Honours with Concentration in Power and Everyday Life - B.A. Honours Applied Social Research - B.A. Honours Population Studies - B.A. Honours**
- **Sociology - B.A. Combined Honours**
- **Sociology and Economics - B.A. Combined Honours**
- **Sociology and Geography - B.A. Combined Honours**
- **Sociology and Journalism - B.A. Combined Honours**
- **Sociology and Mass Communications - B.A. Combined Honours**
- **Sociology and Political Science - B.A. Combined Honours**
- **Sociology and Psychology - B.A. Combined Honours**
- **Anthropology - B.A. Honours**
- **Anthropology with Concentration in Power and Everyday Life - B.A. Honours**
- **Anthropology - B.A. Combined Honours**
- **Sociology-Anthropology - B.A. General**
- **Minor in Sociology**
- **Minor in Anthropology**
- *Mention: français*

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the common regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see *Academic Regulations for the Bachelor of Arts Degree*).

### First Year Courses

Students may receive credit for both SOCI 1000 [1.0] and ANTH 1000 [1.0]. Only one of these credits will be included in the Major CGPA, the other will count against the total number of credits in sociology and/or anthropology. Credit for SOAN 1000 [1.0] precludes further credit for SOCI 1000 [1.0] and/or ANTH 1000 [1.0].

### Sociology - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0] and SOAN 1000 [1.0] with a grade of C+ or better;
2. 1.0 credit from: SOCI 2003 [1.0] and ANTH 2003 [1.0] (SOCI 2003 [1.0] is highly recommended);
3. 3.0 credits in SOAN 2005 [1.0], SOCI 3700 [1.0] and SOCI 4006 [1.0];
4. 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
5. 2.0 credits in Sociology and/or Anthropology at the 2000-level or above;

*Credits Not Included in the Major CGPA (11.0 credits)*

6. 3.0 credits in one discipline excluding Anthropology and Sociology chosen in consultation with the Co-ordinator of the B.A. Honours program in Sociology;
7. 5.0 credits not in SOCI, SOAN or ANTH;
8. 3.0 credits in free electives.

### Sociology with Concentration in Power and Everyday Life - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
2. 1.0 credit in either SOCI 2003 [1.0] or ANTH 2003 [1.0] (SOCI 2003 [1.0] is highly recommended);
3. 4.5 credits in SOAN 2002 [1.0], SOAN 2005 [1.0], SOCI 4006 [1.0], SOCI 3700 [1.0] and SOAN 4908;
4. 0.5 credit in either SOAN 4904 or SOAN 4906;
5. 1.5 credits from SOAN 3003, SOAN 3008, SOAN 3106, SOAN 3205, SOAN 3206, SOAN 3300, SOAN 3309, SOAN 3600, SOAN 3601, SOAN 3803;
6. 1.5 credits from SOAN 4008, SOAN 4009, SOAN 4102, SOAN 4200, SOCI 4400, SOAN 4404, SOAN 4500, SOAN 4506, SOAN 4601, SOAN 4605, SOAN 4707, SOAN 4709;

*Credits Not Included in the Major CGPA (10.0 credits)*

7. 5.0 credits not in SOCI, SOAN or ANTH;
8. 5.0 credits in free electives.

### Sociology with Concentration in Applied Social Research - B.A. Honours (20.0 credits)

*Credits Included in the Major CGPA (10.0 credits)*

1. 1.0 credit in SOCI 1000 [1.0] with a grade of C+ or better;
2. 4.0 credits in SOCI 2003 [1.0], SOAN 2005 [1.0], SOCI 3700 [1.0], SOCI 4006 [1.0];
3. 1.0 credit from SOCI 2501, SOCI 3501, SOCI 3802, SOCI 3803;
4. 2.0 credits from SOCI 4003, SOCI 4004, SOCI 4403, SOCI 4500, SOCI 4501;
5. 1.0 credit in SOCI 4001 and 0.5 credit in Sociology or Anthropology at the 2000-level or above, OR SOCI 4000 or SOCI 4903 [1.0];
6. 1.0 credit from GEOG 2005, GEOG 2006, GEOG 3001, GEOG 3003, STAT 2507, STAT 2509, STAT 2606, STAT 2607;

*Credits Not Included in the Major CGPA (10.0 credits)*

7. 9.0 credits not in SOCI, SOAN or ANTH;
8. 1.0 credits in free electives.

### Sociology with Concentration in Population Studies - B.A. Honours (20.0 credits)

Students may apply for admission into this concentration at the end of their third year.

*Credits Included in the Major CGPA (10.5 credits)*

1. 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better; (SOCI 1000 [1.0] is highly recommended.)
2. 6.5 credits in SOCI 2003 [1.0], SOAN 2005 [1.0], SOCI 2501, SOAN 2200 [1.0], SOCI 3501, SOCI 4000, SOCI 4006 [1.0] SOCI 4903 [1.0];
3. 1.0 credit in either SOCI 3700 [1.0] or (STAT 2507 and STAT 3507);
4. 0.5 credit in Sociology and/or Anthropology at the 4000- or 5000-level;
5. 1.5 credits in Sociology and/or Anthropology at the 2000- or 3000-level. The following courses are recommended: SOAN 2304, SOAN 2401 [1.0], SOCI 2407 [1.0], SOCI 2502, ANTH 3109, SOAN 3200 [1.0] and SOAN 3300;

## Program Information

### *Credits Not Included in the Major CGPA (9.5 credits)*

- 3.0 credits in one discipline excluding Anthropology and Sociology chosen in consultation with the Co-ordinator of the B.A. Honours program in Sociology and the Co-ordinator for Population Studies;
- 5.0 credits not in SOCI, SOAN or ANTH;
- 1.5 credits in free electives.

#### **Note**

Students are required to complete SOCI 4000 with an assignment at Statistics Canada or other agency as part of their concentration requirements. Students should contact the Placement Supervisor to complete arrangements for their placements during the first week of classes in September upon entrance to fourth year.

### **Sociology - B.A. Combined Honours (20.0 credits)**

#### *Credits Included in the Major CGPA (7.0 credits)*

- 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit in either SOCI 2003 [1.0] or ANTH 2003 [1.0] (SOCI 2003 [1.0] is highly recommended);
- 1.0 credit in either SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 1.0 credit in SOCI 3700 [1.0];
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credit in Sociology and/or Anthropology at the 1000-level or above;

#### *Additional Requirements (13.0 credits)*

- The requirements for the other discipline must be satisfied;
- 5.0 credits not in SOCI, SOAN or ANTH or the other discipline;
- Sufficient credits in free electives to make 20.0 credits for the degree.

### **Sociology and Economics – B.A. Combined Honours (20.0 credits)**

#### *Credits Included in the Sociology Major CGPA (6.0 credits)*

- 1.0 credit from: SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit in SOCI 2003 [1.0] or ANTH 2003 [1.0] (SOCI 2003 [1.0] is recommended);
- 1.0 credit in SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credit in Sociology and/or Anthropology at the 2000-level or above;

#### *Credits Included in the Economics Major CGPA (6.0 credits)*

- 1.0 credit in ECON 1000 [1.0] or FYSM 1003 [1.0];
- 4.5 credits in ECON 2002, ECON 2003, ECON 2102, ECON 2103, ECON 2400, ECON 4200, ECON 4201, ECON 4900 [1.0];
- 0.5 credit in Economics at the 4000-level;

#### *Credits Included in Economics or Sociology Major CGPA (1.0 credit)*

- 1.0 credit in ECON 2200 [1.0] or SOCI 3700 [1.0];

### *Credits Not Included in the Either Major CGPA (7.0 credits)*

- 1.0 credit in MATH 1009 and MATH 1109;
- 5.0 credits in electives not in ECON, SOCI, SOAN, ANTH;
- 1.0 credit in free elective.

### **Sociology and Geography - B.A. Combined Honours (20.0 credits)**

#### *Credits Included in the Sociology Major CGPA (7.0 credits)*

- 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit in either SOCI 2003 [1.0] or ANTH 2003 [1.0] (SOCI 2003 [1.0] is highly recommended);
- 1.0 credit in either SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 1.0 credit in either:
  - SOCI 3700 [1.0], or
  - Sociology and/or Anthropology at the 2000-level or above, if GEOG 4904 [1.0] or GEOG 4909 [1.0] is taken;
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credit in Sociology and/or Anthropology at the 2000-level or above;

#### *Credits Included in the Geography Major CGPA (7.0 credits)*

- 1.0 credit from: GEOG 1001 [1.0], FYSM 1009 [1.0], FYSM 1100 [1.0], FYSM 1101 [1.0] or both (GEOG 1002 and GEOG 1003);
- 0.5 credit in GEOG 1100;
- 0.5 credit from: GEOG 2101, GEOG 2200, and GEOG 2300;
- 1.5 credits in GEOG 2005, GEOG 2006, and GEOG 3900;
- 1.5 credits in Geography at the 3000-level;
- 1.0 credit in Geography at the 4000-level;
- 1.0 credit in either:
  - GEOG 4904 [1.0] or GEOG 4909 [1.0], or
  - Geography at the 4000-level, if SOCI 3700 [1.0] is taken;

#### *Credits Not Included in Either Major CGPA (6.0 credits)*

- 5.0 credits not in GEOG, SOCI, SOAN or ANTH;
- 1.0 credit in free electives.

#### **Note**

Students must satisfy either Requirement 4(a) in Sociology or Requirement 13(a) above in Geography.

### **Sociology and Journalism - B.A. Combined Honours (20.0 credits)**

The degree B.A. Combined Honours in Sociology and Journalism is only available to students already admitted to the Bachelor of Journalism program. Consult the Journalism section of this Calendar for Journalism requirements and further regulatory information.

#### *Credits Included in the Sociology Major CGPA (7.0 credits)*

- 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit from: SOCI 2003 [1.0], ANTH 2003 [1.0] or MCOM 2001 [1.0] (SOCI 2003 [1.0] is highly recommended);
- 1.0 credit in either SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 1.0 credit in SOCI 3700 [1.0];
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;

- 1.0 credit in Sociology and/or Anthropology at the 2000-level or above (excluding SOAN 2101 [1.0] if taken before 1994-95).

### **Sociology and Mass Communications - B.A. Combined Honours**

*Credits Included in the Sociology Major CGPA (7.0 credits)*

- 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit from: SOCI 2003 [1.0], ANTH 2003 [1.0] or, if MCOM 2001 [1.0] is taken, 1.0 credit in SOCI, ANTH and SOAN at the 2000-level or above (SOCI 2003 [1.0] is highly recommended);
- 1.0 credit in either SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 1.0 credit in SOCI 3700 [1.0];
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credit in Sociology and/or Anthropology at the 2000-level or above (excluding SOAN 2101 [1.0] or SOAN 3101 [1.0] (if taken before 1994-95), SOAN 4300, SOAN 4301 [1.0] and SOAN 4302);

*Credits Included in the Mass Communications Major CGPA (7.0 credits)*

- 1.0 credit in MCOM 1101 [1.0] or FYSM 1207 [1.0];
- 3.0 credits in MCOM 2001 [1.0], MCOM 2101 [1.0], MCOM 3101 [1.0];
- 1.0 credit at the 2000- or 3000-level in Mass Communication;
- 2.0 credits from MCOM 4000, MCOM 4002, MCOM 4100, MCOM 4102, MCOM 4200, MCOM 4305, MCOM 4500, MCOM 4501, MCOM 4907.

*Credits Not Included in Either Major CGPA (6.0 credits)*

- 5.0 credits not in MCOM, SOCI, SOAN or ANTH;
- 1.0 credit in free electives.

### **Sociology and Political Science – B.A. Combined Honours (20.0 credits)**

*Credits Included in the Sociology Major CGPA (5.0 credits)*

- 1.0 credit in SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit in SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credit in Sociology and/or Anthropology beyond the 1000-level;

*Credits Included in the Political Science Major CGPA (6.0 credits)*

- 1.0 credit in Political Science at the 1000-level or FYSM 1301 [1.0], FYSM 1302 [1.0], FYSM 1303 [1.0], FYSM 1304 [1.0], FYSM 1305 [1.0];
- 1.0 credit in PSCI 2300 [1.0];
- 1.0 credits from the 4000-level Seminars in Political Science;
- 3.0 credits in Political Science satisfying:
  - at least 1.0 credit from the 4000-level Seminars in Political Science;
  - at least 2.0 credits in courses in Canadian Government and Politics and/or Comparative Politics and International Relations;

*Credits Included in Either the Political Science or Sociology Major CGPA (2.0 credits)*

- 2.0 credits in a methodology sequence, either:

- PSCI 2700 [1.0] and SOCI 3700 [1.0];

or

- SOCI 2003 [1.0] (or ANTH 2003 [1.0]) and PSCI 4701 and PSCI 4702;

*Credits Not Included in Either Major CGPA (7.0 credits)*

- 5.0 credits in electives not in PSCI, SOCI, SOAN or ANTH;
- 2.0 credits in free electives;

*Additional Requirements*

- The Political Science Departmental Language Requirement must be satisfied.

### **Note**

Political Science PSCI 4701 and PSCI 4702 may not be offered every year.

### **Sociology and Psychology - B.A. Combined Honours (20.0 credits)**

*Credits Included in the Sociology Major CGPA (7.0 credits)*

- 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 1.0 credit in SOCI 2003 [1.0] or ANTH 2003 [1.0] (SOCI 2003 [1.0] is recommended). Note: Students who take PSYC 2000 [1.0] or (PSYC 2001 and PSYC 2002) may substitute 1.0 credit in Sociology and/or Anthropology at the 2000-level or above for this requirement;
- 1.0 credit in SOAN 2005 [1.0] or SOCI 4006 [1.0] (Note that SOAN 2005 [1.0] is a prerequisite of SOCI 4006 [1.0]);
- 2.0 credits in Sociology and/or Anthropology at the 4000- or 5000-level;
- 1.0 credits in SOCI 3700 [1.0]. Note: Students who take PSYC 3000 [1.0] may substitute 1.0 credit in Sociology and/or Anthropology at the 2000-level or above for this requirement;
- 1.0 credit in Sociology and/or Anthropology at the 2000-level or above;

*Credits Included in the Psychology Major CGPA (7.0 credits)*

- 1.0 credits in PSYC 1001 and PSYC 1002;
- 1.0 credit in (PSYC 2001 and PSYC 2002) or PSYC 2000 [1.0];
- 1.0 credit from: PSYC 2200, PSYC 2500 or PSYC 2700;
- 1.0 credit from: PSYC 2100, PSYC 2400, PSYC 2300, PSYC 2600 or PSYCH 2800;
- 1.0 credit in PSYC 3000 [1.0];
- 1.0 credit in PSYC 3100 [1.0], PSYC 3200 [1.0], PSYC 3400 [1.0], PSYC 3500 [1.0], PSYC 3600 [1.0], PSYC 3700 [1.0], PSYC 3800 [1.0];
- 1.0 credit in PSYC 4905 [1.0] or PSYC 4908 [1.0];

*Credits Not Included in Either Major CGPA (6.0 credits)*

- 5.0 credits in electives not in PSYC, SOCI, SOAN or ANTH;
- 1.0 credits in free electives.

### **Anthropology - B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.0 credits)*

- 1.0 credit from ANTH 1000 [1.0], SOCI 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
- 4.0 credits in ANTH 2003 [1.0], ANTH 2301, ANTH 4009, ANTH 3100 [1.0], ANTH 4905 [1.0];

## Program Information

3. 1.5 credits Anthropology and/or Sociology at the 4000- or 5000-level;
4. 2.5 credits in Anthropology and/or Sociology at the 2000-level or above;

*Credits Not Included in the Major CGPA (11.0 credits)*

5. 8.0 credits not in SOCI, SOAN or ANTH;
6. 3.0 credits in free electives.

### **Anthropology with Concentration in Power and Everyday Life - B.A. Honours (20.0 credits)**

*Credits Included in the Major CGPA (9.0 credits)*

1. 1.0 credit from ANTH 1000 [1.0], SOCI 1000 [1.0], SOAN 1000 [1.0] with a grade of C+ or better;
2. 4.5 credits in ANTH 2003 [1.0], SOAN 2002 [1.0], ANTH 2301, ANTH 3100 [1.0], ANTH 4009, SOAN 4907;
3. 0.5 credits in either SOAN 4904 or SOAN 4906;
4. 1.5 credits from: SOAN 3003, SOAN 3007, SOAN 3008, SOAN 3106, SOAN 3205, SOAN 3206, SOAN 3300, SOAN 3309, SOAN 3504, SOAN 3600, SOAN 3601, SOAN 3803;
5. 1.5 credits from: SOAN 4008, SOAN 4009, SOAN 4102, SOAN 4200, SOCI 4400, SOAN 4404, SOAN 4500, SOAN 4506, SOAN 4601, SOAN 4605, SOAN 4707, SOAN 4709;

*Credits Not Included in the Major CGPA (11.0 credits)*

6. 8.0 credits not in SOCI, SOAN or ANTH;
7. 3.0 credits in free electives.

### **Anthropology - B.A. Combined Honours (20.0 credits)**

*Credits Included in the Anthropology Major CGPA (6.0 credits)*

1. 1.0 credit from: ANTH 1000 [1.0], SOCI 1000 [1.0] and SOAN 1000 [1.0] with a grade of C+ or better;
2. 2.0 credits in ANTH 2003 [1.0] and ANTH 3100 [1.0];
3. 1.0 credit in Anthropology and/or Sociology at the 4000- or 5000-level;
4. Either
  - a) 2.0 credits in ANTH 2301, ANTH 4009, and ANTH 4905 [1.0];
  - or
  - b) 2.0 credits in Anthropology and/or Sociology beyond the 1000-level if an Honours Essay is completed in the other discipline;

*Additional Requirements (14.0 credits)*

5. The requirements for the other discipline must be satisfied;
6. 5.0 credits not in SOCI, SOAN or ANTH or the other discipline;
7. Sufficient credits in free electives to make 20.0 credits for the degree;
8. Students are required to complete an Honours Essay. In those cases where the second discipline does not require an Honours Essay, alternative arrangements may be considered by the Co-ordinator of Honours (Anthropology).

### **Sociology-Anthropology - B.A. General (15.0 credits)**

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit from SOCI 1000 [1.0], ANTH 1000 [1.0] and SOAN 1000 [1.0] with a grade of C- or better;
2. 1.0 credit in either SOCI 2003 [1.0] or ANTH 2003 [1.0];
3. 1.0 credit in either SOAN 2005 [1.0] or ANTH 3100 [1.0];

4. 1.0 credit in Sociology and/or Anthropology at the 3000-level or above;
5. 2.0 credits in Sociology and/or Anthropology at the 2000-level or above.

*Credits Not Included in the Major CGPA (9.0 credits)*

6. 7.0 credits not in SOCI, SOAN or ANTH;
7. 2.0 credits in free electives.

### **Minor in Sociology**

Open to all undergraduate degree students in programs other than Sociology and/or Anthropology.

*Requirements (4.0 credits)*

1. 1.0 credit in SOCI 1000 [1.0];
2. 1.0 credit from: SOCI 2003 [1.0] or SOAN 2005 [1.0];
3. 2.0 credits in Sociology (SOCI) at the 2000-level or above.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

### **Minor in Anthropology**

Open to all undergraduate degree students in programs other than Sociology and/or Anthropology.

*Requirements (4.0 credits)*

1. 1.0 credit in ANTH 1000 [1.0];
2. 1.0 credit in ANTH 2003 [1.0];
3. 2.0 credits in Anthropology (ANTH) at the 2000-level or above.
4. The remaining requirements of the major discipline(s) and degree must be satisfied.

*Mention: français*

Students who wish to qualify for the *Mention: français* notation in Sociology-Anthropology may do so by including the following pattern of courses in their degree program:

1. 1.0 credit in the advanced study of the French language (FREN 1600 [1.0]).
2. 1.0 credit in French-Canadian culture and heritage (FREN 2700 [1.0]).
3. 1.0 credit at the 2000- or 3000-level in Sociology and/or Anthropology taught in French at Carleton or at another University, and approved by the B.A. General or B.A. Honours Program Co-ordinators.
4. In addition, for B.A. Honours Sociology or Anthropology, 1.0 credit at the 4000-level in Sociology or Anthropology taught in French at Carleton or at another University, as approved by the respective B.A. Honours Program Co-ordinator.

### **Articulation Agreement - B.A. General (Carleton)/Police Foundations (Algonquin)**

An articulation agreement between Carleton University and Algonquin College of Applied Arts and Technology permits graduates with a Diploma in Police Foundations from Algonquin College to apply for admission into the B.A. General program at Carleton University. Successful applicants will be granted 5.0 credits on admission towards the completion of a B.A. General in either Criminology, or Law, or Psychology, or Sociology.

To be eligible for admission according to this Articulation Agreement, students must have completed the Diploma in Police Foundations at Algonquin College with an overall B average (Grade Point Average of 3.0). They will then be considered for admission to a B.A. General program at Carleton in one of Criminology, Law, Psychology, or Sociology.

Course transfers: 2.0 credits in Law, 2.0 credits in Sociology, and 0.5 in Political Science and 0.5 in Psychology.

## Technology, Society and Environment Studies

Technology, Society and Environment Studies Committee  
Faculty of Science

This section presents the requirements for:

- **Minor in Technology, Society and Environment Studies (TSE)**

Students may also submit a coherent pattern of courses in TSE Studies for a B.A. Honours or B.A. General in Directed Interdisciplinary Studies, in accordance with the procedures described in the *Academic Regulations for the Bachelor of Arts Degree* section of this Calendar. Assistance in planning such a pattern is available from members of the TSE Committee.

### Minor in Technology, Society and Environment Studies (TSE)

This minor is available to all students.

*Requirements (4.0 credits)*

1. 1.0 credit in ISCI 2001; ISCI 2002;
2. 1.0 credit in TSES 3001; TSES 3002;
3. 1.0 credit in ISCI 1001 and ISCI 1002 or in TSES 2305[1.0] (CLCV 2305[1.0]);
4. 1.0 credit from TSES 4001; TSES 4002; TSES 4003; TSES 4005; TSES 4006; TSES 4007;
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

#### Note

This Minor is designed for all students. There are no requirements for OAC Science credits or University level credits in Natural Sciences. Students with one or more OAC and/or University credits in Science can replace ISCI 1001 and ISCI 1002 with TSES 2305, and/or additional half-credit 4000-level TSE courses. This requires permission of the Chair of TSE.

## Undeclared

Bachelor of Arts

Bachelor of Science

Degree students may begin their studies in the B.A. or in the B.Sc. degree as Undeclared Students. This means that they have not yet chosen a program within the degree. Undeclared students normally must apply to enter a program before beginning their second year of study. The Student Academic Success Centre offers support to Undeclared students in making this decision.

To give themselves the greatest range of choices when selecting a program, Undeclared students should conform to the following guidelines in selecting their courses.

### Bachelor of Arts

*Undeclared B.A. students should register in:*

1. A B.A. First-year seminar (FYSM);
2. Courses in at least three different disciplines leading to programs within the B.A.

Requirement 1 is mandatory for most first year B.A. students. Guidance in selecting courses to meet the condition of Requirement 2 is contained in the *Handbook for New Students*.

### Bachelor of Science

*Undeclared B.Sc. students should register in:*

1. 2.0 credits in Experimental Science;
2. 1.0 credit in Mathematics;
3. 1.0 credit in Mathematics, Experimental Science or Computer Science;
4. 1.0 credit chosen from NSCI 1000 Seminar in Science and/or Approved Arts or Social Sciences.

Experimental Science Courses

**Biology:** BIOL 1003, BIOL 1004

**Chemistry:** CHEM 1000[1.0]

**Geology:** GEOL 1006, GEOL 1007, GEOL 1008

**Physics:** PHYS 1001 and PHYS 1002, PHYS 1003 and PHYS 1004, PHYS 1007 and PHYS 1008

Appropriate Mathematics Courses

**Calculus:** MATH 1002[1.0], MATH 1007

**Algebra:** MATH 1102[1.0], MATH 1107

Appropriate Computer Science Courses

COMP 1004, COMP 1005, COMP 1006

Approved Arts or Social Sciences

These courses are specified in the *Academic Regulations for the Bachelor of Science Degree* section of this Calendar.

### Academic Standing for Undeclared Students

For purposes of Academic Performance Evaluation, Undeclared students are assessed using only the Overall CGPA.

---

## Women's Studies

Pauline Jewett Institute of Women's Studies  
Faculty of Arts and Social Sciences

This section presents the requirements for:

- **Women's Studies - B.A. Combined Honours**
- **Women's Studies - B.A. General**
- **Minor in Women's Studies**

In addition to the requirements listed below, students must satisfy:

- i) the University regulations (see the *Academic Regulations of the University* section of this Calendar),
- ii) the Faculty regulations applying to all B.A. students including those relating to First-Year Seminars and Breadth requirements (see the *Academic Regulations for the Bachelor of Arts Degree* section of this Calendar.)

Students should consult with the Institute when planning their program and selecting courses.

### Women's Studies - B.A. Combined Honours (20 credits)

*Credits Included in the Women's Studies Major CGPA (7.0)*

1. 1.0 credit in WOMN 1808[1.0] or FYSM 1402[1.0] or FYSM 1403[1.0];
2. 1.0 credit in WOMN 2800 and WOMN 2801;
3. 1.0 credit in WOMN 3808[1.0];
4. 3.0 credits from ANTH 2408, ANTH 2409, ARTH 3601, ENGL 2902[1.0], HIST 2504[1.0], HIST 3406, HIST 3504[1.0], HIST 3603, HIST 3705, LAWS 3001, LALS 2703, MCOM 3505, MUSI 3302, MUSI 4303, PHIL 2306, PHIL 2307, PSCI 3500, PSCI 3501, PSCI 3502, PSYC 3603, RELI 2003, RELI 3205, SOCI 2407[1.0], WOMN 2802, WOMN 3002[1.0], WOMN 3003[1.0];
5. 1.0 credit from: WOMN 4900, WOMN 4901, WOMN 4902, WOMN 4903, WOMN 4904[1.0], WOMN 495, WOMN 4908[1.0], BUSI 4602, HIST 4502[1.0], HIST 4504[1.0], HIST 4509[1.0], JOUR 4307, LAWS 4001, LAWS 4002, PHIL 4203, PHIL 4204, PSCI 4500, SOCI 4007, SOAN 4709;

*Additional Requirements*

6. The requirements for Combined Honours in the other discipline must be met;
7. 5.0 credits in electives not in Women's Studies or the other discipline;
8. Sufficient electives to make a total of 20.0 credits for the degree.

#### Note

Other courses may be substituted for the credits specified above in items 4 and 5 when material on gender and/or women is central to the course. Such substitutions must be individually approved by the Institute of Women's Studies.

### Women's Studies - B.A. General (20 credits)

*Credits Included in the Major CGPA (6.0 credits)*

1. 1.0 credit in WOMN 1808[1.0] or FYSM 1402[1.0] or FYSM 1403[1.0];
2. 1.0 credit in WOMN 2800 and WOMN 2801;
3. 1.0 credit in WOMN 3808[1.0];
4. 1.0 credit from ARTH 3601, FILM 3301, HIST 3406, HIST 3504[1.0], HIST 3603, HIST 3705, HIST 3707, LAWS 3001, MCOM 3505, MUSI 3302, PSCI 3500, PSCI 3501, PSCI 3502, PSYC 3603, RELI 3205, SOCI 3201, WOMN 3002[1.0];

5. 2.0 credits from the courses in Item 4 and the following: ANTH 2408, ANTH 2409, ENGL 2902[1.0], HIST 2504[1.0], LALS 2703, PHIL 2306, PHIL 2307, RELI 2003, SOCI 2407[1.0], WOMN 2802.

*Credits Not Included in the Major CGPA (9.0 credits)*

6. 7.0 credits in electives not in Women's Studies
7. 2.0 credits in free electives

*Additional Requirements*

8. Students must complete a Minor in another academic discipline.

#### Note

Other courses may be substituted for the credits specified above in item 4 when material on gender and/or women is central to the course. Such substitutions must be individually approved by the Institute of Women's Studies.

### Minor in Women's Studies

1. 1.0 credit in WOMN 1808[1.0] or FYSM 1402[1.0] or FYSM 1403[1.0].
2. 1.0 credit in WOMN 2800 and WOMN 2801
3. 1.0 credit from FILM 3301, HIST 3406, HIST 3504[1.0], HIST 3603, HIST 3705, LAWS 3001, MCOM 3505, MUSI 3302, PSCI 3500, PSCI 3501, PSCI 3502, PSYC 3603, RELI 3205, SOWK 3204, WOMN 3002[1.0], WOMN 3003.
4. 1.0 credit from the courses in item 3, or ANTH 2408, ANTH 2409, ENGL 2902[1.0], HIST 2504[1.0], LALS 2703, PHIL 2306, PHIL 2307, RELI 2003, SOCI 2407[1.0], WOMN 2802.
5. The remaining requirements of the major discipline(s) and degree must be satisfied.

#### Note

Other courses may be substituted for the credits specified above when material on gender and/or women is central to the course. Such substitutions must be individually approved by the Institute of Women's Studies.

### Courses with substantial material on gender or women's experience offered within the Faculties of Arts and Social Sciences and Public Affairs and Management

The following course offerings are listed for the convenience of students. Detailed course descriptions will be found under the appropriate departmental course listings.

**Note:** Special Topics courses and other courses offered by units throughout the University may in any given year contain substantial material on gender and/or women's experience. Recent examples include certain courses in Art History, Geography, History, Journalism and Sociology.

### Faculty of Arts and Social Sciences

*Art History*  
ARTH 3601, ARTH 4000, ARTH 4600

*Comparative Literary Studies*  
CLST 3002

*English Language and Literature*  
ENGL 2108, ENGL 2109

*Film Studies*  
FILM 3301

*History*  
HIST 2504, HIST 3106, HIST 3406, HIST 3504, HIST 3603, HIST 3705, HIST 3707, HIST 4502, HIST 4504, HIST 4509

*Linguistics and Applied Language Studies*  
LALS 2703

*Music*

MUSI 3302, MUSI 4303

*Philosophy*

PHIL 2306, PHIL 2307, PHIL 4203, PHIL 4204

*Psychology*

PSYC 3603

*Religion*

RELI 2003, RELI 3205

*Sociology-Anthropology*

SOCI 2407[1.0], SOCI 3201, SOCI 4007, SOCI 4802, ANTH 2408, ANTH 2409, SOAN 1001 [1.0], SOAN 2401[1.0], SOAN 3008, SOAN 4509, SOAN 4605, SOAN 4709

**Faculty of Public Affairs and Management**

*Business*

BUSI 4107, BUSI 4602

*Economics*

ECON 3100

*Journalism*

JOUR 4307

*Law*

LAWS 3001, LAWS 3503, LAWS 3804, LAWS 4001, LAWS 4002

*Mass Communication*

MCOM 3505

*Political Science*

PSCI 3500, PSCI 3501, PSCI 3502, PSCI 4500, PSCI 4605

*Social Work*

SOWK 2004, SOWK 3201, SOWK 3204, SOWK 4206