Biol 407-03: General Microbiology (Biol 255) Practicum in Laboratory Teaching Course Syllabus — Fall 2018

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:

- TA Meetings are in LSS 144 on Fridays at 10:30 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 in:
  
  Section 01  Room 171  9:30-11:20 am  
  Section 02  Room 171  12:30-2:20 pm  
  Section 03  Room 171  3:30-5:20 pm

- You will be given the lab manual and have access to the 255 BBLearn site.
- All class information for 407 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 (187 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 — 84 pts.

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<thead>
<tr>
<th>Weekly Task (14 Weeks)</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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<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 | 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.

3. **Final Reflection Paper (Due December 12, 2018): 23 pts.**
   - 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

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<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>
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<tr>
<td>8 pts.</td>
<td>*Students discuss their favorite and least favorite lab (4 pts. per idea)</td>
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<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><strong>23 pts.</strong></td>
<td><em>Total Points</em></td>
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**Total Points 187**