

# COURSE SYLLABUS



COURSE TITLE: BIOL 240 – Wildlife and Habitat

CLASS SECTION: BIOL 240

TERM: W2025

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.

Learn more about Camosun's [Territorial Acknowledgement](#).

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## INSTRUCTOR DETAILS

NAME: Kirk Hart

EMAIL: hartk@camosun.bc.ca

OFFICE: F346A

HOURS: Tuesday and Thursday 1130am – 1pm

*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.*

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## CALENDAR DESCRIPTION

Through a variety of instructional methods, students will explore the systematics, biology and habitat of selected vertebrates and invertebrates, with emphasis on local taxa of high cultural, ecological and economic importance. Students will learn the biology of selected species and examine ecological relationships, integrating components of Traditional Ecological Knowledge (TEK). Standard methods to observe and sample fauna in the field will be practiced in conjunction with wildlife habitat assessment, along with the use of taxonomic keys to identify organisms. Students will gain an understanding of policy, legislation, biodiversity issues and wildlife management principles and apply their understanding in relevant contexts to real-world situations.

### PREREQUISITE(S):

C in BIOL 124

### CO-REQUISITE(S):

Not applicable

### EXCLUSION(S):

Not applicable

Learning Outcomes

- Upon completion of this course students will be able to:
- Explain the taxonomy, anatomy/physiology, and reproduction of selected vertebrate and invertebrate species.
- Describe ecological relationships within local communities.
- Use biological taxonomic keys to identify selected groups of vertebrates and invertebrates of BC.
- Use a variety of laboratory and field techniques to sample and analyze terrestrial and aquatic invertebrates and their habitats.
- Describe biodiversity issues including rare and endangered species, introduced species, overharvesting impacts, and impacts of habitat loss.
- Discuss the importance and impact of policy and legislation on wildlife management issues.
- Identify examples of Traditional Ecological Knowledge (TEK) related to vertebrates and invertebrates.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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Recommended: Invertebrates 4<sup>th</sup> edition. Brusca, Gonzalo, and Moore. 2022. ISBN 9780197554418

Notes and readings provided on D2L

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.

Wk	Date	Lab/Field Exercises FT = Field trip	Lecture Topics
1	Jan 06-10	Lab introduction	Animal development and body plans Porifera
2	Jan 13-17	Porifera, Cnidaria, and Ctenophora	Ctenophora and Cnidaria
3	Jan 20-24	Platyhelminthes and Annelida	Platyhelminthes Annelida
4	Jan 27-31	Mollusca	Mollusca <b>Seminar Topic Due</b>
5	Feb 3-7	<i>FT: Saturday Feb 8th 2-4pm Cattle point</i>	Nematoda Arthropoda
6	Feb 10-14	Nematoda and Arthropoda	Echinodermata, invertebrate chordates
7	Feb 17-21	<b>READING BREAK</b>	
8	Feb 24-28	Echinodermata, invertebrate chordates	Midterm Exam Fishes
9	Mar 3-7	Field Methods & fishes  <b>Seminar Outline Due</b>	Amphibians <b>Invertebrate taxon assignment due</b>
10	Mar 10-14	Amphibians and Reptiles	Reptiles
11	Mar 17-21	<i>FT: Birding - Esquimalt Lagoon</i>	Birds
12	Mar 24-28	Birds and Mammals	Mammals
13	Mar 31-Apr 4	FT: Salamanders	
14	Apr 7-11	<b>Lab Exam</b>	Seminar presentations

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 noticed is required. Deadlines scan 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

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DESCRIPTION	WEIGHTING
D2L Assignments	10%
Invertebrate Search Assignment	10%
Midterm	20%
Lab Final	25%
Pre-labs	5%
Theory Final	20%
Seminar Presentation	10%
In-class/lab activities	5%
	<b>TOTAL</b> 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](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information.  
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

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### Lecture Attendance

Attendance will not be required for lectures (EXAMS are the only exception to this). However, attending and participating in lectures will be an important part of succeeding in this course, as there will be additional explanations and examples to support learning, and participation activities for marks that you will forfeit if absent. If a lecture is missed, the student is responsible for obtaining information such as notes, handouts, assignments, and announcements.

### Laboratory Attendance

In order to pass the course, students are required to meet the minimum lab attendance, participation, and completion requirements:

- Laboratory activities involve practical application of your knowledge as well as development of lab techniques and manual skills. Development of these skills is a requirement to meet the Course Learning Outcomes. Meeting Course Learning Outcomes is a requirement for gaining credit in the course, as well as ensuring pre-requisite and transferability standards are met.
- Laboratory activities are in-person activities; attendance and participation is **mandatory**. Online alternatives are NOT available.
- Laboratory attendance will be monitored by your instructor.
- Arriving late to the lab may result being marked as absent.

Guidelines for missed labs:

- Students who miss a laboratory session have an obligation to seek out concessions directly from their instructor in a timely manner, BEFORE the lab period begins. If notification is provided AFTER the lab period begins, concessions may not be available.
- If a student misses up to three (3) laboratory sessions, they are still eligible to meeting the Learning Outcomes for the course. Concessions offered for the first three (3) missed laboratory sessions will depend on the reason for the laboratory absence and is at the instructor's discretion. Concessions may include writing up the laboratory report with provided data or omitting the lab.
- **If a student misses a total of four (4) or more laboratory sessions for ANY reason** (including but not limited to: life circumstances, significant illness or family/pet emergency, planned vacations, family events, work commitments, childcare or eldercare commitments, competitive athletic events), they will be unable to meet the Course Learning Outcomes and will receive a **failing grade (F) in the course**, regardless of marks received on graded lecture and lab components.
- This guideline applies to laboratory activities only; for missing the Lab Final Test please see the "Missed Exams" section on the following page.
- Please note that if you are suffering from a serious medical illness that prevents you from fully participating in the course, Camosun College has a Compassionate Medical Withdrawal Policy (<https://camosun.ca/services/forms#medical>).

## Assignments

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, while others 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. The only exception to this is when a group member fails to contribute, resulting in a grade of zero for that individual on that particular assignment.

Please submit assignments in the format requested by the instructor. Incorrect formatting will result in late penalties and delayed grading.

All assignments are due at the date and time specified by the instructor. As described on the previous page, late Lab Assignments will be accepted with a penalty of **10% per day**, including weekends. Late assignments will not be accepted once marked assignments have been returned to the class. Late Lecture Assignments will not be accepted.

## Plagiarism

You are encouraged to discuss assignments with your classmates, however, **individual assignments must be your own individual work – beware of plagiarism**. Plagiarizing is appropriating the work or parts or passages of another's writing (including the ideas or language) and passing them off as the product of one's own mind or manual skill.

Except where work is assigned to a group, all written work must be done individually. Plagiarism is a serious offence that is considered to be academic misconduct and **will not be tolerated**. A student caught plagiarizing will forfeit all credit for the assignment and documentation will be sent to the Chair and Dean for their records. Please visit the link to the Academic Integrity Policy later in this syllabus for more information.

## Missed Exams

All 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 **acceptable documentation** of the circumstance where possible (i.e. medical documentation).

In the event of emergency circumstances, it is at the instructor's discretion whether to administer a make-up exam or adjust exam grade weighting accordingly.

**\* HOLIDAYS, SCHEDULED FLIGHTS, EVENTS, AND WORK ARE NOT CONSIDERED TO BE EMERGENCIES \***

Be sure not to make travel, work, or other personal plans for the end of semester until the final exam schedule is finalized and posted.

## Cheating

A student caught cheating on an exam will forfeit all credit for that exam and perhaps for the course. Cheating is a serious offence and is considered to be academic misconduct. Cheating includes but is not limited to:

- (a) using unauthorized materials or resources in a quiz/exam, and
- (b) providing information to another person regarding exam content.

The consequences for cheating and plagiarism are outlined by Camosun College's Academic Integrity policy.

## STUDENT RESPONSIBILITY

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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

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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 <http://camosun.ca/students/>.

Academic Advising	<a href="http://camosun.ca/advising">http://camosun.ca/advising</a>
Accessible Learning	<a href="http://camosun.ca/accessible-learning">http://camosun.ca/accessible-learning</a>
Counselling	<a href="http://camosun.ca/counselling">http://camosun.ca/counselling</a>
Career Services	<a href="http://camosun.ca/coop">http://camosun.ca/coop</a>
Financial Aid and Awards	<a href="http://camosun.ca/financialaid">http://camosun.ca/financialaid</a>
Help Centres (Math/English/Science)	<a href="http://camosun.ca/help-centres">http://camosun.ca/help-centres</a>
Indigenous Student Support	<a href="http://camosun.ca/indigenous">http://camosun.ca/indigenous</a>
International Student Support	<a href="http://camosun.ca/international/">http://camosun.ca/international/</a>
Learning Skills	<a href="http://camosun.ca/learningskills">http://camosun.ca/learningskills</a>
Library	<a href="http://camosun.ca/services/library/">http://camosun.ca/services/library/</a>
Office of Student Support	<a href="http://camosun.ca/oss">http://camosun.ca/oss</a>
Ombudsperson	<a href="http://camosun.ca/ombuds">http://camosun.ca/ombuds</a>
Registration	<a href="http://camosun.ca/registration">http://camosun.ca/registration</a>
Technology Support	<a href="http://camosun.ca/its">http://camosun.ca/its</a>
Writing Centre	<a href="http://camosun.ca/writing-centre">http://camosun.ca/writing-centre</a>

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

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### SUPPORTS AND SERVICES FOR STUDENTS

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Support Service	Website
Academic Advising	<a href="http://camosun.ca/services/academic-supports/academic-advising">camosun.ca/services/academic-supports/academic-advising</a>
Accessible Learning	<a href="http://camosun.ca/services/academic-supports/accessible-learning">camosun.ca/services/academic-supports/accessible-learning</a>

Support Service	Website
Counselling	<a href="https://camosun.ca/services/health-and-wellness/counselling-centre">camosun.ca/services/health-and-wellness/counselling-centre</a>
Career Services	<a href="https://camosun.ca/services/co-operative-education-and-career-services">camosun.ca/services/co-operative-education-and-career-services</a>
Financial Aid and Awards	<a href="https://camosun.ca/registration-records/financial-aid-awards">camosun.ca/registration-records/financial-aid-awards</a>
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Learning Skills	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>
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## 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](https://camosun.ca/services/sexual-violence-support-and-education).

To contact the Office of Student Support: [oss@camosun.ca](mailto: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

## Seminar: Vertebrate Issues

This assignment requires a 10-15 minute oral presentation, done in groups of 2 or 3, on a current issue concerning a vertebrate species of your choice (preferably BC) - excluding *Homo sapiens*. The idea is to study, and empathize with, vertebrate animals of a species other than our own. This is an opportunity to gather and present information on the causes and potential solutions regarding a particular problem facing a group of vertebrate animals or a species (terrestrial or aquatic) that you care about.

Topics may include environmental or ethical issues, for example: endangerment of a vertebrate species through habitat destruction, pollution, or over-exploitation, welfare concerns regarding vertebrates in food production, product testing or entertainment, issues regarding poaching, trade in species (parts), hunting/trapping methods and regulations, or the effect of an introduced species on a native species, etc. There is a wide range of possible topics, but the basic premise is a bio-centric approach, i.e. deconstructing the issue from the point of view of the animal(s) in question, and focusing on the animal's best interest. Please check with your instructor if your topic choice and angle fits the scope of this assignment before you proceed with your research (see course outline for deadlines).

Format and content of this presentation is supposed to be holistic in nature and is loosely based on the concept of a generalized First Nations medicine wheel:

In your presentation, you are therefore expected to present not only the physical and mental aspects of the issue (see West and North), but also the emotional and value-based/ spiritual aspects (see South and East) to the same extent.

Briefly introduce yourself and your topic, and then address the 4 basic aspects of your chosen issue by going around the medicine wheel.

1. W: "Physical" Aspect: Issue Definition

Introduce your chosen vertebrates, including a *brief* background on their biology and ecology as it pertains to the issue. Define and explain the concrete problem facing this species or group of vertebrates, keeping in mind that this may be the first time your audience has heard about this issue. Condense your background research into a precise yet concise, readily comprehensible summary. If relevant, mention other species affected by the issue.

2. S: "Emotional" Aspect: Personal Engagement

Why do you care about this species, this particular issue? What is the story behind your choice? What emotions and opinions were shared by your co-presenter (if applicable) or other discussion partners when researching this issue? Did other people share your position or not? Do you think/know whether your (group's) position on this issue is representative of the population at large?

3. E: "Spiritual" Aspect: Underlying Values – and Alternatives

What societal/cultural/spiritual values or belief systems do you perceive to be at the root of the problem? How did the status quo come to be accepted? What ethical principles or choices may need to be re-evaluated? Are there underlying values or attitudes that may have to be changed in your opinion to allow for support for any type of practical solution? What other societies/cultures/value systems can we learn from in this regard? Discuss some of the values and attitudes you would like to foster.

4. N: “Mental”Aspect: Thoughtful Solutions

What should be done, in your opinion, to fix or ameliorate the problem facing your chosen vertebrate(s)? What can different levels of society contribute to the solution, e.g. government, NGO’s, industry, academia, etc. and what actions can you and your classmates take to support your solutions? Give specific examples. You may cite published solutions that you support, or think outside the box to come up with your own answers to the problem.

A different path around the medicine wheel may be more suitable to your presentation – please discuss the best sequence or integration of aspects with the instructor.

Conclude your talk with a short statement referring to future hopes or plans and thank your audience. (Note: “that’s all we got” or “I guess that’s it…” is *not* a good concluding statement!)

You need to know the material well enough to speak freely as well as answer questions for approx. 5 minutes following your talk (*know more than you present!*). The presentation normally takes place in circle format around a replica of a medicine wheel, i.e. the presenters are seated along with the audience in a circle.

You will not have to stand in front of the class, and **you are not allowed to prepare overheads or power-points – this really is an oral presentation**, and it is meant to provide a different presentation and learning experience. This means that your speech should be as free from references to written notes as possible. A recipe card with point form notes for memory aid is permitted, while reading a prepared paper will result in a maximum 50% mark.

You are also required to bring a visual aid ***of your making*** (1 unique visual aid **from each student**). Aids should be user-friendly and add to your talk but not distract from it; written materials are usually not suitable. The sky is the limit here but you must be the one to make it so feel free to let your creative side show. Some examples could be a drawing, a carving, a piece of music or recorded sounds (that you record), even a play-doh model. Please also have a list of references handy, in case you may be asked about the sources of presented information.

It is important to practice the talk several times beforehand, in order to feel comfortable speaking freely, to allow for smooth transitions, and to keep within the time limit of 10-15 minutes in fairness to all other students.

As a member of the audience, you are expected to be respectful to the speaker by following the talk with focus and an open mind, so you may be able to contribute a question at the end of the talk. While a classmate is presenting, it is unacceptable to review your own notes, carry on a conversation or leave the circle early. Being a disrespectful listener may affect your overall mark for this project.

**Evaluation of Oral Presentation:**

CRITERIA	SCORE (0 – 10)
1. <u>Content</u> : bio-centric, not anthropocentric perspective maintained; all 4 sub-topics (directions) addressed adequately and with appropriate details in each category; evidence of broad background research and in-depth contemplation of the issue  a. Physical	
b. Emotional	
c. Spiritual	
d. Mental	
2. <u>Outreach</u> : the issue and potential solutions were presented convincingly, with respect, empathy and engagement – prepared to draw and hold audience attention	
3. <u>Format</u> : appropriate opening and closing statements, smooth and clear transitions between sub-topics; the talk flowed well, trains of thoughts were followed through	
4. <u>Delivery</u> : free speech, referred to notes only very briefly or not at all, used good voice projection, clear pronunciation, suitable intonation	
5. <u>Timing</u> : fair time allocation for each sub-topic/direction, without rushing or needless pauses or fillers; time limit (10 -15 min) observed (-3 marks/extra minute over or under)	
6. <u>Visual Aid(s)</u> : well-chosen and informative, attention to ease of viewing and handling, no distracting details such as extensive writing, well-integrated into talk	
7. <u>Questions</u> : questions from the audience were answered knowledgably and honestly, showing involvement with the subject beyond the information given in the talk	
TOTAL SCORE	...../10 <b>0</b>