

COURSE SYLLABUS



COURSE TITLE: BIOL-124: Evolution and Diversity

CLASS SECTION: 001AB

TERM: F2024

COURSE CREDITS: 4

DELIVERY METHOD(S): In Person

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

INSTRUCTOR DETAILS

NAME: Kirk Hart

EMAIL: hartk@camosun.bc.ca

OFFICE: Fisher 346A

HOURS: Tuesday 11-11:50am and Friday 1-2 pm

NAME: Sarah Cockburn

EMAIL: cockburns@camosun.bc.ca

OFFICE: Fisher 352

HOURS: Tuesday 11:30am-12:20pm; 3:30pm-4pm and Thursday 3pm-3:30pm

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

This course consists of studies in the general areas of evolution and organism diversity. Topics include natural selection, the genetic basis of evolution, speciation and evolutionary change and the adaptive radiation of organisms.

PREREQUISITE(S):

One of:

C in English 12

C in Camosun Alternative

And one of:

C+ in Anatomy and Physiology 12

C+ in Biology 11

C+ in Camosun Alternative

CO-REQUISITE(S):

EQUIVALENCIES:

BIOL 224

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon completion of this course a student will be able to:

1. Identify and classify living organisms to their major taxonomic groupings, and list their defining characteristics.
2. Describe the major lines of evidence for evolution.
3. Explain major topics in evolutionary theory.
4. Discuss the nature of scientific knowledge in biology, its limits and strengths, and how it is documented.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Texts: Recommended material (not required) Campbell Biology, Canadian Edition. 2021. Biology 3rd ed., Pearson Education, Inc., San Francisco, CA.

*Note: Campbell Biology 1st/2nd Canadian Edition, Campbell Biology 10th, 9th and 8th US edition are also okay to use as a textbook

Lab Manual: Lab instructions and related assignments will be posted on D2L prior to each scheduled lab.

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

WEEK or DATE RANGE	ACTIVITY or TOPIC	Chapter	Laboratory Material
1-Sept 2-6 College Closed Sept 6 Labour Day	Biological Diversity lecture Evolution – Darwinian	22	NO LAB- LABOUR DAY
2- Sept 9-13	History of Life Phylogeny	25, 26	Lab Introduction 1. Phylogeny and Classification

WEEK or DATE RANGE	ACTIVITY or TOPIC	Chapter	Laboratory Material
3- Sept 16-20	Population Evolution Species Evolution	23, 24	2. Biodiversity Field trip
4- Sept 23-27	Species Evolution Prokaryotes	24, 27	4. Bacteria
5- Sept 30 - Oct 4 <i>College closed Sept 30 National Day for Truth Reconciliation</i>	Prokaryotes MID-TERM I	27	NO LAB – NATIONAL TRUTH AND RECONCILIATION DAY
6- Oct 7 - 11	Protists	28	4. Bacteria cont. 5. Protists
7- Oct 14 - 18 <i>College closed Oct 14 Thanksgiving</i>	Seedless Plants	29	NO LAB – THANKSGIVING
8- Oct 21 - 25	Seed Plants	30	LAB EXAM I
9- Oct 28 - Nov 1	Fungi	31	7. Fungi and Plants Week 1
10- Nov 4 - 8	Animal evolution MID-TERM II	32	8. Seed and Seedless Plants (Week 2)
11- Nov 11 - 15 <i>College closed Nov 11 Remembrance Day</i>	Invertebrates	33	NO LAB- REMEMBRANCE DAY
12- Nov 18 - 22	Invertebrates	33	9. Invertebrates I
13- Nov 25 - 29	Vertebrates	34	11. Chordates
14- Dec 2 - 6	Vertebrates	34	LAB EXAM II
Dec 9 - 13	Final Exam Period		

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Midterm 1 (Oct 3)	15
Midterm 2 (Nov 7)	15
Lab Exam 1	13
Lab Exam 2	13
Lecture Assignments and D2L quizzes	10

DESCRIPTION	WEIGHTING
Lab Assignments	12
In class Assignments/activities/quizzes	2
Final Exam (TBA)	20
TOTAL	100%

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](#) policy for more information.

COURSE GUIDELINES & EXPECTATIONS

Lecture Attendance

Attending lectures will be an important part of succeeding in this course. From time to time there will be quizzes and other in-class activities for marks that will also help you and I determine how you are doing with the material. If you know that there is a lecture that you will miss where an announced activity will take place, you must let me know ahead of time and have a legitimate reason to miss it (e.g. an emergency or an illness with documented evidence). The lecture PowerPoint presentations will be posted on <http://online.camosun.ca> but there will be much more information provided during lecture time that you won't want to miss!

Laboratory Attendance

The laboratory experience is critical to the course objectives and so attendance throughout the entire laboratory session is mandatory and will be noted. Lateness in arriving, or failure to attend the lab will result in forfeiting credit for that lab, including any written assignments.

Arriving after the start of the lab time is considered late. If a lab session is missed, another student's data **may not** be used to complete a lab assignment for credit. Exceptions can be made **at the instructor's discretion** in legitimate cases of emergency (e.g. illness); in such cases the instructor must receive **advance notification** and **documented evidence** of the situation (e.g. medical certificate) and grant approval for any accommodation.

Missed Labs Guidelines:

- Students who will miss a laboratory session have an obligation to seek out concessions directly from their instructor in a timely manner, BEFORE the lab period occurs.
- If notification is provided AFTER the lab has occurred, concessions may not be available.
- If you miss up to three (3) laboratory sessions, you are still eligible to meet the Learning Outcomes for the course.
- Concessions offered for the first three (3) missed laboratory sessions will depend on the reason for laboratory absence and is up to instructor discretion. Concessions may include writing up the laboratory report with provided data, omitting the lab, or other concessions.

- If you miss **a total of four (4) or more labs for any reason** (including, but not limited to: life circumstances, legitimate illness or family/pet emergency, planned vacations, milestone family events, work commitments, childcare or eldercare commitments, competitive athletic events), you will be unable to meet the learning outcomes for the class and **will receive a failing grade (F) in the entire course**, regardless of marks received on graded lab and lecture components. . Exceptions will only be considered through an academic concession granted by the instructor or Dean/Associate Dean.
- This guideline applies to in-person laboratory activities only; for missed Lab Exams, please see the section in this outline on Exams below.
- Please note that if you are suffering from a serious medical illness that prevents you from participating in this course, Camosun College has a Compassionate Medical Withdrawal Policy (<https://camosun.ca/services/forms#medical>)

Missed Exams

Without exception, all lecture and lab exams must be written at the scheduled times. However, it is understood that emergency circumstances occur (e.g. severe illness or emergency in the immediate family); for such circumstances accommodation may be offered at the discretion of the instructor, provided the student: (a) notifies the instructor in advance of the exam (not after), and (b) provides documented evidence of the circumstance is applicable.

In the event of emergency circumstances, it is at the instructor's discretion whether to administer a make-up exam or adjust the weighting of the final exam to make up the missing marks. Note that work commitments or holiday travel are NOT considered emergency circumstances. Be sure not to make any travel plans for the end of the semester until the final exam schedules are finalized and posted.

Assignments

There will be many lecture and lab assignments throughout the course. It is the student's responsibility to be informed of any work expected and the dates the work is due. Some course assignments will be group work; most course assignments will be individual work. When submitting your own individual assignment, be sure that it is your own work (keeping in mind student conduct requirements). This applies even if you are working with a study group! I do encourage you to study and work with other students, but the work you submit must still be your own. For group assignments, each person in a group will receive the same mark on any group work. Please submit assignments in the format requested by the instructor. Incorrect formatting will result in late penalties and delayed grading.

Late Penalties

Assignments are due at the **beginning** of the class period on the due date. Assignments not handed in at the beginning of class will be considered late, for which there is a 10% penalty/day. The format is expected to be professional, i.e. a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty. If the

assignment is more than one page, separate pages must be stapled before you come to class. Electronic submissions will not be accepted unless otherwise stated by the instructor.

Additional Information

No programmable devices are allowed in exams (cell phones, apple watches etc.).

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit camosun.ca/services.

Support Service	Website
Academic Advising	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre
Career Services	camosun.ca/services/co-operative-education-and-career-services
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student-services
International Student Support	camosun.ca/international
Learning Skills	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its

Support Service

Website

Writing Centre

camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>
Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

Academic Accommodations for Students with Disabilities

Camosun College is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging appropriate academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a documented disability and think you may need accommodations, you are strongly encouraged to contact the Centre for Accessible Learning (CAL) and register as early as possible. Please visit the CAL website for more information about the process of registering with CAL, including important deadlines: <https://camosun.ca/cal>

Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal (see [Medical/Compassionate Withdrawals policy](#)). Please visit <https://camosun.ca/services/forms#medical> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence Policy: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and camosun.ca/services/sexual-violence-support-and-education.

To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

Changes to this Syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes