

## Biology Teaching Assistant– Job Description for 2024W

Please consult the course schedule for lecture and tutorial/lab times:

<https://courses.students.ubc.ca/cs/courseschedule?pname=subjarea&tname=subj-department&dept=BIOL>

The job descriptions serve as a rough guide of TA duties over the Winter term and may be subject to changes depending on the instructor.

Please note that as part of the Biology teaching team, you may be assigned to invigilate a final exam that is not your own course but the hours (3.5hr) are included in your TA duties and time allocation.

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### BIOL 111 – Introduction to Modern Biology

#### General description of job duties:

TAs are required to attend 3 one-hour lectures per week and hold 3 office hours in the Biology Learning Centre. Other duties include: Marking midterm exams, final exams and possibly assignments; assisting the instructor during class as needed; monitoring and responding to student's posts on the electronic bulletin board; responding to student emails; preparing classroom and learning centre activities, reviewing exam questions; facilitating review sessions before midterms and finals; and possibly delivering a guest lecture (if mutually agreed upon by TA and instructor). Other activities are possible and subject to discussion between the TA and course instructor.

**TA responsible for:** lecture attendance and office hours with students in Learning Centre

**Prep meeting:** Yes, time and day of week TBD

**Lecture attendance:** Yes

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### BIOL 112 – Biology of the Cell

#### General description of job duties:

- attend lectures and help with in-class activities (will be assigned to one lecture section)
- teach 3 sections of 50 min tutorials (8 weeks of tutorial per term; content provided)
- attend TA prep meeting: up to 2 hours per week for most weeks in the term
- schedule office hours (1 hour per week; in person and/or via zoom)
- invigilate and mark exams (1 midterm + 1 final exam)
- monitor and address questions on Piazza (online forum)
- perform additional tasks assigned by section instructor (marking short assignments, assigning participation grades, etc.)

#### TA responsible for:

- attending lectures; attending prep meetings; teaching tutorials and helping students in office hours and on Piazza; invigilating and grading exams; other responsibilities as discussed with section instructor.

#### Time/day of week for TA prep meeting:

- Typically, Thursday or Friday afternoon

**Lecture attendance:** Yes

**Number of lab/tutorial sections required to teach:** 3 tutorial sections per week

**Background knowledge:** Cell biology, plant cell biology, microbiology

**Other useful information:** This is a first-year course with students who mostly have completed first year at UBC. However, empathy and compassion for the first-year transition is preferred. Skill level and pace of learning may vary among students so experience with 1st/2nd year students an asset. Patience with struggling students.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:**

- 8-12 hours of midterm marking
- 8-12 hours of final exam marking
- About 2hours of midterm exam invigilation (in-class or evening exam)
- 3.5 hours of final exam invigilation (may be assigned to invigilate someone else's course)

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## **BIOL121 – Genetics, Evolution and Ecology**

**General description of job duties:**

- attend lectures (3 hours/week) and help with any in-class activities
- hold 2 hours of office hours per week in BIOL 1114.
- Exams: Help to invigilate and mark two midterm exams, and the final exam; review exam questions
- Assignments: Mark assignments (may be on Canvas)
- Monitor and respond to students' post on the electronic bulletin board.
- Respond to student emails.
- Other activities are possible and subject to discussion between the TA and course instructor.

**Prep meeting:** None

**Lecture attendance:** Required, unless other arrangements have been made

**Number of lab/tutorial sections required to teach:** None

**Background knowledge:** Strong preference for those with background in genetics, evolution, and ecology

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## **BIOL155 - Human Biology: Physiology and Introductory Anatomy**

**General description of job duties:**

**Tutorial TAs** are required to lead a 4-section block of 50minute tutorials covering anatomy from a specific organ system or part of an organ system each week (tutorial materials and exercises are prepared ahead of time by the course instructor). Tutorial TAs also are required to attend a weekly 45minute meeting with the instructor to go over course materials for that week. Tutorial TAs provide formative feedback for students in tutorials, hold a 1 hour weekly office hour, administer tutorial attendance and grade the short answer component of the tutorial term final test in both terms. Tutorial TAs also mark and invigilate for both lecture term finals (December & April and for 1 of the 2 lecture midterms either T1 or T2). The **Lecture TA** attends all lectures (both lecture sections) and is responsible for monitoring student questions and running in-class activities, and holds a weekly 1 hour office hour. The lecture

TA marks for all lecture exams (two midterms, two term finals) and is responsible for lecture exam logistics (e.g. exam printing, invigilation coordinating external markers, totalling marks)

**TA responsible for:** Tutorial TA: Tutorials, exam invigilation and some marking. Lecture TA: Exam invigilation and marking

**Time/day of week for prep meeting:** typically 9AM Monday (tutorial TAs only)

**Is lecture attendance required:** Y (lecture TA only)

**Number of tutorial sections required to teach:** 4 tutorial sections (Tutorial TA) 2 lecture sections (lecture TA)

**Background knowledge:** Vertebrate anatomy and physiology knowledge is required for tutorial TA (experience with human anatomy and physiology is an asset) Lecture TA does not require background knowledge, though it is preferred.

**Other useful information:** Lecture TA - very helpful to be based at the Point Grey campus

**Approximate # hrs for midterm(s) and final exam invigilation and marking:** All TAs: 4.5 hr invigilation per semester. Tutorial TAs 12-15 hrs marking per semester. Lecture TAs 20-30hr marking per semester.

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## **BIO180/121 - Thinking Like a Life Scientist & BIOL121 grading TA**

### **General description of job duties:**

Biol 180/121 TAs are required to support their Biol 180 instructor in teaching two 3-hour classes weekly and may be required to hold one office hour per week. In preparing for their teaching, TAs must attend a 1 hour meeting with the Course Coordinators every Friday between 11:15 am and 12:15 pm for the first 6-9 weeks of the semester. The meeting will be in person. In addition, they will meet with their course instructor weekly to prepare for the focal topic specific to their sections. TAs will help their instructor mark group and individual assignments as well as the midterm assessment.

As well, each TA is expected to spend up to 10 hours in helping mark the exams of Biol 121 (either October or November midterms or final exam). While there is no final exam in Biol 180, all Biol 180 TAs are expected to help invigilate the final exam of another biology course at the end of term.

Conferences or other conflicts with TA duties must be brought to the Course Coordinator's attention as early as possible to maximize the chance of being able to make alternative arrangements.

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## **BIOL 200 – Fundamentals of Cell Biology**

### **General description of job duties:**

TAs are required to teach 3 1-hour tutorials and hold one 1 hour office hour per week, plus attend a 2 hour prep meeting with the Course Coordinator every Friday. They are expected to prepare in advance for the tutorials by ensuring that they fully understand the weekly problems and activities, and by reviewing concepts in cell biology where needed. TAs are required to invigilate the evening midterm exam and final exam, and need to be available in the weeks following the midterm and final exams for marking. TAs are also responsible for grading tutorial worksheets and a term paper. Conferences or other conflicts with TA hours must be brought to the Course Coordinator's attention as early as possible so that arrangements with other TAs can be made.

**TA responsible for:** TAs are responsible for teaching three 1-hour tutorial sections and holding one office hour each week. They will invigilate an evening midterm, and grade assignments (including one paper) and exams. They are also expected to invigilate one final exam in Biology.

**Time/day of week for TA prep meeting:** TAs must be available for Friday afternoon prep sessions. The meeting time is not negotiable.

**Lecture attendance:** Not required

**Number of lab/tutorial sections required to teach:** 3 tutorial sections

**Background knowledge:** A background in cell and molecular biology or closely related fields is required.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Invigilation: midterm (90 minutes), final exam (2.5 hours). Midterm marking (~20 hrs) + final exam (~25 hours). Varies depending on TA experience with the course.

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## BIOL201 – Introduction to Biochemistry

**Job description and Requirements for a TAship in BIOL 201:**

1. Hours of work expected: ~ 12h/wk on average over the term (~16 weeks)
2. Hours of work split per week (~8- 9 h /wk on average) as below:
  - a. Prep time each week: 2-3h on problem sets (for TA with biochemistry background)
  - b. Student contact time: 4h per week (4 tutorial sections per week).
  - c. Weekly Prep session: 1-2h **Friday am** (during the Prep sessions we go over problem sets for the following week)
3. A **Biochemistry background is a strong requirement** for this TAship.
4. TA Prep sessions are scheduled on Friday mornings (between 9:30 – 11:30am): we will likely not need two hours every week, but this is the expected time we require you to block off for the term. **Availability for the TA prep session on Friday mornings is a requirement.**
5. Two exams to mark. Availability during February and April exam period to invigilate and complete marking of exams within the marking period is a requirement.

Please note exam dates:

- a. **Exam I: Feb. 13th (Thursday) – 6:30 – 8:30pm**
  - b. Exam II (final exam): during the final exam period in April (scheduled by Enrolment services)
6. Each TA will get access to the e-textbook (Lehninger) and problem set documents to prep for the course.

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## BIOL203 – Eukaryotic Microbiology

**General description of job duties:**

The course has of four lab sections (two on Mondays and two on Tuesdays) and one lecture section (M/W/F) . One TA position will consist of teaching two 3-hour lab sessions each week (M/T) attend a 2-hour prep session each Monday morning (9-11 pm) and attending lectures, grading lecture activities exams and lab activities. The other two TA positions will consist of teaching one 3-hour lab session each week (Monday or Tuesday), attend a 2-hour prep session each Monday morning (9-11 pm) and attending lectures, grading lecture activities exams and lab activities. The grading load for lecture activities will be allocated among the two TA types so that workload is equitable (the TA teaching 2 lab sections will have a reduced grading load). During each lab session, TAs give a brief introduction, run small group activities facilitate activities and provide demonstrations, monitor student lab work, answer questions, and help with setup and clean-up. TAs are supported by lab faculty during the lab sessions and by the lecture faculty while invigilating lecture exams.

**Background knowledge:** A background in basic light microscopy is very helpful; familiarity with eukaryotic organismal diversity in freshwater habitats is also helpful. A background in cell biology is preferred. A desire to continue learning and exploring the diversity of the eukaryotic microbial world is expected.

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## BIOL204 – Vertebrate Structure and Function

### General description of job duties:

TAs are required to teach two 3-hour lab sessions each week and to attend a 3-hour prep session each Friday afternoon (2-5pm). During each lab session, TAs give an introduction to the topic, facilitate activities and provide demonstrations, monitor student lab work, answer questions, and help with clean-up. TAs facilitate an interactive check-out discussion with small groups of students at the end of each lab to provide formative feedback. TAs invigilate and mark both lecture and lab exams, and will help to set up the lab midterm and lab final exam. TAs are supported by lab faculty during the lab sessions and lab exams, and by the lecture faculty while invigilating lecture exams.

**TA responsible for:** Dry labs and wet labs (includes dissections of preserved vertebrates); invigilation and marking of lecture exams (a lecture midterm and a lecture final exam); set-up, invigilation, and marking of lab midterm and final exams.

**Time/day of week for TA prep meeting:** Friday 2-5PM

**Is lecture attendance required:** No

**Number of lab sections required to teach:** two 3hr lab sections per week

**Background knowledge:** Strong preference for those with a background in vertebrate anatomy and practical experience with dissections

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Total of 40 marking hours: 12 hours for lecture midterm, 7 hours for lab midterm, 7 hours for lab final, 14 hours for lecture final. Total of 18 invigilation hours: 2 hours for lecture midterm, 3 hours for lecture final exam, 6.5 hours for lab midterms, 6.5 hours for lab final exams

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## BIOL205 – Comparative Invertebrate Zoology

### General description of job duties:

TAs are required to teach two 3-hour lab sessions each week and to attend a 3-hour prep session each Friday afternoon (2-5pm). During each lab session, TAs give an introduction to the topic, facilitate activities and provide demonstrations, monitor student lab work, answer questions, and help with clean-up. TAs facilitate an interactive check-out discussion with small groups of students at the end of each lab to provide formative feedback. TAs invigilate, mark, and help to set up the lab midterm and lab final exam. TAs are supported by lab faculty during the lab sessions and lab exams.

**TA responsible for:** Wet labs (includes dissections of preserved invertebrates, using microscopes to view samples and slides, and handling of live invertebrates); set-up, invigilation, and marking of lab midterm and final exams

**Time/day of week for TA prep meeting:** Friday 2-5PM

**Number of lab sections required to teach:** two 3hr lab sections per week

**Background knowledge:** Strong preference for those with a background in invertebrate zoology and practical experience with dissections and microscopes

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Lab Exams Invigilation: 13 hours; Lab Exams Marking: 14 hours

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## **BIOL 209 - Biodiversity of Algae, Fungi, and Bryophytes**

### **General Description of Job Duties:**

In BIOL209, the TA is primarily an accessible guide for students during weekly laboratory explorations of beautiful, diverse, and mostly fresh fungal, algal, and bryological specimens. The TA helps their students develop light microscopy, biological drawing, and observation skills while comparing/contrasting taxonomic groups based on their morphological structures, ecology, and life cycles. During lab, the lab coordinator, and often the instructor, will be in lab to support the TA and students. Each TA is responsible for 2 x 3 hr lab sections per week plus a weekly, mandatory 2 hr lab prep meeting. TAs are expected to attend regular lectures as well, three times per week, and are also expected to participate in some grading and exam invigilation.

### **TAs are responsible for:**

- Preparing and delivering brief introductions to weekly lab materials
- Guiding and monitoring student learning in the lab
- Some light lab set-up and clean-up
- Grading quizzes, assignments, and exams and maintaining organized records of resulting grades
- Attending lectures and engaging with students during in-class activities
- Attending weekly TA lab prep meetings for 2 hours each
- Helping to prepare lab exam materials on 2 afternoon/evenings during the term
- Invigilating lecture and lab exams as needed
- Holding office hours

**Time/Date for TA Prep Meeting:** Every Wednesday from 9 am to 10:50 am (mandatory)

**Background knowledge:** TAs with knowledge of algae, fungi, bryophyte biology, cell biology, and/or light microscopy techniques are preferred. If you're the kind of person who would want to float in a forest of elegant and enormous kelps, luxuriate in carpets of cheerful, emerald green mosses, and marvel at mysterious mushrooms bobbing under falling raindrops, please apply to join our team.

**Approximate # of hours for grading, exam prep, and exam invigilation outside of regular student contact hours:** 3 hrs for lab quiz grading, 7 hrs for lab midterm grading, 7 hrs for lab final grading, 4 hrs for lecture final grading, 3 hrs for final exam invigilation, 8 hrs for lab exam set up, 4 hrs for other small grading/admin activities. Total ~ 36 hrs.

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## **BIOL230 - Fundamentals of Ecology**

### **General description of job duties:**

All TAs: All TAs are expected to invigilate and grade 2 midterms and 1 final exam. Lab TAs only: Each Lab TA is responsible for two lab sections on Mon., Wed., Thurs., or Fri from 2-5 pm; labs meet most weeks but not all and will only rarely take the full 3 hours. Lab activities include outdoor data collection, online activities, and office hours. Lab TAs are also expected to grade lab assignments. Lecture TA only (1 per semester): Lecture TAs are expected to attend all lectures and help facilitate in-class activities. Other tasks may include but are not limited to: answering questions on Piazza, holding office hours, co-designing assessments (such as quizzes), and occasional lab-related tasks.

**TA responsible for:** All TAs: Invigilation and marking. Lab TAs only: Field labs and online discussions. Lecture TA: May be asked to assist with tutorial-type activities (e.g., review sessions).

**Time/day of week for TA prep meeting:** All TAs: Scheduled as needed depending on TA availability.

**Is lecture attendance required:** Y (for lecture TA only)

**Number of lab sections required to teach:** 2 (for lab TA only)

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Variable, but typically no more than 12 hrs/exam

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## **BIOL234 - Fundamentals of Genetics**

### **General description of job duties:**

Biol 234 TAs are required to attend lectures (3 per week) and a weekly prep meeting. TAs will lead two tutorial sessions (2 hours in length) per week. Tutorials will cover assigned problem sets where the TA will help facilitate student understanding and develop problem solving skills. TAs are required to invigilate midterms (typically two midterms) and one final exam. TAs are also required to mark midterms and the final exam.

**TA responsible for:** two 2 hour tutorials per week (except for weeks of midterms)

**Time/day of week for TA meeting:** TBA

**Is lecture attendance required:** yes

**Number of lab/tutorial sections required to teach:** two per week (2hrs each)

**Background knowledge:** background knowledge in fundamentals of genetics very helpful

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** this depends on the exams but typically approx. 4 hours per midterm and 8 hours for final exam.

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## BIOL260 – Fundamentals of Physiology

### General description of job duties:

BIOL 260 TAs are required to grade midterms (there will be 2-3 each term) and the final, answer student questions on the course discussion board, and hold office hours and optional review sessions (which could be for up to 50 students). TAs are also responsible for grading group projects, and for holding information sessions regarding the project. There will be opportunities to provide review sessions in lecture to the complete class if desired. TAs also supervise exam viewings and invigilate the midterms and final. TAs that do not have prior experience in the course are required to attend lecture, and at least one TA out of those assigned to the course must be available to attend lecture in every session to help facilitate active learning exercises.

**TA responsible for:** Lecture support, exam invigilation and marking, project marking, student support in course discussion board

**Time/day of week for TA prep meeting:** none

**Is lecture attendance required:** yes, if the TA is unfamiliar with the course; attendance of at least one TA each lecture session is required, and this duty is shared among the TAs

**Number of lab/tutorial sections required to teach:** none

**Background knowledge:** Background knowledge in EITHER plant or animal physiology is required

**Approximate # of hour for midterm(s) and final exam invigilation and marking:** approximately 20 hours each midterm, and 25 hours for the final plus 3.5 hours final exam invigilation, although this varies depending on the total number of TAs assigned to the course. This is based on 6 assigned TAs.

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## BIOL300 - Fundamentals of Biostatistics

### General description of job duties:

TAs are required to lead 2 tutorials per week (each 2 hours long), during which they assist students with self-guided, established labs in R that teach basics of data science and statistics. TAs are responsible for grading weekly assignments and labs, with the help of Canvas auto-grader. TAs are also responsible for invigilating and grading one midterm exam, one lab exam (during tutorial), and one final exam. TAs are required to learn all course material, through lecture attendance, watching lecture recordings, and/or reading the textbook. TAs are expected to hold one office hour per week, attend 30-minute weekly course planning meetings, and respond to student inquiries via e-mail and on Piazza.

**TAs responsible for:** tutorial

**Time/day of week for TA prep meeting:** TBA

**Is lecture attendance required:** Encouraged

**Number of lab/tutorial sections required to teach:** 2

**Background knowledge:** Basic stat knowledge required

**Approximate # of hour for midterm(s) and final exam invigilation and marking:** Variable

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## BIOL301 - Biomathematics

### General description of job duties:

Biol 301 TAs are required to attend lectures (3 per week, unless familiar with the material) and a weekly prep meeting. TAs lead two tutorial sessions (2 hours total in length) per week, running computer labs with the program maxima to help students solidify the modelling skills built in class. TAs are required to mark weekly assignments, the midterm, and the final exam. TAs are required to invigilate midterms and one final exam.

**TAs responsible for:** Run tutorials (computer lab), mark assignments and exams, invigilate exams

**Time/day of week for prep meeting:** TBD

**Lecture attendance required:** Yes, unless familiar with the material

**Number of lab/tutorial sections required to teach:** 2

**Background knowledge:** Mathematical modelling skills and/or computational skills (asset), ability and interest in helping students develop their math and modelling skills (required)

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** 4 hours (midterm), 6 hours (final)

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## BIOL302 – Biodiversity, Human and Planetary Health

### General description of job duties:

- Attend M-W-F lectures and help with in-class activities as needed
- One TA prep meeting with professor per week (one hour, time to be determined)
- Run two tutorial sessions of 50 min each per week, which will include active learning and peer-to-peer learning activities provided by professor
- Schedule office hours for students as needed, and hold pre-exam review session
- Mark in-class assignments and/or quizzes
- Invigilate final exam (2 hr) and possibly another exam of 3.5 hr
- Exam marking (multiple choice and short answer)
- Assist in marking final projects (5 page/student)
- Respond to student emails
- Other activities could include admin tasks like photocopying, posting files or marks to Canvas

**Background knowledge:** Knowledge of biodiversity conservation a strong plus, but many types of backgrounds would fit with this class, including disease ecology, microbiology/microbiome, human ecology, wildlife ecology...

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## BIOL306 – Advanced Ecology

### General description of job duties:

Each TA leads a lab section (20 students) once per week. Each lab session is up to 3 hours long, and often involves a short pre-lab oral presentation, as well as monitoring and assisting students with exercises during the lab session. TAs attend one lab planning meeting each week, and each TA is also required to attend 3-4 lecture sessions per term. TAs are responsible for marking course assignments (lecture and lab) and exams (two midterms and one

final), and are also asked to help invigilate some exams during the term. TAs meet with students upon request, but are not required to schedule consistent office hours.

**TA responsible for:** Lab exercises (mainly indoors, but occasionally outdoors), exam invigilation and marking, answering student questions on Piazza.

**Time/day of week for TA prep meeting:** Variable (scheduled based on TA availability)

**Is lecture attendance required:** Yes, but only 3-4 lectures per term (attendance at other lectures encouraged but optional)

**Number of lab/tutorial sections required to teach:** 1/week

**Background knowledge:** Familiarity with advanced ecological concepts and approaches (e.g., functional traits, allometry, scaling, metabolic theory of ecology) an asset, but not required.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Variable, but no more than 12hrs/exam

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## BIOL310 - Introduction to Animal Behaviour

### General description of job duties:

There are typically two TAs for three 2-hr tutorials, either Tue, Wed, or Thu, most weeks of the term. TAs team teach the Tue tutorial and separately teach one of the other two. Tutorials consist of a mixture of basic exercises on coding animal behaviour (three in the lab, three in the field) and instruction on putting together a research proposal poster. Students work in pairs to prepare the research proposal poster, which they present during a poster session at the end of the term. TAs grade (via Canvas) worksheets associated with the quasi-weekly tutorials, as well as eight based on readings associated with the lecture component of the course. TAs also participate in grading midterm and final exams.

**TA responsible for:** TAs are responsible for quasi-weekly tutorials, marking worksheets associated with lectures and tutorials, participating in marking a midterm and final, and invigilating one of the exams.

**Time/day of week for TA prep meeting:** One meeting at the start of the term; otherwise via email.

**Is lecture attendance required:** Not required.

**Number of lab/tutorial sections required to teach:** 1.5 per week

**Background knowledge:** Background in animal behaviour, ecology, or evolution desirable.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** 4-5hrs per exam or less.

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## BIOL 325 Introduction to Animal Mechanics and Locomotion

**General description of job duties:** TAs will manage weekly quiz rollout on Canvas, mark midterms and final exams, hold office hours once per week and attend lectures.

### TAs responsible for:

- Overseeing the deployment of the weekly quiz on Canvas
- Midterm and final exam invigilation and marking
- Two office hour periods per week.

- No regular prep meeting.

**Lecture attendance required:** Yes: 3× 1h lectures per week

**Number of lab/tutorial sections required to teach:** No labs/tutorials

**Background knowledge:** basic physics, biomechanics, comparative animal physiology

**Other useful information:** This is a large class (250 student cap) so marking the two midterms and final exam is a substantial portion of the workload.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Midterm exam marking: 12 hours + 1 h invigilation for each of 2 midterms; Final exam marking: 20 h + 2.5 h invigilation.

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## BIOL326 – Experimental Biology of Invertebrates

### General description of job duties:

BIOL 326 meets once a week in a 5-hour block. The first hour is lecture; TA attendance is expected as lab plans are often explained in lecture. The remaining four hours include wet lab work, occasional field trips to Pacific Spirit Park or local marinas, and time for a statistical tutorial to help the students analyze and plot their data in R. TAs are responsible for helping with set-up and clean-up, ensuring that the labs run smoothly (the instructor attends these as well), and for delivering the R tutorials. They are also responsible for grading lab reports (~4 per term), other small homework assignments, and the independent project write-ups. If the TAs are interested, they can design and run one of the eight labs for the term; this optional responsibility is a good opportunity to hone your lesson planning and lecturing skills. There is one weekend field trip to Bamfield, and it is very helpful if the TAs can attend and serve as drivers / chaperones. Finally, TAs are required to hold office hours (90 minutes per week) and attend weekly planning meetings (generally 30 minutes per week).

**TA responsible for:** statistics tutorial, wet lab, report, and homework marking.

**Time/day of week for prep meeting:** usually Friday afternoons, but it depends on everyone's schedules

**Is lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** There is only one lab section, which meets weekly. Any tutorials (e.g., using R for statistical analysis) occur during the regular lab hours.

**Background knowledge:** Use of R for statistical analyses required, knowledge of invertebrates is an asset

**Any other useful information:** It's a fun course with lots of opportunities to interact with highly engaged students. There is also a weekend field trip to Bamfield.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** There are no exams in this course. That said, marking the lab reports, including the big independent project report at the end of the term, can be time consuming.

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## BIOL328 – Ecology and Evolution of Parasites

### General description of job duties:

TA is required to attend a weekly prep session and will teach, together with the instructor, one 3-hour lab session each week. Each week the TA is required to mark the students' lab reports and answer student emails. TA is also required to mark essay assignments, as well as invigilate and mark the midterm and final exams.

**Time/day of week for prep meeting:** flexible

**Number of lab/tutorial sections required to teach:** 1 per week

**Lecture attendance required:** Yes

**Background knowledge:** knowledge of evolution and/or ecology, and degree of familiarity with parasites (worms, bacteria, viruses). Keen interest in the topic is ideal.

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## **BIOL329 – Cell Receptor Signaling, Communication and Regulation**

**General description of job duties:** TAs are required to attend all lectures and a weekly prep session. The TAs are also required to help with students in quizzes and assignments. The TAs are also required to invigilate during midterm exams, and mark assignments, midterm and final exams. Final exam invigilation assignments will be done by each Department. Designing and delivering a guest lecture capturing principles covered is an option.

**TAs responsible for:** exam invigilation, marking (midterm, final, assignments)

**Time/day of week for prep meeting:** Flexible

**Lecture attendance required:** Yes

**Background knowledge:** Basic cell biology knowledge required (BIOL200 level). Cell biology lab experience and knowledge of cell signaling principles is an important asset

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## **BIOL331 – Developmental Biology**

**General description of job duties:**

We will be working with three different model systems: Xenopus, drosophila, and chick embryos. Labs involve working with live specimens, various solutions, dissections, teratogenic drugs, and chicken eggs. TAs must be vigilant about safety and cleanliness during lab time (students are responsible for cleaning up their own lab bench, as well as for keeping clean the common areas such as the sinks and counters in the lab). You are also responsible for checking student lab notebooks at the start and end of the lab before students leave for the day. TAs must check to see that students have cleaned up completely and properly and that they have attempted to discuss and make any necessary modifications to their hypotheses and predictions.

**TA responsible for:** Wet lab, dry lab, exam invigilation, marking, occasionally Piazza and office hours

**Time/day of week for prep meeting:** Usually Friday 11am – noon

**Is lecture attendance required:** No (but helpful)

**Number of lab/tutorial sections required to teach:** TAs are required to either 1) teach two (2) lab sections with a co-TA or 2) teach one (1) lab section and be responsible for some lab preparations (but very minimal) required for the upcoming labs along with a co-TA each week. A TA pair will work as a team the entire term; a pair will teach two lab sections for half the term and then switch with the other pair to teach one section and be in charge of the prep for the remainder of the term.

**Background knowledge:** in developmental biology an asset

**Any other useful information for applicants:** Email me (instructor) questions!

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** 8 hours for MT, 16 hours for final exam (more hours are allocated for lab report grading)

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## BIOL332 – Protistology

### General description of job duties:

TA is required to attend a weekly prep session and will teach, together with the instructor, one 3-hour lab session each week. Each week the TA is required to mark the student's lab reports. TA is also required to mark half of the 10 page essays that students will write. Invigilation of the final (organized by the department).

**Time/day of week for TA prep meeting:** Mondays 9:30AM-12noon

**Number of lab/tutorial sections required to teach:** 1

**Lecture attendance required:** No (but helpful)

**Background knowledge:** a degree of familiarity with protists, or at least algae and/or fungi is required

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## BIOL335 – Molecular Genetics

### General description of job duties:

Biol 335 TAs are required to attend lectures (3 per week) and a weekly prep meeting. TAs will lead two tutorial sessions (2 hours in length) per week. Tutorials will cover assigned problem sets where the TA will help facilitate student understanding and develop problem solving skills. TAs are required to invigilate midterms (typically two midterms) and one final exam. TAs are also required to mark midterms and the final exam.

**TA is responsible for:** two weekly tutorials of 2hrs length

**Time/day of week for TA prep meeting:** Thursdays 12-1PM

**Lecture attendance required:** Yes

**Number of lab/tutorials sections required to teach:** two weekly tutorials of 2 hours length

**Background knowledge:** knowledge of molecular genetics required

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** typically 4 hours of marking for midterms and 8 hours for the final exam

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## BIOL336 – Fundamentals of Evolutionary Biology

### General description of job duties:

TAs are required to attend a weekly prep session and prepare assignments for their tutorials. TAs will lead two 1-hour back-to-back tutorials one day a week. Tutorials consist of activities, case studies, paper discussions, quizzes and problem sets, all usually in small group or problem-based learning settings. Each week TAs will be required to develop tutorial material and mark tutorial assignments (approximately two per tutorial, either before, during or after

tutorial). In addition, there will be one final essay (2-3 pages long) that TAs will mark for their own sections. TAs are also required to invigilate during the midterm, and mark midterm and final exams.

**TA responsible for:** Run tutorials (discussion groups, two computer-based), mark assignments and exams, invigilate exams

**Time/day of week for TA prep meeting:** TBD

**Lecture attendance required:** Yes, unless familiar with the material

**Number of lab/tutorial sections required to teach:** 2

**Background knowledge:** Familiarity with evolution, phylogenetics, and/or population and quantitative genetics (asset), ability and interest in helping students develop their understanding of evolution (required)

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Marking: 4-5 hours (midterm), 6-7 hours (final); Invigilation: Average 3.5 hours

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## BIOL337 – Introductory Genetics Laboratory

### General description of job duties:

TAs are required to teach, together with the lab instructor, two 3-hour lab sessions each week. Prior to each class the TA will pick several quiz questions from a prepared set for the daily quiz. The instructor prepares the quiz for the TA (mostly online but sometimes on paper) to be given at the start of lab. TAs will mark the short quiz during or after class and return to students during the next class. Together with the instructor they will explain various procedures or concepts that the students are working on in lab or in assignments. Most time will be spent assisting students with their experiments either using dissecting microscopes or molecular biology techniques. TAs are required to grade student lab reports and bioinformatics assignments and keep accurate records of student grades. There are no formal prep sessions but TAs are expected to be familiar with basic Mendelian genetics, molecular biology procedures and experimental design. If needed, TAs will receive instruction on how to work with *Caenorhabditis elegans* and *Arabidopsis thaliana*. There are 2 individual lab reports, 2 individual bioinformatics assignments, 1 group lab report and several small group assignments. The instructor provides marking keys and marks a few of the reports/assignments in each section so that the TAs can compare their marking to the instructor. The instructor does more marking in the section with higher enrollment, so the TAs mark the same amount.

**TA responsible for:** TA is in a "wet" lab, but it is only the latter half of the course when there are molecular techniques that a lab coat is required. TAs assist students working with dissecting microscopes. TAs grade daily quizzes (mostly during class) and grade lab reports and assignments.

**Time/day of week for TA prep meeting:** n/a

**Lecture attendance required:** n/a

**Number of lab/tutorial sections required to teach:** 1 section (which meets twice a week) either Tu/Th afternoons 2-5 or W/F afternoons 2-5.

**Background knowledge:** TAs are required to have knowledge of Mendelian genetics and linkage. Prefer TAs who have a background in molecular biology.

**Other useful information:** TAs who work with *C. elegans* or *A. thaliana* have an advantage but it is not required. TAs who have previously TAed for BIOL 234 also have an advantage but it is not required either.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Lab 1 marking: 6 hrs; Lab 2 marking 4 hrs, Lab 3 marking 8 hrs, Bioinformatics #1: 5 hrs, Bioinformatics #2 4 hrs, Group Contract (1 hr in class), Assessing confidential feedback: 30 minutes. Daily quizzes 1-2 hrs/class (frequently marked partially or completely during class time). ~ 27 hours of marking reports/assignments over the term. There are 20 quizzes which requires ~ 25 hrs of marking (mostly during class time). There is no midterm or final exam.

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## **BIOL340 - Introductory Cell Biology Laboratory**

### **General description of job duties:**

TAs are expected to be familiar with field of cell biology, its common practices, and be open to learning new material as needed. TAs are required to attend 1-1.5 hour weekly lab prep meetings, in addition to allocating 0.5 hours before each lab session. During the week, TAs are involved in facilitating two 3-hour lab sessions alongside the instructor. Responsibilities encompass ensuring student preparedness, upholding lab safety standards, monitoring student activities and conduct, and fostering inclusive learning environments. TAs also partake in marking student quizzes and assignments, which include 3 individual and 3 group assignments under the guidance of the instructor. Moreover, TAs may need to allocate extra time outside regular lab hours to aid students during independent experiments, this amount of time will vary but will not exceed the designated TA workload for the semester. Any conflicts with TA duties (e.g. conferences or other commitments) must be communicated to the course instructor as early as possible so that arrangements with other TAs can be made.

**TA responsible for:** Wet labs (described above), marking of assignments, as well as invigilation of exams. This course does not have midterm or final exam. However, TAs will be assigned to invigilate a final exam (~3 h) for another course.

**Time/day of week for TA prep meeting:** Typically, Friday Morning but flexible.

**Lecture attendance required:** No

**Number of lab/tutorial sections required to teach:** 2 sections (which meets either TU, W, Th 2-5 pm or F 10 am-1 pm)

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## **BIOL341 - Introductory Molecular Biology Laboratory**

### **General description of job duties:**

TAs are expected to be familiar with molecular biology, molecular biology techniques, experimental design, and be open to learning new material as needed. TAs are required to attend 1-1.5 hour weekly lab prep meetings, in addition to allocating 0.5 hours before each lab session. During the week, TAs are involved in facilitating two 3-hour lab sessions alongside the instructor. Responsibilities encompass ensuring student preparedness, upholding lab safety standards, monitoring student activities and conduct, and fostering inclusive learning environments. Additionally, TAs are tasked with marking various student work, including lab notebooks, assignments (drafts and final version), presentations, and final reports, some of which are group projects, with oversight from the instructor. Conferences or other short-term conflicts with TA duties must be brought to the instructor's attention as early as possible so that arrangements with other TAs can be made.

**TA responsible for:** Wet labs (described above), marking of assignments, as well as invigilation of exams. This course does not have midterm or final exam. However, TAs will be assigned to invigilate a final exam (~3 h) for another course.

**Time/day of week for TA prep meeting:** Typically, Friday Morning but flexible.

**Lecture attendance required:** No

**Number of lab/tutorial sections required to teach:** 2 sections (lab section times: TU, W, Th 2-5pm, F 10 am-1 pm)

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## **BIOL342 – Integrative Biology Laboratory**

### **General description of job duties:**

Each TA supervises 2 3-hour labs per week and attends lecture. Most weeks require a 1 hour prep session. There are 2-3 project weeks where extra lab supervision is required in lieu of prep sessions or lecture attendance. TAs support student creativity in project design and implementation. We do not grade in this course, so there is no marking, but TAs provide regular and meaningful feedback on all student submissions. All student projects go to the community at large, so stakes are high to provide meaningful feedback for improvement. This course does involve one field trip to a salmon stream near campus. TAs help to supervise on this field trip.

Lab supervision, regular feedback on assignments, regular office hours, supervise one field trip

**TAs responsible for:** Wet labs, providing feedback, one field trip

**Time/day of week for TA prep meeting:** Typically Fridays at 11AM (but flexible).

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** 2 labs per TA

**Background knowledge:** Basic stats is required. Some molecular biology experience is an asset.

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## **BIOL 351 – Plant Physiology I**

### **General description of job duties:**

Each TA is required to teach, together with the lab instructor, specific lab sessions each week. TAs will attend all lab meetings, information sessions and experimental demonstration sessions.

During the labs TAs will explain various experimental protocols and concepts to students, facilitate discussion, and answer students' questions. During each lab session, TAs will help set up lab experiments and make sure that lab safety protocols are followed. TAs will also be required to grade student lab reports, research project reports and research presentations.

**TAs are responsible for:** Mainly wet labs (photosynthesis, respiration, water relations, protein/enzyme analysis, and stress physiology); Marking one short lab report, one research project report and one short research presentation; Lecture Exam invigilation

**Time/day of week for TA prep meeting:** Most weeks require a 1-2 hrs lab prep session to familiarize TAs with the experimental techniques. Extra lab supervision (in lieu of prep work) could be required during three research project weeks.

**Lecture attendance:** Generally not required, unless TAs need more background in plant physiology



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## BIOL 352 – Plant Physiology II Plant Development

### Lab TAs

#### **General description of job duties:**

Each TA is required to teach, together with the lab instructor, specific lab sessions each week. TAs will attend all lab meetings, information sessions and experimental demonstration sessions.

During the labs TAs will explain various experimental protocols and concepts to students, facilitate discussion, and answer students' questions. During each lab session, TAs will help set up lab experiments and make sure that lab safety protocols are followed. TAs will also be required to grade student lab reports, research project reports and research presentations.

**TAs are responsible for:** Mainly wet labs (plant hormones, tissue culture, protein analysis (SDS-PAGE and Western blot), and cell/tissue/organ growth; marking one short lab report, one research project report and one short research presentation; Lecture Exam invigilation

**Time/day of week for TA prep meeting:** Most weeks require a 1-2 hrs lab prep session to familiarize TAs with the experimental techniques. Extra lab supervision (in lieu of prep work) could be required during three research project weeks.

**Lecture attendance:** Generally not required, unless TAs need more background in plant physiology

### Tutorial TAs

#### **General description of job duties:**

The tutorial TA will help teach tutorial sessions under the guidance of the instructor. The TA is required to attend one 1-hr tutorial session and two 1-hr lectures each week. The TA is responsible for monitoring students' individual homework answers and prepare a summary assessment report before the tutorial each week. The TA will also help the instructor in designing the weekly homework questions. During each tutorial session, the TA will compile homework answers from each group. In addition, the TA will compile the tutorial homework marks.

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## BIOL362 – Cellular Dynamics

#### **General description of job duties:**

TAs are required to attend all lectures and a weekly prep session. The TAs are also required to help with students during four Case study (group work) sessions. The TAs are also required to invigilate during midterm exams, and mark case study assignment, midterm and final exams. Final exam invigilation assignments will be done by each Department.

**TA responsible for:** Exam invigilation, marking (midterm, final, and case study assignments)

**Time/day of week for TA prep meeting:** Flexible

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** Basic cell biology knowledge required (BIOL200 level). Cell biology lab experience is an important asset

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Approx. 30 hours in total (1 midterm, 1 final, 4 case study assignments)

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### **BIOL363 - Laboratory in Animal Physiology**

#### **General description of job duties:**

TAs are required to teach, together with the lab instructor, one 4-hour session including both lab & tutorial each week. The 4 hours will be spent assisting students with their experiments and answer questions. TAs are required to help with the grading of student lab notebooks, assignments, lab exam and keep accurate records of student grades. There are weekly formal prep sessions (Tuesday morning) to familiarize TAs with equipment and procedures (Computerized data acquisition software, spectrophotometry, calibration of transducers, dissections, etc.). TAs are expected to be familiar with basic concepts in animal physiology and experimental design.

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### **BIOL364 – Comparative Cardiovascular, Respiratory and Osmoregulatory Physiology**

#### **General description of job duties:**

TAs are required to attend 3 one hour lectures per week, hold 2 office hours per week in the Biological Sciences Bldg, and attend 1 h per week meeting with instructor. Other duties include: Helping to mark midterm exams, final exams and quizzes; assisting the instructor during class as needed; monitoring and responding to students' posts on piazza; responding to student emails; preparing multiple choice and short answer questions for the midterms and final exam, reviewing exam questions; facilitating review sessions before midterms and finals; and possibly delivering a guest lecture (if mutually agreed upon by TA and instructor). Other activities are possible and subject to discussion between the TA and course instructor.

**TA responsible for:** Exam invigilation, marking (midterm, final, and quizzes)

**Time/day of week for TA prep meeting:** 1 h /week

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** basic understanding of physiology and/or biochemistry

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** There are two midterms and one final. Each midterm requires 20 hours of marking per TA and the final requires 40 hours of marking per TA.

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### **BIOL370 – Principles of Muscle Physiology and Energetics**

#### **General description of job duties:**

TAs are required to attend, in person, all lectures during which time their role is to circulate through the lecture hall and to facilitate active learning. The TAs are required to ask students questions that help them to think things through themselves. The TAs are also responsible for developing exam questions related to lecture material, hold

weekly office hours for students, as they are responsible for grading mid-terms, the final exam, and all class assignments.

**TA responsible for:** exam invigilation, grading all assignments and exams, developing questions for exams and pre-readings, and attending lectures.

**Time/day of week for TA prep meeting:** 1hr per week

**Lecture attendance required:** yes

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** basic understanding of physiology and/or biochemistry

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Of the 192 hr/term allocated to TAing, ~80 hr will be spent grading mid-terms (2 or 3) and the final exam. Other hours are spent in lecture (~37.5 hr), holding office hours (12 hr) or doing self-directed preparation for the course

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## **BIOL371 – Principles of Neurobiology I**

### **General description of job duties:**

TAs are required to hold one weekly office hour. They also write drafts of exam questions, mark exams, and mark worksheets.

**TA responsible for:** Office hour

**Lecture attendance required:** Yes if it is the first time the TA has worked in the course.

**Number of lab/tutorial sections required to teach:** 1

**Background knowledge:** Background knowledge in cellular and synaptic neuroscience is a firm requirement. The TA must have completed an undergraduate course exclusively focused on Neuroscience.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Exam marking hours are the most substantial time commitment of the job. There are two midterms and one final. Each midterm requires 20 hours of marking per TA and the final requires 30 hours of marking per TA.

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## **BIOL372 – Principles of Neurobiology II**

### **General description of job duties:**

TAs are required to hold one weekly office hour, mark quizzes and assignments, invigilate and mark exams (~2 midterms and 1 final exam). In addition, they will be expected to cover some in-person lectures (1 per session) to help with classroom logistics.

**TA responsible for:** Office hours, exam invigilation, exam marking

**Time/day of week for TA prep meeting:** Flexible

**Lecture attendance required:** Yes for first-time TAs, for returning TAs only one per lecture are required.

**Number of lab/tutorial sections required to teach:** 1 office hour / week

**Background knowledge:** Background knowledge in introductory neuroscience is a firm requirement

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Marking hours are the most substantial time commitment of the job. There are two midterms and one final. Each midterm requires approx 15 hours of marking per TA and the final requires approx 20 hours of marking per TA. Each assignment requires ~5 hours of marking (there are on average 6 per term).

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## BIOL402 – Aquatic Ecology

**General description of job duties:**

- **Lab activities:** approx 10 sessions, preps lab materials including data sheets, teaches labs sometimes with prof and sometimes alone, supports students in lab assignments (approx 6-8 hours per week).
- **Field Trip:** prepares gear, drives, helps organize field trip, helps after field trip with samples, and gear. Heavy work in the week before field trip - up to 20 hours, and then during the field trip. Historically the field trip was an overnight, though this might change to a day trip next year.
- **Attend class** (attend most but not all classes, < 3 hours per week).

**TA responsible for:** wet lab, lab marking, leading field trip activities and preparation

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** 1 3 hr lab / week (most weeks), plus field trip

**Background knowledge:** field ecology, aquatic ecology, R coding and data wrangling

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** 0 - 8. Prof usually marks exams and final papers. TA marks labs and provides support with lab activities

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## BIOL403 – Microbial Ecology

**General description of job duties:**

- **Admin:** office hours (1 hour/week), admin (respond to email/piazza, help with Canvas management, team meeting: 2 hours/week).
- **Project facilitation-activities:** TA is expected manage dataset processing and upload to canvas at start of term to facilitate student projects (20 hours). Misc project facilitation (2 hours/week). grade project assignments on code and data appendix (~10 hours).
- **Lab activities (12 sessions):** TA is expected to prep for lab by update lab materials (including code, assignments, rubrics) (2 hours/week), lead 1 lab section (3 hours/week), grade lab assignments (3 hours/week).

**TA responsible for:** dry lab and marking

**Lecture attendance required:** No

**Background knowledge:** Required; Proficiency in R and analysis of ecological data required.

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## BIOL404 – Ecological Methodology

**General description of job duties:**

Weekly: Prepare for lab (2 hours - materials+ reading over lab + 0.5 hr TA prep meeting) + Run lab (3 hours) + Office hours (1 hour per week in person, 1 hour per week answering Q online) + Marking of four reports (2.5 hours per week on average) + attending class (0.5 hour on average per week) + one hour flex + 0.5 hour vacation

**TA responsible for:** Prepping and running the lab (1 section) one after noon per week, marking lab reports, assisting students in acquiring equipment for independent projects, office hours. NOT required: office hours for statistics portion of course, marking statistics assignments.

**Time/day of week for TA prep meeting:** TBD

**Lecture attendance required:** yes for 25% of lectures (those explaining theory connected to labs)

**Number of lab/tutorial sections required to teach:** 1

**Background knowledge:** Required: ecology, biostatistics, R, fieldwork experience; Useful: wilderness first aid

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** No midterms or final exams (!), but you may need to invigilate another course's exam.

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**BIOL406 – Plant Ecology I**

**General description of job duties:**

**Regular weekly activities (6hrs/week):** Help manage Canvas content & student participation (3 hrs/week), Office hours (1 hr/week), Admin (respond to email, help outside of office hours, etc.) (1.5 hrs/week), Team meetings (0.5 hr/week)

**Lab activities** Revamp/update lab materials (incl. handouts, codes, rubrics (7hrs at start of term), Prep for lab (~2hrs/week x 6 sessions), Lead 1 lab section (2hrs/week x 9 sessions), misc facilitation during data collection weeks (3hrs/week x 2 weeks), Grade lab assignments (3hrs/week x 9 assignments) = 70hrs/13 weeks = 5.4hrs/week

**TA responsible for:** Canvas + lab

**Number of lab/tutorial sections required to teach:** Lead 1 lab section

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Grading: 2 midterms (12hrs/exam), final reports (12hrs)

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**BIOL411 – Insect Ecology**

**General description of job duties:**

Attend lecture (3x week, 50 min lectures), During Lecture: help with zoom chat (if hybrid), facilitate class discussion 1x week (plus prep); hold office hours (1hr/wk), facilitate R and data analysis tutorials during class or during separate office hours (requires prep)

**TA responsible for:** Facilitates class 1x week (50 min class); helps with marking; helps with data analysis (we run large class projects; TA must have solid R skills)

**Time/day of week for TA prep meeting:** Usually 1-1.5 hr/week prep

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** Lead 1 lecture per week - usually paper-based discussion or R-based data analysis

**Background knowledge:** Must have strong insect ecology background; must have strong R skills

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Marking: help with grading 1 midterm, 2 major projects, 1 final assignment

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## BIOL415 – Evolutionary Processes in Plants

### General description of job duties:

The TA is expected to attend two 50-minute lectures each week, lead a two 2-hour tutorial each week, and prepare and grade weekly quizzes.

**TA responsible for:** Tutorial and weekly quizzes

**Time/day of week for TA prep meeting:** None

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** 1

**Background knowledge:** Required

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** None

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## BIOL416 – Principles of Conservation Biology

### General description of job duties:

Running tutorials, grading assignments, office hours, invigilating final exam, guest lecture (optional!)

**TA responsible for:** Weekly tutorial (two sections). Grading of midterm report and tutorial assignments

**Time/day of week for TA prep meeting:** up to 1 hour prep meeting the week before tutorials

**Lecture attendance required:** no (but attendance recommended for 3-4 lectures)

**Number of lab/tutorial sections required to teach:** two sections per week

**Background knowledge:** Basic ecology/evolution theory, coding ability in R, familiarity with phylogenetic analyses/data an asset

**Lecture attendance required:** Yes. for TAs that have not previously taken conservation-related courses

**Other useful information:** Comfort with coding in R (more than just running stats). Running 2 three-hour tutorials a week requires a lot of student engagement.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Grading of mid-term assignment (written report) 40 hrs, grading of final exam 20 hrs, exam invigilation 2.5 hrs

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## BIOL427 – Ornithology and Herpetology

### General description of job duties:

The primary TA responsibilities include preparing for, presenting, and overseeing six weeks of lab sessions (two laboratory sections / week, each of 2.5 hours) focusing on identification of museum specimens of birds, plus designing, presenting and marking a lab quiz as well as a lab exam (each occurring in a separate week). The TA will also assist in giving advice for group field projects, as well as grading student presentations and written reports. The TA is encouraged to attend lectures if time allows, but this is not a strict requirement. One of the laboratory weeks involves an outdoor birding session—this is led by the instructor and usually supported by the TA.

**TA responsible for:** Two weekly laboratory sessions focusing on identification of museum specimens.

**Time/day of week for TA prep meeting:** No regular prep meeting

**Lecture attendance required:** No but encouraged for new TAs for this course

**Number of lab/tutorial sections required to teach:** In most years, one TA teaches 2 laboratory sections, each of up to 3 hours.

**Background knowledge:** Strong background in ecology, evolution, and/or natural history of birds.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Depending on how much TA is remaining, the TA assists with marking student presentations and final project reports.

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## BIOL438 – Zoological Physics

### General description of job duties:

TA will mark assignments and exams, hold office hours once per week, and attend lectures. Marking duties will be shared with a TA from the physics department.

**TA responsible for:** exam invigilation and marking; HW marking; office hours

**Time/day of week for TA prep meeting:** No regular prep meeting

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** One hour per week of office hours

**Background knowledge:** biomechanics, comparative animal physiology, basic physics

**Other useful information:** There are two sections (PHYS438 and BIOL438), and a TA from physics will assist.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** Midterm exam marking: 2 hours; Final exam marking + invigilation = 5 hrs

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## BIOL 453 Insect Physiology

**General description of job duties:** TA will primarily assist with running lab classes investigating the physiology of live insects (primarily cockroaches).

**TA responsible for:** assisting with setting up lab prior to class, running the lab (this includes handling live insects) and pack-down after classes. Some familiarity with electrophysiological recordings desirable.

**Lecture attendance required:** Yes: 2× 1.5h lectures per week

**Number of lab/tutorial sections required to teach:** 1x 3 h lab each week with an additional 1.5 h of set-up and pack-down time.

**Background knowledge:** Insect or comparative animal physiology, neurobiology, any experience with electrophysiological techniques beneficial

**Other useful information:** Lab classes use a variety of live insects, but predominantly cockroaches (*Nauphoeta*, *Dubia* and *Gromphadorhina* species) so TAs must be comfortable handling these animals.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:**

Midterm exam marking: 2 hours + 1.5 h invigilation; Final exam marking + invigilation = 5 hrs

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## **BIOL454 – Comparative Animal Physiology**

**General description of job duties:**

TAs are required to attend 2- 1.5 hour lectures per week and hold 2 office hours in the Biological Sciences Bldg. The TA will meet weekly with the instructor as preparation for the upcoming week. Other duties include: Helping to grade term papers and peer reviews of term papers; provide feedback on outlines of term papers, assisting the instructor during class as needed and facilitating discussions; monitoring and responding to students' posts on piazza; responding to student emails; preparing questions for exams, reviewing exam questions; and possibly delivering a guest lecture (if mutually agreed upon by TA and instructor). Other activities are possible and subject to discussion between the TA and course instructor. The TA will work closely with students to guide the development of a high quality term paper and oral presentation of that term paper as their major assignment.

**TA responsible for:** Will invigilate and grade exams, oral presentations and term papers.

**Time/day of week for TA prep meeting:** weekly meetings as needed

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** detailed knowledge of comparative physiology is required.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** ~ 80 hr/term allocated for grading.

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## **BIOL457 – Comparative Environmental Physiology**

**General description of job duties:**

TA will attend lectures, faculty group discussions, prepare and give class lectures in areas of interest, grade materials (weekly quizzes, exams and major assignment). TA will work closely with students to guide the development of a research grant as their major assignment.

**TA responsible for:** Will invigilate and grade exams

**Time/day of week for TA prep meeting:** meetings only when needed

**Lecture attendance required:** Yes

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** detailed knowledge of environmental physiology is required.

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** ~ 80 hr/term allocated for grading.



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## BIOL463 – Gene Regulation in Development

### General description of job duties:

TA responsibilities include: attending lecture (3x/week) and contribute by facilitating group work and other activities, relaying students' questions to the instructor, and sharing comments and examples from experience as a student and as a researcher; contributing to the evaluation of students' work (e.g. worksheets, reflection assignments, quizzes, projects); hosting office hours; giving students ongoing feedback on their projects; providing feedback to the instructor; answering students' questions; monitoring and contributing to the Piazza discussion board; managing, evaluating, and answering students' questions related to the Wikipedia project (students develop Wikipedia articles). The TA will also be required to participate in some TA professional development activities.

**TA responsible for:** invigilation and some marking of exams.

**Time/day of week for TA prep meeting:** Will try to find a day and time that works for both the TA and instructor.

**Lecture attendance required:** YES

**Number of lab/tutorial sections required to teach:** n/a

**Background knowledge:** Required: Knowledge of and experience with gene regulation and epigenetic; relevant laboratory experience; TAs need to have taken BIOL463 or an equivalent course. Asset: Excellent writing, including scientific writing skills; keen interest in teaching/mentoring.

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## BIOL465 – Diversity and Evolution of Fishes

### General description of job duties:

Set up and take down lab displays under instructions of prof. Attend and run 2x2 hr lab sessions per week using lab guides provided by prof. Office hours (2 hr week). Occasional marking. Basic knowledge of concepts in ecology and evolution, some fish experience desirable.

**TA responsible for:** Wet lab, some marking.

**Time/day of week for TA prep meeting:** variable

**Lecture attendance required:** no, but encouraged

**Number of lab/tutorial sections required to teach:** 2

**Background knowledge:** Ecology, evolution, physiology (all desired)

**Approximate # of hours for midterm(s) and final exam invigilation and marking:** 12 (total)

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