



Lab Coordination Guidelines

Responsibilities associated with Coordination of labs and lab courses in the Department of Biology.

Coordination of labs in the Department of Biology is a large responsibility and can be assigned to faculty members and/or the Biology Lab Managers. The following document outlines the responsibilities of those involved in labs with respect to their duties, and sets out a framework for cooperation between faculty members, the lab manager and the technical staff.

1. Coordination Responsibilities of the Lab Managers:

- a. Organize weekly meeting with TAs for courses within your area of responsibility.
- b. Collaborate with the technician assigned to the lab to ensure that all materials are prepared and available.
- c. Discuss the TA contract with TA's and define required duties (note TA's are paid until the end of the final exam period and must be available for marking).
- d. Supervise all aspects of the responsibilities of the TAs teaching the labs.
- e. Provide TAs with all necessary materials (PowerPoint presentations where applicable, assignments, marking keys, etc.) or supervise development of lab exams and marking key.
- f. Post lab materials to Canvas as needed, or arrange for printing and distribution of lab manuals.
- g. Manage the spreadsheet of marks for the labs and forward the grades to the lecture instructor in a timely manner.
- h. Ensure that all TAs have ChemSafe certification (Note: the Biosafety course is also required for microbiology labs).
- i. Schedule TAs to invigilate and mark lecture exams and assignments as needed in consultation with lecture instructors.
- j. Deal with problem students and students with problems.
- k. Set up procedures for dealing with emergencies and equipment failures.
- l. Coordinate the content and order of lab sessions in collaboration with the lecture instructors.

2. Lab Coordination for Faculty members who work with the Biology Lab Managers:

- a. The Biology Lab Managers may be assigned responsibility for coordinating labs along with faculty members who teach the lecture portion of a course, or other faculty members who are assigned to the labs.
- b. **Responsibilities of the faculty members who work with the Biology Lab Managers.**
The faculty member(s) will:
 - 1) Provide the lab manager with a course and lab outline that specifies all equipment or materials needed and any solutions required (on a per lab basis), any safety considerations, and the dates that the materials are needed. The Lab Manager will coordinate the requirements with the technician(s) assigned to the labs.

- 2) Work with the Lab Manager to provide TAs with all necessary materials (PowerPoint presentations where applicable, assignments, marking keys, etc.).
- 3) In collaboration with the lab manager:
 - a) Develop new lab exercises when and as needed
 - b) Ensure that the labs are coordinated with the lecture material where appropriate
 - c) Update lab exercises when and as needed
 - d) Reorganize lab exercises to match lecture content
 - e) Modify lab exercises because of problems with supplies/equipment
- 4) Work with Lab Manager to supervise development of lab exams and marking keys
- 5) *Note that where ethics approval is required, it is the responsibility of the faculty member in charge of the course (whether or not they are involved in the labs) to complete the application and attain approval.

3. Lab Coordination for Faculty members who are assigned to coordinate labs without the direct assistance of the Biology Lab Manger.

- a. If a faculty member coordinates lab sections (8 or fewer sections), the following responsibilities include, but are not limited to, the following:
 - 1) Preparation of the lab outline for the course (in cooperation with the faculty member who is doing the lecture- if applicable).
 - 2) Provide the lab manager(s) with a course and lab outline that specifies all equipment or materials needed and any solutions required (on a per lab basis), any safety considerations, and the dates that the materials are needed. The Lab Manager(s) will coordinate the requirements with the technician(s) assigned to the labs.
 - 3) Review of lab exercises. The faculty member will take responsibility if:
 - a) New lab exercises need to be developed
 - b) Lab exercises need to be updated
 - c) Lab exercises need to be reorganized to match lecture content
 - d) Lab exercises need to be modified because of problems with availability of supplies or equipment
 - 4) Coordination of weekly meetings of TA's
 - 5) Instruction of TA's re safety considerations in the lab and ensuring that all TAs have CHEMSAFE certification (and also the Biosafety course for microbiology courses)
 - 6) Discussion of TA contract with TA's ensuring they understand the required duties
 - 7) Scheduling TA's, in conjunction with the lecture instructor, to be available to invigilate and mark lecture exams and assignments
 - 8) Preparation of power point presentations for the TA's that can be used as the basis of the lab lectures for the students
 - 9) Posting of lab exercises, assignments and marks to Canvas or printing and distributing lab manuals
 - 10) Development of assignments, discussion with TA's, and preparation of marking keys for assignments.
 - 11) Development and set up of lab exams with TA's and preparation of exam marking keys.

- 12) Collection of marks for the course, calculation of overall lab marks and forwarding of marks to the lecture instructor(s) in a timely manner.
 - 13) Dealing with problem students, or students with problems in the labs
 - 14) Being available to TA's for help when needed
 - 15) Reporting to the Head any concerns about the labs or TA's or students to ensure that communication lines are open
 - 16) Note that where ethics approval is required, it is the responsibility of the faculty member in charge of the course (whether or not they are involved in the labs) to complete the application and attain approval.
- b. **Lab coordination for faculty members for labs that have 9 or more sections:** It should be noted that for courses that have 9 or more sections, a faculty member may be assigned as the overall coordinator. Faculty members who teach the lecture may be also assigned to work with the Faculty Member who is acting as the overall coordinator.

4. Responsibilities of the Overall Coordinator:

- a. Arrange meetings of the faculty members and divide up the lab exercises amongst the faculty members according to expertise.
- b. Prepare the lab outline for the course in cooperation with the faculty member who is doing the lecture and other faculty members assigned to the course.
- c. Ensure that the technician assigned to the labs has an up to date list of all required materials and equipment, and a lab schedule.
- d. Set up the initial TA meetings and establish the ground rules for the course. Then responsibility for the TA meetings should be divided among the faculty members assigned to the labs based on their area of expertise.
- e. Manage the spreadsheet for the course and ensure that lab marks are sent to lecture instructors in a timely manner.
- f. Schedule TA's in conjunction with the lecture instructor to be available to invigilate and mark lecture exams and assignments.
- g. Deal with problem students, or students with problems in the labs.
- h. Be available to TA's for help when needed.
- i. Report to the Department Head any concerns about the labs or TA's or students to ensure that communication lines are open.
- j. Ensure that all TAs have ChemSafe certification (and also Biosafety course for microbiology courses).

5. Responsibilities of faculty members who work with the Overall Lab Coordinator in large multi-section labs:

- a. Review lab exercises that you are responsible for, and make decisions on new labs, updating or revision in cooperation with overall coordinator.
- b. Work with the lab coordinator to make any changes necessary to the labs.
- c. Write the lab lectures and distribute to TA's at TA meetings.
- d. Meet with TAs before every lab that you are responsible for (This usually requires about 1 1/2 hours per meeting). Note: There can be up to 3 TA meetings per week depending on TA availability and the number of lab sections.
- e. Post lab exercises to Canvas for labs you are responsible for.

- f. Set up the first lab section for an exercise, in cooperation with the overall coordinator and the technician.
- g. Prepare lab assignments and develop marking keys.
- h. Participate in developing lab exams and developing exam answer keys.
- i. Be available to TA's for help when needed.
- j. Report to the overall coordinator any concerns about the labs or TA's or students to ensure that communication lines are open.