

For First Year Students Planning to Major in BIOL or MARI

- ❑ Visit the **Degree Checklists** page on the Department of Biology website and download the checklist for the degree you are interested in (BSc BIOL, BSc MARI, etc.):
 - <https://www.dal.ca/faculty/science/biology/BiologyProgram/degree-checklists.html>
 - see p. 2 of this document for a guide to interpreting a Degree Checklist
- ❑ Draft your 2nd year schedule based on the requirements in the checklist and when courses are offered in the timetable. Consider taking:
 - three or four 2000-level BIOL courses
 - electives of your choice (see p. 3)
 - any missing first year requirements, if applicable
- ❑ First year didn't go quite as well as you'd hoped? Keep in mind:
 - You can take BIOL 2020, BIOL 2030, and BIOL 2040 with a C or higher in BIOL 1010[20], before earning a C or higher in BIOL 1011[21].
 - You can take BIOL 2003 and BIOL 2060 with a C or higher in BIOL 1011[21], before earning a C or higher in BIOL 1010[20].
 - You must have a C or higher in both BIOL 1010[20] **and** BIOL 1011[21] before taking BIOL 2004.
 - Several courses meeting first-year requirements are offered during the summer; e.g., BIOL 1020/21, CHEM 1011/12, MATH 1000/10/30/60, PSYO 1031/32, ENGL 1015/25/40/60.

Top Tip: All six core 2000-level courses are required for all BIOL and MARI majors, but they do not all have to be taken in the second year. Most students can only take two core courses per term, at most.

What to Expect During the Registration Process

Courses will fill quickly. Be patient! Classlists will change frequently as students finalize their schedules. Plan to keep an eye on DalOnline throughout the summer and especially during the first couple weeks of term, just prior to the add/drop deadline. Chances are that spaces will eventually open up in the courses you want to take.

For Declared BIOL and MARI Majors in their Second Year or Higher

The second year looks similar whether you are majoring in BIOL or MARI, so chances are you won't make any 'wrong' course selection decisions, even if you ultimately decide to switch majors. There are also many options for customizing your degree; the summer after first year and fall of second year is the time to start exploring and planning ahead for third and fourth years.

Options include:

- BIOL- and MARI-equivalents (courses from other departments that can count as BIOL or MARI credits)
- Minors
- Honours
- Electives (see p. 3)
- Certificates
- Co-Op
- Experiential Learning: academic credit for volunteering
- Independent Research
- Special Topics: customized to your interests
- SEASIDE (summer field courses)

Resources For Everyone

Undergraduate Academic Calendar: academiccalendar.dal.ca

- GENERAL DEGREE REQUIREMENTS: subject groupings, math & language requirements
- BIOLOGY: degree options & requirements, course descriptions, BIOL-equivalents
- MARINE BIOLOGY: degree options & requirements, course descriptions, MARI-equivalents

Timetable: when courses are offered (terms and timeslots) and their delivery format; via DalOnline

Advising: Send an e-mail to biology.advising@dal.ca to get an auto-reply with our advisors' contact information and links to degree checklists, awards and scholarships, and other resources. Updated each term.

Anatomy of a Degree Checklist: Degree checklists summarize the requirements for each degree option in the department. Fill in the blanks to complete your degree! It's a good idea to review your checklist before speaking with an advisor. Download checklists at <https://www.dal.ca/faculty/science/biology/BiologyProgram/degree-checklists.html>.

BSc Major in Biology (120 Credit Hours) Student Name _____ B00 _____

Each specified course or blank space on this form represents 3 credit hours. updated Sep 2022

First Year: 30 credit hours
Some 1000-level requirements may be deferred to later years if they are not prerequisites for subsequent courses.

- | | | |
|--|--|------------------------|
| <input type="checkbox"/> BIOL 1010 or BIOL 1020 (C ^{1a}) | <input type="checkbox"/> BIOL 1011 or BIOL 1021 (C ^{1b}) | Life/Physical Sciences |
| <input type="checkbox"/> CHEM 1011 ² | <input type="checkbox"/> CHEM 1012 ² | Life/Physical Sciences |
| <input type="checkbox"/> MATH/STAT 1060 ³ | _____ | Math |
| _____ | _____ | Lang/Hum |
| _____ | _____ | Social Sci |

a different checklist for each degree option

- ¹Minimum grade required to take BIOL 2004, BIOL 2020, BIOL 2030, & BIOL 2040. ^{1a}Minimum grade required to take BIOL 2003, BIOL 2004, & BIOL 2060.
- ²Recommended (but not prerequisites) for BIOL 2020 (Cell Biology) and BIOL 2030 (Genetics and Molecular Biology). Required to complete the degree.
- ³MATH/STAT 1060 (or STAA 2000; Agricultural Campus) is a prerequisite for BIOL 2060 (Introductory Ecology) and comprises 3 of the 3 credit hours required in math. The other 3 credit hours may come from MATH 1000, MATH 1010, MATH 1215, MATH 1030, or any upper-level MATH or STAT course.
- ⁴Writing Course; 6 credit hours required if SCIE 1111 is not taken. The Writing Course may be used to satisfy one of the subject group requirements as an elective, satisfies the Writing Course requirement (but not a subject grouping) with 3 credit hours. SCIE 1111 is recommended for students who do not take a Writing Course.

required courses are identified by course code

Subsequent Years: 90 credit hours
at least 72 credit hours must be above the 1000 level

BIOL courses (including BIOL-equivalents*)

- | | |
|---|---|
| <input type="checkbox"/> BIOL 2020 (Cell Biology) | <input type="checkbox"/> BIOL 2003 (Animal Diversity) |
| <input type="checkbox"/> BIOL 2030 (Genetics and Molecular Biology) | <input type="checkbox"/> BIOL 2004 (Diversity of Plants and Microorganisms) |
| <input type="checkbox"/> BIOL 2040 (Evolution) | <input type="checkbox"/> BIOL 2060 (Introductory Ecology) |
| _____ | _____ |
| _____ | <input type="checkbox"/> BIOL 4 _____ |
| _____ | _____ |

BIOL 2020, 2030, 2040, and 2060 are offered in Fall and in Winter. BIOL 2003 is offered in Fall only, and BIOL 2004 is offered in Winter only. Students starting prior to Fall 2017 may choose two of BIOL 2003, BIOL 2004, and BIOL 2060. An additional BIOL or BIOL-equivalent course is required if all three are not taken.

checklists organize courses by category, not by year taken

Electives (any subject including BIOL)

Maximum 60 credit hours in BIOL. Students who exceed the maximum may seek a waiver of this regulation from the Assistant Dean (Student Affairs) for the Faculty of Science (scleasst@dal.ca).

fill in the blanks with courses of your choice within each category; see annotations for guidance

Electives (any subject except BIOL)

To add a minimum of 2000+ level maximum of 6 subjects and 6 subjects. See required, depending on the subject.

*Courses with biology emphasis from other departments that can count as BIOL courses.
This form is intended as a guide only. Please check the Dalhousie Undergraduate Calendar at academiccalendar.dal.ca for complete academic regulations and degree requirements. Students can access the Degree Audit Reporting System (DARS) via DalOnline.

Strategies for Finding Electives

Electives are an important part of any degree, and they play two useful roles. Electives allow you to pursue your academic interests outside of your chosen major, and they also allow you to take courses that complement your major. That is, they help you to develop perspectives and learn skills that enhance your appreciation for and broaden your understanding of your major subject.

Electives Outside Your Major

On the main page of the Undergraduate Calendar, look for links to pages that list Dalhousie's many **Minors** and **Certificates**. Whether or not you are interested in officially including a minor or certificate in your degree, these pages will help you find subject areas and individual courses of interest.

Electives That Complement BIOL and MARI Majors

Some courses outside of Biology/Marine Biology (and outside of the BIOL- and MARI-equivalent courses and/or cross-listed courses in the calendar) might be of interest as complementary electives for students pursuing Biology or Marine Biology degrees. If you're especially interested in a particular subject, check the Calendar to see what other courses are offered by that department and what their prerequisites are.

Computer Science courses, including

CSCI 2202: Introduction to Programming with Applications for Scientists
CSCI 4181: Bioinformatics Algorithms

Earth Sciences courses, including

ERTH 2420: Dinosaurs

General Science courses, including

SCIE 3211: Communicating Science to Non-Scientists
SCIE 4444: Leadership in Science

History of Science courses, including

HSTC 2102: Origins of Modern Medicine
HSTC 2202: The Beginnings of Western Medicine
HSTC 2206: Bio-Politics: Human Nature in Contemporary Thought
HSTC 2209: Environmentalism: Origins, Ideals, and Critique
HSTC 2210: Engineering the Planet
HSTC 2220: Ideas of the Sea and Seafaring: Intercultural Perspectives
HSTC 2310: Women and Gender in Early Modern Science
HSTC 2811: Asia and the West
HSTC 3101: Human Experiments
HSTC 3102: Plagues, Pandemics, and People
HSTC 3202: Ecology and Religion
HSTC 4002: Science and Nature in the 20th and 21st Century

Journalism courses, including

JOUR 1002/1003: Foundations of Journalism
JOUR 2400: Science and the Media
JOUR 3600: Photojournalism

Academic Calendars

Undergraduate Calendar Graduate Calendar Dentistry, Law and Medicine Calendar PDF Versions

Undergraduate 2023/2024 - Calendar 2023/2024

CALENDAR 2023/2024

Undergraduate Calendar

Agriculture
Architecture and Planning
Arts and Social Science
Computer Science
Engineering
Health
Management
Science

Important Notices

Students are advised that the matters dealt with in this Calendar are subject to continuing review and revision. The content of this calendar is subject to change without notice, other than through the regular processes of Dalhousie University, and every student accepted for registration in the University shall be deemed to have agreed to any such deletion, revision or addition whether made before or after said acceptance. Additionally, students are advised that

Academic Calendars

Undergraduate 2023/2024

- A Statement of the Aims of Undergraduate Education at Dalhousie
- Academic Dates 2023/2024
- General Information
- Admission Requirements
- University Regulations
- Academic Regulations
- Minors
- Certificates
- College of Arts and Sciences
- College of Sustainability
- Faculty of Agriculture

Mathematics/Statistics courses, including

STAT/MATH 2080: Statistical Methods for Data Analysis and Inference
STAT/MATH 2300: Mathematical Modelling
STAT 2450: Introduction to Data Mining with R
STAT/MATH 3350: Design of Experiments
STAT/MATH 3380: Sample Survey Methods

Ocean Sciences courses, including

OCEA 2001/2002: The Blue Planet*
OCEA 2800: Climate Change
OCEA 3004: The Last Billion Years

Philosophy courses, including

PHIL 2480: Environmental Ethics
PHIL 2660: Logic: Understanding of Scientific Reasoning
PHIL 2680: Ethics in Science
PHIL/PHLA 3106: Animal Ethics

Psychology/Neuroscience courses, including

PSYO 3161: Measuring Behaviour
PSYO/NESC 3180: Psychoneuroimmunology / Ecological Immunology
PSYO/NESC 3403: Neurobiology of Learning

Sustainability courses, including

SUST 3102: Coastal Change and Adaptation

*The Blue Planet is a required course for MARI majors, and might also be of interest to Biology students as an elective course.