

BIOL 336 – Biology of Algae

Spring Term, 2021

A01 - CRN 20407

Thursdays, 11:30-12:50 pm

By Zoom

INSTRUCTOR:

Dr. Katy Hind (khind@uvic.ca)

Cunningham 010

250-721-8713

Office hours: by appointment

COURSE OBJECTIVES: Welcome to the wonderful world of algae! This course will introduce you to many of the major algal lineages including both micro- and macroalgae. We will also cover current topics in phycology such as climate change, species discovery, biofuels, and biomechanics. You will be exposed to active research areas in phycology with guests lectures by scientists from around the globe. In the labs you will practice scientific skills that can be used across disciplines. Long after you've forgotten the details of this course, what I hope endures is your understanding of:

- the major lineages and diversity of algae, their characteristics, relatedness and major evolutionary events.
- the importance of algae in marine and freshwater ecosystems.
- the importance of careful observation and documentation in science.
- how to read, interpret and disseminate data from scientific research and literature.

TEXTBOOK: *Algae*, by Graham, Graham, Wilcox and Cook 3rd Ed (2016), available digitally through the UVic library: <http://voyager.library.uvic.ca/vwebv/holdingsInfo?bibId=4326920>

Please note that, as a UVic student, you are permitted to view and download the PDF without cost, but due to copyright you cannot share this PDF with anyone or post it on social media or websites. For anyone else (non-UVic), this e-book is available as a digital purchase through the author's website (www.ljilmpress.com/algae.html).

LAB MANUAL: Biology 336 Laboratory Manual 2021- Biology of Algae (posted weekly on Brightspace).

COURSE FORMAT:

Lecture

- One synchronous (live) Zoom session will take place every Thursday at 11:30am. You are required to attend as there will be group work during lecture time that will count towards your final grade.
- Lectures start Thursday, January 14th and end Thursday, April 8th, 2021.
- The synchronous sessions will be recorded and posted on Brightspace following the lecture.
- One or two asynchronous (pre-recorded) lectures will be posted weekly every Monday (approximately 1-hour total duration).
- Both synchronous and asynchronous lecture components will be testable.

Lab

- Weekly labs are synchronous (live) on Zoom and attendance is mandatory.
- Labs begin January 11th (B01) and 12th (B02), 2021
- Asynchronous material (e.g. videos and lab manual chapters) will be posted weekly every Monday (one week before your lab).
- The lab schedule and breakdown of marks can be found in the lab manual (Chapter 1) and on Brightspace.

EVALUATION: The lecture and laboratory components of this course are each worth 50%.

Primary Literature Discussion (4 discussions, worth 3% each)	12%
Discussion Forum (5 posts, worth 1% each)	5%
Midterm exam	13%
Final exam	20%
Laboratory (see laboratory assessments in lab manual)	50%

Primary Literature Discussion; four submissions worth 3% each:

Four times throughout the term we will read a primary literature article by current psychologists. I have invited one of the authors of the article to attend our class and discuss the primary literature article with us. What an amazing opportunity to be able to meet psychologists from around the globe! After the class discussion, we will move to breakout rooms to answer questions provided to you (these will be posted right before the lecture so you will not have them in advance). You will work in the same small group for each primary literature discussion.

How will the Discussion Groups be organized?

You will be assigned to a 'Discussion Group' consisting of 4-5 students. Each group will be given a set of questions about the paper that will serve to focus the group's discussion. Each week, one member of each group will be assigned the job of 'Secretary'. The Secretary will record the group's answers to each question and will submit the report to Brightspace the following week. The job of Secretary will go to a different person for each Discussion session so that everyone (most everyone) has one opportunity to be Secretary.

Everyone must read the assigned paper PRIOR to the lecture session. A link to each paper will be posted on Brightspace one week in advance.

How will Discussion Reports be graded?

Each report is worth 3% of your course grade and all members of a group will receive the same mark. ***Each Secretary is strongly encouraged to distribute the report to all group members for feedback and suggested revisions several days before it is due. I strongly encourage you to use the Microsoft Teams private channel for your group so that all members can contribute to the discussion questions.***

Discussion reports will be marked by the lecture moderator and returned the following week.

Discussion Forum; five posts worth 1% each:

On the weeks that we are not reading a primary literature article we will still have guests to our class. You will be required to post on the Brightspace Discussion forum questions for the scientist about their research. Each person must post a question that they would like to ask the scientist about their research. I will pick three questions that we will ask the scientist during the live session. You are required to make five discussion forum posts over the course of the term worth 1% each.

Midterm and final exams; 13% and 20% respectively, non-cumulative:

- **Students must achieve a passing grade ($\geq 50\%$) in BOTH the lecture and the laboratory components to pass the course.**
- As indicated in the University Calendar, students who do not pass the laboratory component will not be permitted to write the final examination.
- You are required to write all exams. If you must miss the midterm exam for *a valid well-documented reason* (illness, accident, family affliction or sporting commitments as a UVic athlete), you must notify Dr. Hind as soon as possible. If excused, your final exam will be worth 33% of your final course mark. If you are not excused from the missed exam, you will receive a zero for the missed midterm.
- Exams cannot be written early under any circumstances. However, the final exam can be deferred for a valid well-documented reason (see above). If you miss or expect to miss the final exam for any of these reasons, please notify the course instructor as soon as possible. When you are able to do so, you must apply for academic concession using a *Request for Academic Concession* form that can be found in the Office of the Registrar's website.
- You are also required to attend the weekly laboratory sessions and complete all laboratory assignments. If you must miss a laboratory session or the presentation for a valid well-documented reason you must notify Dr. Hind as soon as possible. If you are excused from the missed lab work, the course instructor will inform you as to how your final lab mark will be calculated; you will not incur a penalty.
- You must complete all portions of the course (including the written report and final lab presentation) to get credit for this course.
- You cannot miss more than 2 weekly laboratory sessions, even for valid well-documented reasons, to get credit for this course.
- Travel plans are not a valid reason for missing laboratories, the presentation, exams or any assignment deadlines. The date for the BIOL 336 final exam will not be known until the final exam schedule is posted later in the term. The last day for final exams this term is Tuesday, April 27, 2021. You are safe to make travel arrangements for *after* that date.
- No supplemental exams or assignments will be offered in this course. In other words, you cannot rewrite any exams or provide extra assignments in order to improve your grade.
- All exams may be of mixed format (definitions, multiple choice, short answer, and longer multi-part or essay questions). All lecture course materials (*i.e.* instructor commentaries, class discussions and figures, posted notes, and assigned readings from papers from the primary literature) are fair game for lecture exams. The textbook readings will help you to supplement the lecture material and provide you with additional insight and illustrations, and in-depth explanations. The lab tests will also include visual identification of specimens and/or their parts that were studied during the weekly lab sessions.

Grade Conversion: A+ 90-100%; A 85-89.5%; A- 80-84.5%; B+ 77-79.5%; B 73-76.5%; B- 70-72.5%; C+ 65-69.5%; C 60-64.5% D 50-59.5%; F <49.5%

Labs

Labs begin the week of January 11th, 2021. There are two lab sections (B01 – Mondays, 2:30-5:30pm and B02, Tuesdays, 2:30-5:30pm) for all students. You must attend the lab section that you are registered in. We designed the labs to be approximately 90 mins each week, but we anticipate that some weeks will be longer, so please block off the entire three hours in your schedule. You may also want to use this time to work with your lab partners on weekly lab assignments.

You will have two Teaching Assistants (TAs) who will lead your lab sessions on Zoom each week. Lab videos, lab manual chapters, datasets, and assignments will be posted every Monday one week before your lab. The labs will also use the platform – Microsoft Teams. Please sign up for your free Microsoft Teams account before the first lab and allow 48 hours for activation. Here is the link:

<https://onlineacademiccommunity.uvic.ca/O365/teams/>

The laboratory portion of the course is worth 50% of your final grade. You must pass the lab in order to pass the course. Please see Lab 1 posted on Brightspace for full laboratory policies and details.

Attendance in the synchronous laboratory sessions is mandatory and we will be taking weekly attendance. If you miss more than two labs for any reason, even with a medical excuse, you will receive a failing grade (F) in the course.

Academic Integrity: Students are required to abide by all academic regulations set as set out in the [University calendar](#), including standards of academic integrity. Violations of academic integrity (e.g. cheating and plagiarism) are considered serious and may result in significant penalties. The exams must all be completed **individually** and not with a friend/classmate or a group. You are prohibited from sharing any information about the exam with others.

UVic services:

Student Supports for Online Technology:

Learn Anywhere:

<https://onlineacademiccommunity.uvic.ca/LearnAnywhere/>

New Student Mental Health Supports

In addition to providing both face to face and online mental health resources through our new Student Wellness Centre, a new 24x7 phone & online student mental health resource and support program is now available for all UVic students, no matter where they are located, at any time.

<https://www.uvic.ca/services/counselling/resources/supportconnect/>

Counselling Services - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. <https://www.uvic.ca/services/counselling/>

Health Services - University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives. UVic Health has transitioned to offering services almost entirely by telehealth. <http://www.uvic.ca/services/health/>

Centre for Accessible Learning - The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. <https://www.uvic.ca/services/cal/>.

Elders' Voices - The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students and others in Indigenous ways of knowing and being. <https://www.uvic.ca/services/indigenous/students/programming/elders/index.php>

Sexualized Violence Prevention and Response

UVic takes sexualized violence seriously. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). If you want to take part in the important prevention work taking place on campus, you can also reach out: Where: Sexualized violence resource office in EQHR; Sedgewick C119, Phone: [250.721.8021](tel:250.721.8021), Email: svpcoordinator@uvic.ca