Biol 407-03: Introductory Microbiology (Biol 155) Practicum in Laboratory Teaching Course Syllabus — Spring 2017

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General Microbiology (Biol 255) Practicum in Laboratory Teaching Course Syllabus — Spring 2017

Instructor:

Tim Steffens, tims@uidaho.edu, LSS 168, 885-8953 Office Hours by Appointment

Course Description:

Practicum in Biology Laboratory Teaching is an experience that allows students to become peer mentors, tutors and teaching assistants to other students taking microbiology. In this course students will prepare introductory lectures to laboratories, help set-up and take down weekly labs, tutor students, write and grade quiz and exam questions. This experience helps students practice and solidify their own knowledge of a broad range of microbiology concepts, and it allows students to practice teaching using various methodologies.

University Learning Outcomes:

Learn and Integrate—Students will learn a variety of new laboratory skills and apply their knowledge to help guide other students in laboratory exercises and independent research projects for each course.

Think and Create—Students will create and communicate weekly introductions to the laboratories that help explain the main concepts being addressed. They will use multiple teaching strategies and apply the concepts to real world issues to gain student attention and fully explain the information under study in the laboratory that week.

Communicate—Students will create and articulate a broad range of scientific concepts to primarily freshmen and sophomore students. Teaching Assistants will spend three to six hours a week circulating within laboratory classes helping answer student questions or mentoring students completing independent research projects. Teaching Assistants must also communicate in written form to their students, providing them with valuable feedback on the concepts under study.

Clarifying Purpose and Perspective—Students will learn to manage information, time, people and their own work. They will be open to mentoring a diverse group of students. Students will gain a tremendous amount of confidence and expand their knowledge of self and others from teaching and mentoring.

Practice Citizenship—In the Laboratory Practicum Experience students will establish themselves as leaders within a group of twenty-four peers. They will make ethical decisions and use responsible behaviors in order to gain the respect of their classes. They will learn how to be firm and fair in dealing with the diverse groups of students they teach. They will collaborate with the instructors, technicians and other Teaching Assistants in order to successfully complete this job.

Disability Support Reasonable Accommodations:

Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306, in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

[Phone: 208-885-6307 Email: dss@uidaho.edu Website: www.uidaho.edu/dss]

Please notify the instructor during Week One of classes if accommodations are required.]
Class Notes and Other Course Information:

For 155

- TA Meetings are in LSS 144 on Fridays at 7:00 am (you are required to be there and on time)
- TAs will be given Building access and issued a lab key (must be returned at the end of the semester).
- 155 Labs are on Mondays and are in LSS:
  - Section 01 Room 171  3:30-6:00 pm
  - Section 02 Room 170  3:30-6:00 pm
  - Section 03 Room 171  7:00-9:30 pm
  - Section 05 Room 167  3:30-6:00 pm
- You will be given the lab manual.
- All class information can be found on the class site on BB Learn (https://www.bblearn.uidaho.edu) and will be sent weekly via emails.
- You will be giving weekly mini-lectures to your assigned section. The instructor will supply an outline and will walk you through it during the weekly TA meetings.
- You must read your email at least once a day (early, mid, and late is better).
- As a group you must submit orders for all equipment, supplies, and cultures at least two weeks ahead. Start for the 2-6-17 lab. It is suggested you do the whole semester all at once.
- Each TA will take turns in compiling and editing the quizzes and exams. The finished product will be sent to the instructor by the given due date. All TAs will contribute questions for all the quizzes and exams.
- There is setup and cleaning time required (30 – 60 minutes) especially at the start of the day.
- All grade changes must be sent to the instructor once a week via the supplied spreadsheet. Highlight any change of a previous grade.
- Confidentiality: TAs will receive FERPA training and pass a standard university assessment on this knowledge. TAs will keep all student information and educational records confidential.

For 255

- TA Meetings are in LSS 144 on Fridays at 11:30 am (you are required to be there and on time)
- TAs will be given Building access and issued a lab key (must be returned at the end of the semester).
- 255 Labs are on Tuesday and Thursday and are in LSS:
  - Section 01 Room 171  9:30-11:20 am
- You will be given the lab manual.
- All class information can be found on the class site on BB Learn (https://www.bblearn.uidaho.edu) and will be sent weekly via emails.
- You will be giving weekly mini-lectures to your assigned section. The instructor will supply an outline and will walk you through it during the weekly TA meetings.
- You must read your email at least once a day (early, mid, and late is better).
- You will take turns submitting orders for all equipment, supplies, and cultures at least two weeks ahead (not this semester).
- Each TA will take turns in compiling and editing the quizzes and exams. The finished product will be sent to the instructor by the given due date.
- There is setup and cleaning time required (30 – 60 minutes) especially at the start of the day.
- All grade changes must be sent to the instructor once a week via the supplied spreadsheet.
- Confidentiality: TAs will receive FERPA training and pass a standard university assessment on this knowledge. TAs will keep all student information and educational records confidential.
Grading:

The course instructor will evaluate the students. Based on this information, a letter grade will be assigned to their work. Letter grades are awarded based on the University of Idaho grade scale (175 total points):

A 90 – 100% (157 pts.)  B 80 – 89% (140-156 pts.)  C 70 – 79% (122-139 pts.)  D 60 – 69% (105-121 pts.)  F 0 – 59% (104 and below pts.)

1. Weekly tasks — 72 (84 for 255) pts.

<table>
<thead>
<tr>
<th>Weekly Task (12 Weeks 155 and 14 Weeks 255)</th>
<th>No=0</th>
<th>Yes=1</th>
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<tbody>
<tr>
<td>TA comes to Lab TA meeting and on time.</td>
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<tr>
<td>TA understands the class material to be taught.</td>
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<td>TA arrives at their Lab 10 - 60 minutes (depending on needs) prior to the start of class for setup.</td>
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<td>TA grades students in a fair manner and provides feedback as needed.</td>
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<td>TA helps clean up the lab at the end of the lab period.</td>
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<td>TA turns in weekly updated grade spreadsheets on time to Instructor.</td>
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Total Points Possible for Semester 72 (84)

2. Interaction — 80 pts.

Presentation/communication skills (10 pts.)
Student interaction (10 pts.)
Preparedness (10 pts.)
Effort (10 pts.)
Graded twice for each TA during the semester for 80 pts. total.


1-2 page summary
TA shares three things they gained and learned from the Practicum Experience
TA shares one lab they would change and one they would keep and why
Typed, 12 Font, Double-spaced
Grammar/Spelling Correct

<table>
<thead>
<tr>
<th>Points Awarded</th>
<th>Description of Paper</th>
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<tbody>
<tr>
<td>12 pts.</td>
<td>*Student discusses three things they have gained or learned from the Practicum Experience (4 pts. per idea)</td>
</tr>
<tr>
<td>8 pts.</td>
<td>*Students discuss their favorite and least favorite lab (4 pts. per idea)</td>
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<tr>
<td>1 pt.</td>
<td>*Paper is typed with correct formatting (1 pt.)</td>
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<td>2 pts.</td>
<td>*Paper has correct grammar and spelling (2 pts.)</td>
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<tr>
<td>23 pts.</td>
<td>Total Points</td>
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Total Points 175 – for 155 and 187 – for 255