

Biology 468: Food web ecology (Split with Bio550: Directed studies in Ecology)

We acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

Instructor: Dr. Rana El-Sabaawi (Biology) (She/her)
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Characterizing food web interactions is fundamental to Ecology. This course provides a comprehensive introduction to the most important methods used to characterize food web interactions in terrestrial and aquatic ecosystems. Topics will include: isotopic ecology, ecological stoichiometry, nutritional geometry, lipid tracers, and molecular tracers.

Because we continue to deal with many unknowns this year, please note that details of the syllabus might change as the course progresses. Please be patient as we adjust to the new normal.

Time: Mondays-Thursdays 1:00 PM – 2:20 PM

MacLaurin Building D010

Readings and textbook: There is no textbook for the class.

Course delivery:

Lectures will be delivered in person. Should we need to pivot because of instructor illness or because of changes in the Public Health Officer's Orders, lectures will be delivered synchronously via Zoom or Echo360. Links will be provided on the Brightspace page.

Please be aware that in-person lectures will be recorded to allow students who are not able to attend to watch later. The recording will be posted in Brightspace. Students who have privacy concerns can contact me. If you have other questions or concerns regarding class recording and privacy please contact privacyinfo@uvic.ca.

Please note that since the software we will be using to record the lectures is new, there might be some glitches to work through especially in the first few weeks of class.

Brightspace: All course information including slides, and assignment guidelines will be communicated via Brightspace.

Weekly assignments will be delivered via Brightspace. Details to follow.

Core principles:

1. We will keep ourselves and each other safe by following public health orders on masking, physical distancing, and staying home when sick.
2. We are committed to equity, diversity and inclusion. Our goal is to create an inclusive environment where all are welcome. We ask students to be respectful of each other and mindful of bias. Additional resources on equity, diversity and inclusion will be available on Brightspace. If you are registered with the center for accessible learning (CAL, <https://www.uvic.ca/services/cal/>), or have any concerns about barriers to success, please discuss them with me as soon as you can.
3. We will maintain a high standard of academic integrity. Please review the UVic Calendar (links below) to refresh yourselves on the UVic guidelines for integrity and plagiarism.

Evaluation:

Biology 468

- Weekly assignments 10%
- Midterm 40% (**Thursday 21 Oct**)
- Final 50% (date and time to be announced)

Biology 550 (graduate students):

- Weekly assignments 10%
- Midterm 20% (**Thursday 21 Oct**)
- In class seminar 20% (Nov 29th in class)
- Final Exam 20%
- Final paper 30%

Weekly assignments will be administered using Brightspace. They will usually comprise a few questions, such as multiple choice, calculations, and short answer question. They will become available on Thursdays (starting on 16th Sept) of each week, and will be due on Sunday of the same week. The goal of the assignments is to help you keep up with the lecture material. Therefore I will give you full marks for submitting the assignments, regardless of how you did on it. The assignments will be automatically marked in Brightspace, and a marking scheme will be available for you to on the following Mondays.

The *midterm* and *final* will both be open book, and will administered via Brightspace. However, students will be required to write them in person (more information to follow).

Communications and questions:

I am happy to set up appointments for individual zoom or in-person meetings as needed. Please email me to set up an appointment (rana@uvic.ca)

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.

Copyright:

All course content and materials are made available by instructors for educational purposes and for the exclusive use of students registered in their class. The material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act. Violations may result in disciplinary action under the [Resolution of Non-Academic Misconduct Allegations policy \(AC1300\)](#).

Academic regulation:

1. **VERY IMPORTANT:** UVic's policy on academic integrity (<https://tinyurl.com/ycjeyumu>)
2. Know your responsibilities as outlined in the calendar (<https://tinyurl.com/y3o8q586>)
3. The Center for Accessible Learning is here to help (<https://www.uvic.ca/services/cal/>)
4. Grades are assigned on a percentage scale in accordance with UVic policy as outlined in the calendar (<https://tinyurl.com/y7qydfyy>)
5. Please read UVic's policy on copyright (<https://www.uvic.ca/library/featured/copyright/>)
6. Important UVic dates including dates for adding and dropping course, holidays, etc. (<https://www.uvic.ca/calendar/dates/>)
7. Please read UVic's policy on plagiarism (<https://www.uvic.ca/library/research/citation/plagiarism/index.php>)

Biol 468 syllabus

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Date	Day	Lec	Topic	Notes (from UVic calendar)
9-Sep	Th	1	Introduction	
13-Sep	M	2	Introduction to stable isotopes	
16-Sep	Th	3	Fractionation (ASSIGNMENT 1 available online)	
20-Sep	M	4	Fractionation during photosynthesis	Sept 21 is the last day for 100% reduction of tuition fees for standard first term and full year courses
23-Sep	Th	5	Fractionation during photosynthesis (ASSIGNMENT 2 available online)	Sept 24 is the last day for adding courses that begin in the first term
27-Sep	M	6	Nitrogen fractionation in plants	
30-Sep	Th		National Day for Truth and Reconciliation	
4-Oct	M	7	Nitrogen fractionation in the ocean	
7-Oct	Th	8	Animal fractionation (ASSIGNMENT 3 available online)	
11-Oct	M		Thanksgiving Day	Oct 12 is the last day for 50% reduction of tuition fees for standard courses
14-Oct	Th	9	Food web isotopes (ASSIGNMENT 4 available online)	
18-Oct	M	10	Food web isotopes	
21-Oct	Th	11	Midterm	
25-Oct	M	12	Isotopes and migration	
28-Oct	Th	13	Isotopes and paleoecology (ASSIGNMENT 5 available online)	Oct 31 is the last day for withdrawing from first term courses without penalty of failure
1-Nov	M	14	Fatty acids	
4-Nov	Th	15	Fatty acids in fish (ASSIGNMENT 6 available online)	
8-Nov	M	16	Stoichiometry	
11-Nov	Th		Remembrance Day/Reading break	
15-Nov	M	17	Stoichiometry and nutrient recycling	
18-Nov	Th	18	Stoichiometry and dietary imbalances (ASSIGNMENT 7 available online)	
22-Nov	M	19	Metabolic ecology	
25-Nov	Th	20	Nutritional geometry (ASSIGNMENT 8 available online)	
29-Nov	M	21	Bio 550 seminar	
2-Dec	Th	22	Review (ASSIGNMENT 9 available online)	
06-Dec	M	23	Review	Last Dat of class