Microbiology 391H

Microbiology Colloquium

A course to satisfy the Commonwealth Honors College Requirements for Honors Scholarship

Instructor: Dr. Kristen DeAngelis

Meetings: Fridays 1:25PM - 2:15PM, Morrill Sci. Ctr. (I) room N448

Office Hours: 1-1:25pm Fridays in Morrill (I) N448,

or by appointment

Contact: deangelis@microbio.umass.edu, LSL N435

Course description: This class is a small group tutorial discussion on interdisciplinary topics in Microbiology. This course fulfills the requirement for Honors in Microbiology, though it is open to other honors students. The theme for this semester is "I, Microbiologist," and will focus on developing skills for becoming better scientists and better advocates for science with a focus on microbiology.

Course goals: Through practice asking questions, students will improve skills in courage, communication, organization and connections. Students will reflect on and modify factors outside of the classroom that impact their success. Students will become better advocates for science, microbes, and microbiology.

Class Policy: All students are expected to attend each class and actively participate in class discussions. Absences may be excused with a written note or email submitted to the instructor before the missing class. All students are expected to adhere to the Code of Conduct as described by the UMass Dean's office to create a respectful atmosphere for learning and sharing. Students with disabilities should notify the instructor as early in the semester as possible for accommodations.

Activities:

- 1. Each week in class students will research guest faculty members, develop questions to ask of our guests and participate in our class discussions.
- 2. Each student will interview (outside of class) and introduce one of our guests, listed on the class schedule below; this may be alone or with one other student.
- 3. Each student will choose some combination of **3** among the following **advocacy activities**, to be completed any time before the end of the semester. These can be done in the 5 minutes at the beginning of class or on your own time:
 - a. Give us a 2-minute **snippet** of a recent paper. We will share snippets at the beginning of class each week. Email the citation to the instructor for credit.
 - b. Letters advocating for science, science education or something similar can be written and sent to your members of congress and senators in your home state; letters must be shared with the class for credit.
 - c. Students may turn in a **Self-Evaluation Rubric**, then meet with the instructor for about 10 minutes during office hours to show your work and discuss.
 - d. Other advocacy activities can be done with instructor's advance permission.
- 4. The class, through small group work, will collaborate to **design a T-shirt** with artwork relating to science, microbiology, or the "I, Microbiologist" theme. T-shirts will be gifted to the class and sold through the microbiology department.

Grade Basis: Attendance is half of your grade, and there are 13 classes per semester, so each unexplained class absence will result in a deduction of 50/13 points, implemented as a reduction in one letter grade increment (A to A-, A- to B+, etc) of your final grade. Participation is the other half of your grade. Students who willingly do not participate in class activities will have points deducted proportional to the amount of work missed or refused. There is work assigned for each class, so lack of participation in a class activity will result in deduction of up to 50/13 or up to 4 points off or one letter grade increment per missed or poor participation in the activity.

2018 Class Schedule

Date	Topic & Meeting Site*	Presenter
1/26	Introductions, semester plan, and discussion on communicating science	Students
2/2	The Rubric - class activity in Self-evaluation	Dr. DeAngelis, students
2/9	Visit to Dr. Sloan Siegrist 's tuberculosis lab, LSL N271 (Microbiology Dept., campus map C3-D3)	Student Host:
2/16	Visit to Dr. Michele Klingbiel 's parasitology lab, LSL N227 (Microbiology Dept., campus map C3- D3)	Student Host:
2/23	Visit to Dr. Mandy Muller 's virology lab, 207 Morrill IVN (Microbiology Dept., campus map C3)	Student Host:
3/2	Visit to Dr. Dong Wang 's research space in the CNS greenhouse (aka Bowditch greenhouse, BMB Dept., campus map B3)	Student Host:
3/9	No class: class time banked for field trip	
3/16	No class: Spring break	
3/23	Visit to Dr. David Sela 's lab, Chenoweth 340 (Food Science Dept., campus map B3)	Student Host:
3/30	Visit to Dr. Cynthia Baldwin 's lab, Integrated Sciences Building 427E (Dept. Veterinary and Animal Sciences, campus map C3)	Student Host:
4/6	Visit to Dr. Derek Lovley 's geochemistry lab & "microbial brain", 4th floor Morrill IVN (Microbiology Dept., campus map C3)	Student Host:
4/13	Visit to Dr. Barry Goodell' s mycology lab, 1 st floor Morrill IVN (Dept. Microbiology, campus map C3)	Student Host:
4/20	Field Trip to the Notch at Mount Holyoke Range State Park in Amherst to examine geologic evidence of subsurface microbial life with Drs. James Holden (Microbiology Dept) and Steve Petsch (Geosciences Dept)	Student Hosts:,
4/27	Final class discussion and wrap up	Students

^{*}We will meet in the classroom, 448 Morrill IVN, before walking together to our lab site visit. Locations are indicated, and campus map coordinates are included just in case.