

# COURSE REQUIREMENTS

## Course Requirements for Bachelor of Science

All required and complementary courses used to fulfil program requirements, including the basic Science requirements, must be completed with a grade of C or better. Students who fail to obtain a Satisfactory grade in a required course must either pass the supplemental examination in the course or do additional work for a supplemental grade, if these options are available, or repeat the course. Course substitution will be allowed only in special cases; students should consult their academic advisor.

Normally, students are permitted to repeat a failed course only once (failure is considered to be a grade of less than C or the administrative failures of J and KF). If a required course is failed a second time, students must submit an appeal in writing (by email) to their degree advisor, to obtain permission from the Associate Dean (Student Affairs), Faculty of Science, to take the course a third time. If permission is denied by the Associate Dean and/or by the Committee on Student Standing on appeal, students must withdraw from the program. If the failed course is a complementary course required by the program, students may choose to replace it with another appropriate complementary course. If you choose to substitute another complementary course for a complementary course in which a D was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a D was received, credit will be given only once.

Full details of the course requirements for all programs offered are given in each unit's section together with the locations of program advisory offices, program directors, and telephone numbers should further information be required.

## Course Overlap

You will not receive additional credit towards your degree for any course that overlaps in content with a course for which you have already received credit at McGill, CEGEP, at another university, or Advanced Placement (AP) exams, Advanced Level Results, International Baccalaureate Diploma, or French Baccalaureate. It is your responsibility to consult with a degree advisor in the Science Office of Undergraduate Student Advising (SOUSA), or the academic unit/department offering the course as to whether or not credit can be obtained and to be aware of exclusion clauses specified in the course description in this publication.

For detailed information on transfer credits, consult McGill's Transfer Credit & Advanced Standing website.

Sometimes, the same course is offered by two different units/departments allowing students from multiple disciplines to enroll. These are called 'double-prefix' courses. For example, **LING 345 / COMP 345 From Natural Language to Data Science (3 credits)** is listed under both Linguistics and Computer Science. When such courses are offered simultaneously, you should take the course offered by the department of your declared program. For example, Linguistics students (in the Faculty of Arts) should take LING 345, and Computer Science students (in the Faculty of Science) should

take COMP 345. If a double-prefix course is offered by different departments in alternate years, you may take whichever course best fits your schedule.

**Note for Arts students:** Credit for computer courses offered by the School of Computer Science is governed by rules specified in each individual course description.

**Note for Science, and Bachelor of Arts and Science students:** Credit for statistics courses offered by faculties other than Arts and Science requires the permission of the Associate Dean (Student Affairs), Science, except for students in the B.Sc. Major in Environment, who may take required statistics courses in the Faculty of Agricultural and Environmental Sciences necessary to satisfy their program requirements. Credit for computer courses offered by faculties other than Science requires the permission of the Associate Dean (Student Affairs), Science, and will be granted only under exceptional circumstances.

Credit for statistics courses for **Arts, Science, and Bachelor of Arts and Science students** will be given with the following stipulations:

- Credit will be given for only **one** of the following introductory statistics courses:

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| Course     | Title                                 | Credits |
|------------|---------------------------------------|---------|
| AEMA 310   | Statistical Methods 1.                | 3       |
| BIOL 373   | Biometry.                             | 3       |
| ECON 227D1 | Economic Statistics.                  | 3       |
| ECON 257D1 | Economic Statistics - Honours.        | 3       |
| EDPE 375   | Introductory Statistics.              | 3       |
| GEOG 202   | Statistics and Spatial Analysis.      | 3       |
| MATH 203   | Principles of Statistics 1.           | 3       |
| MGCR 271   | Business Statistics.                  | 3       |
| MGCR 273   | Introductory Management Statistics.   | 3       |
| POTH 204   | Introduction to Statistics for OT/PT. | 3       |
| SOCI 350   | Statistics in Social Research.        | 3       |

- Students who have already received credit for PSYC 204 Introduction to Psychological Statistics. **will not** receive credit for any of the following:

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| Course     | Title                                 | Credits |
|------------|---------------------------------------|---------|
| AEMA 310   | Statistical Methods 1.                | 3       |
| BIOL 373   | Biometry.                             | 3       |
| ECON 227D1 | Economic Statistics.                  | 3       |
| ECON 257D1 | Economic Statistics - Honours.        | 3       |
| EDPE 375   | Introductory Statistics.              | 3       |
| GEOG 202   | Statistics and Spatial Analysis.      | 3       |
| MATH 203   | Principles of Statistics 1.           | 3       |
| MGCR 271   | Business Statistics.                  | 3       |
| MGCR 273   | Introductory Management Statistics.   | 3       |
| POTH 204   | Introduction to Statistics for OT/PT. | 3       |
| SOCI 350   | Statistics in Social Research.        | 3       |

- Credit will be given for only **one** of the following intermediate statistics courses:

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| Course     | Title                               | Credits |
|------------|-------------------------------------|---------|
| AEMA 411   | Experimental Designs 01.            | 3       |
| ECON 227D1 | Economic Statistics.                | 3       |
| ECON 257D1 | Economic Statistics - Honours.      | 3       |
| GEOG 351   | Quantitative Methods.               | 3       |
| MATH 204   | Principles of Statistics 2.         | 3       |
| PSYC 305   | Statistics for Experimental Design. | 3       |
| SOCI 461   | Quantitative Data Analysis.         | 3       |

with the exception that you may receive credit for both PSYC 305 Statistics for Experimental Design. and ECON 227D1 Economic Statistics./ECON 227D2 Economic Statistics. or ECON 257D1 Economic Statistics - Honours./ECON 257D2 Economic Statistics - Honours..

- Students who have already received credit for MATH 324 Statistics. or MATH 357 Honours Statistics. will **not** receive credit for any of the following:

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| Course     | Title                                     | Credits |
|------------|-------------------------------------------|---------|
| AEMA 310   | Statistical Methods 1.                    | 3       |
| AEMA 411   | Experimental Designs 01.                  | 3       |
| BIOL 373   | Biometry.                                 | 3       |
| ECON 227D1 | Economic Statistics.                      | 3       |
| ECON 257D1 | Economic Statistics - Honours.            | 3       |
| GEOG 202   | Statistics and Spatial Analysis.          | 3       |
| GEOG 351   | Quantitative Methods.                     | 3       |
| MATH 203   | Principles of Statistics 1.               | 3       |
| MATH 204   | Principles of Statistics 2.               | 3       |
| MGCR 271   | Business Statistics.                      | 3       |
| MGCR 273   | Introductory Management Statistics.       | 3       |
| PSYC 204   | Introduction to Psychological Statistics. | 3       |
| PSYC 305   | Statistics for Experimental Design.       | 3       |
| SOCI 350   | Statistics in Social Research.            | 3       |

- For 500-level statistics courses not listed above, students must consult a program/department advisor to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500-level course will not be allowed.

## Courses Outside the Faculties of Arts and of Science

Students in the Faculty of Science should consult the statement of regulations (see below) for taking courses outside the Faculties of Arts and of Science. A list of approved/restricted courses in other faculties can be found in the The Faculty of Science's Undergraduate Handbook (Section 3.2.2 List of approved and restricted courses outside the Faculty of Science). Students may take courses on the approved list and may not, under any circumstances, take courses on the restricted list for credit. Requests for permission to take courses that are not

on either list should be submitted in writing (by email) to the degree advisor (in SOUSA), to be approved by the Associate Dean (Student Affairs), Science.

The regulations are as follows:

- Students may take only 6 credits per year, up to 18 credits in all, of courses outside the Faculties of Arts and of Science.
- Courses offered in the Faculty of Science or in the Faculty of Arts are found in the Course Catalogue Course Search tool.
- Courses in other faculties that are considered as taught by Science (e.g., BIOT, EXMD, and PHAR) are so designated as offered by the Faculty of Science in the Course Search tool.
- Courses in Music are considered as outside the Faculties of Arts and of Science, except MUAR courses, which are considered Arts courses.
- All courses listed in the Religious Studies (RELG) section are considered courses in Arts and Science except for courses restricted to B.Th. or S.T.M. students and courses that require permission from the Chair of the B.Th. Committee.
- Students should consult the list of restricted courses outside of the Faculties of Arts and of Science in the Science Undergraduate Handbook (Section 3.2.2 List of approved and restricted courses outside the Faculty of Science).
- Students must have the necessary prerequisites and permission of the instructor for such courses.
- Credit for computer and statistics courses offered by faculties other than Arts and Science require the permission of the Associate Dean (Student Affairs), Science, and will be granted only under exceptional circumstances. Requests must be submitted in writing (by email) to the Faculty (SOUSA) advisor.
- If a student uses Minerva to register for a course that exceeds the specified limitations or is not approved, the course will be flagged for no credit after the course change period.
- Credit will not be given for any "how to" courses offered by other faculties that are intended to provide practical or professional training in specific applied areas. Examples include courses that teach the use of certain computer packages (databases, spreadsheets, etc.) or computer languages (SQL, COBOL, FORTRAN, etc.); machine shop or electronic shop courses; technical drawing courses; and professional practice courses.
- Students in the **Bieler School of Environment** may exceed the 18-credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study.
- Students in the **Major in Software Engineering** may exceed the 18-credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study.
- Students in the B.Sc. Liberal Program taking a **Major Concentration in Music** may exceed the 18-credit limit for courses outside the Faculties of Arts and of Science, provided that all such courses are necessary to complete their program of study, up to a maximum of 36 Music credits.
- The 18-credit limit applies to students taking the **Minor in Nutrition**; equivalent courses in Science should be taken instead of courses in the Faculty of Agricultural and Environmental Sciences.

## Correspondence, Distance Education, or Web-Based Courses

Science students may obtain transfer credit for correspondence, distance education, or web-based courses if they receive prior approval from the appropriate McGill department for the course content **and** prior approval from the Science Office of Undergraduate Student Advising for the method of delivery and evaluation. Consult the Science Undergraduate Handbook (Section 4.5 Transfer Credits) for details and instructions.

Courses taught through distance education from institutions other than McGill will only be considered for transfer credits under the following conditions:

- The course is given by a government-accredited, degree-granting institution acceptable to McGill.
- The course counts for credit toward degrees granted at the institution giving the course.
- The combined total of regular course credits and distance education course credits do not exceed the permitted maximum number of credits per term according to Faculty regulations.
- Courses taught through distance education may not be used to complete program requirements, except on an individual basis when serious, documented circumstances warrant it.

## Courses in English as a Second Language (ESL)

ESL courses are only open to students whose primary language is not English and who have studied for fewer than five years in English-language secondary institutions. Students in the B.Sc. may take a maximum of 12 credits, including academic writing courses for non-anglophones, from the list of ESL courses in the McGill Writing Centre.

## First-Year Seminars: Registration for First-Year Seminars in the Faculty of Science

Registration for First-Year Seminars is limited to students in their first year of study at McGill, i.e., newly admitted students in U0 or U1. These courses are designed to provide a closer interaction with professors and better working relations with peers than is available in large introductory courses. These seminars endeavour to teach the latest scholarly developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis. The maximum number of students in any seminar is 25, although some are limited to fewer than that.

You may take only one First-Year Seminar. If you register for more than one, you will be obliged to withdraw from all but one of them. Please consult the departmental listings for course descriptions and availability.

### First-Year Seminars

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| Course   | Title                              | Credits |
|----------|------------------------------------|---------|
| EPSC 199 |                                    | 3       |
| PSYT 199 | FYS: Mental Illness and the Brain. | 3       |

The First-Year Seminars offered by the Faculty of Arts are also open to Science students. For a complete listing, please consult the First-Year Seminars page.

## Course Credit Weight

The credit assigned to a particular course should reflect the amount of effort it demands of a student. One credit equals about 45 hours of work. This may be a combination of lecture, laboratory, tutorial, and conference time plus personal study hours. Personal study hours may include required activities, group activities, time spent doing assignments, and preparing and reviewing for a course.