

COURSE OUTLINE
Entomology – 10398 – Biology 312 – A01

Fall 2021

TABLE OF CONTENTS

| | page |
|--|-------------|
| Contact information and course description | 2 |
| Copyright statement | 2 |
| Grade distribution and important dates | 3 |
| Academic integrity | 4 |
| Lecture schedule | 5 |
| Lab schedule | 6 |
| Class recording and online conduct | 7 |
| Mental health and additional resources and support | 7 |
| Course experience survey | 7 |

Instructor:

Steve Perlman

Email: stevep@uvic.ca

Office hours: by appointment

Lab Instructor:

Neville Winchester

winchest@uvic.ca

by appointment

When and where:

Lectures: Mondays and Thursdays, 10am-11:20am, Cunningham 146

Labs: Monday, Tuesday, or Wednesday, (2:30pm-5:20pm), Cunningham 228

Course content and information will be posted regularly on our course's Brightspace site.

Territory Acknowledgement: *We acknowledge and respect the lək'wəḡən peoples on whose traditional territory the university stands, and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.*

Course description:

This course will provide a detailed introduction to the field of entomology – the scientific study of insects, with an emphasis on insect evolution, ecology, and systematics. Lectures will include: an overview of insect morphology, internal anatomy, and physiology, and insect and arthropod phylogenetic relationships. Lectures will also include topics in insect ecology and evolution, including mating systems, sociality, medical entomology, plant-insect interactions, and conservation. The laboratory portion of the course concentrates on insect identification, collecting and curating techniques. As a lab project, students will prepare an image-based insect collection.

Textbook:

There is no required text. There will be required readings consisting of journal articles, as well as lecture material, uploaded onto Brightspace.

Copyright Statement:

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).

Students may not distribute lecture notes or any exams or quizzes from the course without permission of the instructor, and to do so, through note-sharing sites or other means, violates the Policy on Academic Integrity.

BIOL 312, Fall 2021 – Grade Distribution and Important Dates:

| | |
|--|-----|
| Lecture test 1 (Mon. Oct. 25) | 15% |
| Lecture test 2 (Mon. Dec. 6) | 15% |
| Written assignment – paper critique (due Fri. Dec. 3) | 10% |
| Video response to readings & discussions (2) | 8% |
| Participation exercise 1 (GenBank, alignment, & phylogeny, due Oct. 8) | 4% |
| Participation exercise 2 (horizontal gene transfer, due Oct. 8) | 4% |
| Participation exercise 3 (biological control, due Nov. 19) | 4% |
| Lab test 1 (week of Oct. 18) | 15% |
| Lab test 2 (week of Nov. 22) | 15% |
| Lab project (due Fri. Dec. 3) | 10% |

Penalty for late submissions: 5% per day.

Note these important dates:

Last day for 100% reduction of tuition fees for standard courses – Tue. Sept. 21

Last day for adding first term courses – Fri. Sept. 24

Last day for 50% reduction of tuition fees for standard courses – Tue. Oct. 12

Last day for withdrawing from 1st term courses without penalty of failure – Sun. Oct. 31

Medical documentation for short-term absences is not required for the Fall 2021 term (approved by Senate). Attendance is important. Students who cannot attend due to illness are asked to notify their instructors immediately. If you miss (or know beforehand that you will be missing) a test because of illness, accident, family affliction, you are required to contact the appropriate instructor in a timely manner after the test (normally within seven calendar days).

Policies regarding undergraduate student academic concessions and deferrals are also detailed here: <https://www.uvic.ca/registrar/students/appeals/acad-concession/index.php>

The convention used for assigning letter grades is as follows:

A+ (90-100), A (85-89), A- (80-84), B+ (77-79), B (73-76), B- (70-72), C+ (65-69), C (60-64), D (50-59), F (0-49)

Please be sure to consult the UVic calendar for more information on UVic policies and procedures:

<https://www.uvic.ca/calendar/future/undergrad/index.php#/home>

An important message from your instructor on academic integrity:

As a teacher, mentor, scientist, researcher, and member of the University of Victoria community, academic integrity is of the highest importance to me.

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.

It is absolutely essential that you understand and uphold academic integrity. To this end, I ask you to please read UVic's framework on academic integrity, which you can find here:

<https://www.uvic.ca/students/academics/academic-integrity/index.php>

You can also find UVic's Policy on Academic Integrity in the UVic calendar:

https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V

To help avoid plagiarism and cheating, please read the UVic Libraries' plagiarism guide: <https://www.uvic.ca/library/research/citation/plagiarism/>

I reserve the right to use plagiarism detection software or other platforms to assess the integrity of student work.

BIOL 312 Tentative Lecture Schedule – Fall 2021:

| | |
|-----------------|---|
| Thurs. Sept. 9 | 1. Introduction and Importance of Insects |
| Mon. Sept. 13 | 2. Morphology |
| Thurs. Sept. 16 | 3. Introduction to Phylogenetics |
| Mon. Sept. 20 | 4. Phylogenetics and Ecdysozoa |
| Thurs. Sept. 23 | 5. Arthropods to Hexapods |
| Mon. Sept. 27 | 6. Pterygota and flight, Neoptera |
| Thurs. Sept. 30 | National Day for Truth & Reconciliation – No Class |
| Thurs. Oct. 1 | 7. Neoptera continued |
| Mon. Oct. 4 | 8. Holometabola, Metamorphosis & meet with a Guest Entomologist |
| Thurs. Oct. 7 | 9. Holometabola continued |
| Mon. Oct. 11 | Thanksgiving Holiday – No Class |
| Thurs. Oct. 14 | 10. Internal Anatomy & Physiology |
| Mon. Oct. 18 | 11. Nervous System and Sensory Biology |
| Thurs. Oct. 21 | 12. Development, Life Histories |
| Mon. Oct. 25 | 13. Lecture Test #1 |
| Thurs. Oct. 28 | 14. Sexual Selection, Mating Systems |
| Mon. Nov. 1 | 15. Insect Sociality |
| Thurs. Nov. 4 | 16. Plant-Insect Interactions – Herbivory |
| Mon. Nov. 8 | 17. Plant-Insect Interactions – Pollination |
| Thurs. Nov. 12 | Reading Break - No Class |
| Mon. Nov. 15 | 18. Insect Conservation |
| Thurs. Nov. 18 | 19. Parasitoids, Predators, Parasites |
| Mon. Nov. 22 | 20. Biological Control & meet with a Guest Entomologist |
| Thurs. Nov. 25 | 21. Insect Symbionts |
| Mon. Nov. 29 | 22. Medical Entomology |
| Thurs. Dec. 2 | 23. Pests & transgenics |
| Mon. Dec. 6 | 24. Lecture test #2 |

BIOLOGY 312 LAB SCHEDULE, FALL 2021

Dr. Neville Winchester: winchest@uvic.ca



| LAB# | WEEK OF | TOPIC |
|------|----------|---|
| 1 | Sept. 6 | No labs |
| 2 | Sept. 13 | Lab overview and introduction - Insects and Biodiversity – Ordinal identification |
| 3 | Sept. 20 | Insect External Anatomy |
| 4 | Sept. 27 | Aquatic Insect Biodiversity – sampling and curation |
| 5 | Oct. 4 | Lepidoptera Biodiversity – sampling and curation |
| 6 | Oct. 11 | Thanksgiving – NO FORMAL LABS |
| 7 | Oct. 18 | Test #1 – Identification, biodiversity modules |
| 8 | Oct. 25 | Diptera Biodiversity – sampling and curation |
| 9 | Nov. 1 | Coleoptera Biodiversity -sampling and curation |
| 10 | Nov. 8 | Reading Break – NO FORMAL LABS |
| 11 | Nov. 15 | Hymenoptera Biodiversity – sampling and curation |
| 12 | Nov. 22 | Test #2 – Identification, biodiversity modules |

MARKS

| | |
|----------------|------------|
| Test #1 | 15% |
| Test #2 | 15% |
| Insect Project | 10% |
| Total | 40% |

NOTE:

1. Each lab includes biodiversity modules that are meant to introduce you to the diverse field of entomology. All lab material will be posted on your Brightspace site for the Fall 2021 term. There is nothing to purchase!
2. Format and details of the lab tests will be discussed by Neville. The final lab test (test #2) is not cumulative except for order identification.
3. Project due date: Dec. 3, 4:30 – Submit on your BRS page - Details of the insect project will be discussed during the term.

Class recording: Due to the evolving Covid situation, please be aware that sessions in this course may 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 and will have the option to limit their personal information shared in the recording. If you have other questions or concerns regarding class recording and privacy please contact privacyinfo@uvic.ca

Online conduct: The University of Victoria is committed to promoting critical academic discourse while providing a respectful and supportive learning environment. All members of the university community have the right to this experience and the responsibility to help create such an environment. The University will not tolerate racism, sexualized violence, or any form of discrimination, bullying or harassment.

Please be advised that, by logging into UVic's learning systems or interacting with online resources, and course-related communication platforms, you are engaging in a university activity.

All interactions within this environment are subject to the university expectations and policies. Any concerns about student conduct may be reviewed and responded to in accordance with the appropriate university policy.

To report concerns about online student conduct: onlineconduct@uvic.ca

Mental health: A note to remind you to take care of yourself. Diminished mental health can interfere with optimal academic performance. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone. Here are some UVic web sites with links to many useful resources that are available to you:

<https://www.uvic.ca/student-wellness/index.php>

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

Course Experience Survey (CES):

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to <http://ces.uvic.ca>. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device.