Course Syllabus

BIOL 111: Introduction to Modern Biology (2023W2)

Time: Tuesdays/Thursdays 12:30 PM to 1:50 PM
Location: ESB 1013

Teaching Team and Office Hours

Dr. Donald Wong (Instructor)

Email: **donald.wong@botany.ubc.ca (mailto:donald.wong@botany.ubc.ca)** (preferred) or by Canvas message
Office Hours: By appointment (in-person or online) and Mondays from 1:30-2:30 PM via **Zoom (https://ubc.zoom.us/j/62580767618?pwd=bXoxV0ZYeHRhNW9ZY3RydlUyUndtdz09)**

Bryn Wiley (Teaching Assistant)

Email: **wiley@zoology.ubc.ca (mailto:wiley@zoology.ubc.ca)**
Office Hours: Tuesdays from 2:00-3:00 PM in BRC 236 (Biodiversity Research Centre, located beside the Beaty Biodiversity Museum)

Christiaan Spangenberg (Teaching Assistant)

Email: By Canvas message
Office Hours: To be determined

Please include “BIOL 111” in the subject line to keep everyone’s inbox organized.

Course Summary

This course aims to provide you with an appreciation and conceptual understanding of molecular biology, evolution, biodiversity, biotechnology, diseases, and human interactions with ecosystems that will enable you to understand the biological processes that shape your personal life and the global phenomena that affect us all.

Eligibility: Open to students that do not have credit for Biology 12 (including AP, IB) or BIOL 112 and require BIOL 111 as a prerequisite for BIOL 112, 121, and 180.

Course Learning Goals

At the end of this course, students should be able to…

1. … understand science as an inquiry-driven, investigative process.
2. … enhance their own scientific literacy and ability to access scientifically reliable information and to appraise biologically related news items critically.
3. … construct a framework of biological knowledge that will help them understand some of life's experiences and issues.
4. … work cooperatively in a team to discuss, debate and problem-solve in-class exercises, current issues assignments and case studies.
5. … use the biological knowledge and concepts to evaluate a variety of biological problems and challenges.

Course Materials and Learning Technologies

- **Textbook:** We will make use of an openly available textbook for any assigned readings. All other materials will be provided in lecture slides and posted readings from a variety of sources, such as popular press and scholarly articles.
- **Canvas:** We will use Canvas as our central repository of course materials. such as lecture slides and readings will be posted to Canvas. Announcements and updates about the course will also be posted there, and some assessments will be uploaded onto Canvas. Quizzes will also be done on Canvas. You are expected to keep up to date by checking Canvas regularly.
- **Piazza:** Our course's discussion board will be hosted on Piazza, which can be accessed through the Piazza link on the course Canvas menu. Post content-related questions on Piazza, and help your peers out my answering them. During lecture, a live Q&A session will take place on Piazza to provide you with an additional opportunity to ask questions during lecture. See instructions on Canvas for how to get set up.
- **iClicker Cloud:** We will do some of our in-class participation via iClicker. It is a free service that can be used on a variety of electronic devices. See instructions on Canvas for how to get set up.

Course Format

- **Pre-class activities:** To get the most out of our time in lecture, complete any assigned pre-class activities to help you prepare and be exposed to the topics before discussion during class. These may include readings, videos and/or worksheets. All materials will be uploaded to Canvas.

- **Lectures:** Lectures take place in-person on Tuesdays and Thursdays from 12:30 PM to 2:00 PM in Earth Sciences 1013. Lectures will consist of presentations from the teaching team, clicker questions, and other in-class activities, which may be individual or done in groups. To get the most out of your experience, we expect you to participate fully during class. Engage with the BIOL 111 community by taking notes, drawing diagrams, answering clicker questions, and engaging in small-group and whole-class discussions.
- **Quizzes:** There will be five short quizzes on Canvas throughout the term to check your understanding of the concepts we cover in class.
- **Group Activities:** You will form small groups of 3 to 4 students to complete some of the longer activities. These activities reinforce the concepts learned in class, and provide you with opportunities to apply what you have learned. Some activities will have you explore biodiversity outside the classroom through self-guided excursions to locations around the university.
- **Exams:** The midterm and final exams will consist of some multiple choice and more short answer questions.

Study/Memory Aid for Exams

While exams are closed-book, you are permitted to have a SINGLE-SIDED 8.5" × 11" sheet of paper with HANDWRITTEN (including any diagrams) notes on both exams. These will be collected after the exam. The notes should be your own and not copied from another student or some other source. We reserve the right to modify or take away your notes during an exam if they are in violation of any of the rules described above.

Assessment

The following is a breakdown of how your final grade will be assessed.

Formative Activities (45%):

1. *iClicker Participation 5%*

We will make use of iClicker as a tool for the class to interact together, and to allow us to gauge how everyone is doing. iClicker questions will not be graded for correctness, and you will earn full credit for each iClicker session/lecture by answering at least one question during that lecture. The first lecture will not be counted, and up to three iClicker sessions can be missed without penalty.

2. *Quizzes 10%*

There will be five quizzes spread throughout the term to regularly check your understanding of the materials covered in lectures and readings. These quizzes may

include a variety of questions, including multiple-choice, true/false, and short-answer questions. The lowest quiz score will be dropped.

3. *Group Activities 30%*

We will have a number of assignments to be completed in a small group. These are intended to reinforce and apply the knowledge you have gained throughout the course, in addition to providing you with an opportunity to explore topics beyond the course. These will be submitted as group assignments on Canvas. Due dates for all assignments can be found on Canvas—make use of the Canvas calendar function to conveniently keep track of due dates.

Summative Assessments (55%):

1. *Midterm 25%*
2. *Final Exam 30%*

These are individual assessments of your understanding of the course materials. The midterm will take place during class time, while the final exam will take place during the university's formal exam time. There is no requirement to pass either summative assessment to pass the course.

Course Policies

Late Assignments

It is imperative that assignments are assessed and returned in a timely fashion. Unless an extension or grace period has been granted, or otherwise stated, all **late assignments will be subject to a penalty of 10% of the assignment's maximum score per 24-hour period**. No assignments will be accepted 96 hours (4 days) after the posted due date. Please reach out to Dr. Wong ahead of time if you anticipate any difficulties—we can work together to support you through any challenges.

General Expectations

- You are responsible for reading all of the course announcements and staying updated on the course. Check your notification and time zone settings, as well as your Canvas and email inboxes to make sure do not miss anything.
- All group work must list the names of ***only those who participated***. Students who did not attend class must not be listed—if we find out that a student's name was put on an assignment, but they had not attended, everyone in the group will receive zero for that assignment.
- We encourage thoughtful questions and discussion both in and out of class! This shows engagement and curiosity for the material. We highly encourage questions

about course content to be posted to our discussion board on Piazza, and for all members of the BIOL 111 community to take part in answering them. Answering your peers' questions is a great way to practice communicating what you have learned to someone else. Personal matters should be directed to Dr. Wong or any member of the teaching team directly.

- Emails to the teaching team should include BIOL 111 in the subject line to ensure they do not get lost in our inboxes. Your messages should also include the name(s) of who you are trying to contact, as well as your own name.
- Do the right thing and be honest with your work. Please read the "Academic Honesty" documents on Canvas for more information. If you find yourself struggling or falling behind at any point, reach out to your teaching team for support rather than taking the easy way out. We would MUCH rather spend many office hours with you to support you than to have an academic misconduct meeting with you at the end of term. Academic misconduct meetings are painful, time-intensive, and entirely unnecessary FOR ALL PARTIES.
- Distribution of course materials is not permitted. The course materials we provide (syllabus, lectures, videos, slides, worksheets, and assignments) are the intellectual property of the BIOL 111 teaching team. Uploading course materials to commercial websites (whose purpose it is to sell them to other students) is illegal. Distribution of course materials that are not your own is both a copyright and privacy violation.

Use of Generative AI Tools

Generative artificial intelligence tools are those that have the capability to generate written content using AI algorithms trained on large data sets, and many of these have become widely accessible over the last year. Like any other tool, appropriate use can provide much opportunity to support learning. When misused, these will ultimately hamper your ability to practice critical thinking and communication of your original ideas and thoughts (a detriment during examinations!). In this course, students are permitted to use these tools for formative work such as gathering information or brainstorming, but it is just as effective to use non-scholarly sources (e.g., Wikipedia) to get started. However, the use of generative AI tools to produce parts of or entire assignments is unacceptable. Assignments produced using these tools no longer represent original work produced by the student, a violation of academic integrity. Content produced by such tools might also include inaccurate information and/or lack sources—this could potentially constitute as plagiarism and be investigated as academic misconduct. If you have further questions around the acceptable or unacceptable use of generative AI tools, we encourage you to speak to us.

Your Personal Health

If you are sick, it is important that you stay home, no matter what you think you may be sick with (e.g., cold, flu, other). Do not come to class if you have COVID symptoms, have recently tested positive for COVID-19, or are required to quarantine. You can check this website to find out if you should self-isolate or self-monitor: **http://www.bccdc.ca/health-info/diseases-conditions/covid-19/self-isolation (http://www.bccdc.ca/health-info/diseases-conditions/covid-19/self-isolation)**

If you miss class because of illness:

- Help each other by sharing notes.
- Watch the lecture recording on Canvas and do any posted activities.
- Consult the class resources on Canvas; all slides and readings will be posted.
- Use the discussion board for help.
- Come to office hours (they're online, so you can join from anywhere).
- See the marking scheme for reassurance about what flexibility you have.
- If you need to miss a particular key activity due to illness, contact us.
- If you need to be considered for an academic concession for missing more than a week of classes and/or assignments, you will need to sign an academic concession form (available on Canvas) and email Dr. Wong.

Missed Midterm

DO NOT come to the midterm if you are sick. Please stay at home. You must email Dr. Wong within 24 hours of the missed exam to make alternate arrangements. We would strongly prefer that you contact us to make an alternate arrangement than for you to come to the exam while you are ill. It is much better for you to email ahead of time and not attend. Remember to include your full name and student number in your message. If you do show up for an exam and you are clearly ill, we will send you home.

Missed Final Exam

If you are ill during the final exam period, you must apply for deferred standing (**https://students.ubc.ca/enrolment/exams/standing-deferred-supplemental-exams (https://students.ubc.ca/enrolment/exams/standing-deferred-supplemental-exams)**) through your home faculty's advising office no later than 48 hours after the exam. You must be in good standing in the course to apply for a deferred standing. Students who are granted deferred standing are able to submit at a later date.

For additional information about academic concessions, see UBC's official policy here: **http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0 (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0)**

Tips for Success in BIOL 111

Group Work

You will have opportunities to work in groups on a variety of activities. Keep the following in mind while working in groups:

- Be positive and professional; consider working in groups an opportunity for professional development.
- Value the diverse skillset represented by all members of the BIOL 111 community!
- Make every effort to ensure all members have an opportunity to contribute—lift each other up as you progress.
- Be explicit with expectations for how group members are to interact with each other to accomplish your goals. Consider drafting a document highlighting how you will ensure your group's success.

Individual Efforts

- Be engaged with course material, and be prepared before class. Watch and listen to the online course materials, critically read text references, lecture notes/slides, and other assigned readings.
- Review course materials beyond class by making study charts, concept maps, etc.
- Actively participate during in-class group discussions and activities.
- Ask plenty of questions! Attend office hours, post on Piazza, etc.