

MICROBES AND SOCIAL EQUITY

UO CHC 441H/431H

Summer 2019

Dr. Sue Ishaq Pellegrini

Course Goals

- Introduce basic concepts, techniques, historical background, terminology, and technology of microbial ecology.
- Review current literature on select topics on how humans influence microbial communities on ourselves, in environmental systems, and in the built environment.
- Learn to review/critique scientific journal articles, distill findings while understanding limitations, and develop science communication skills via written assignments and in-class discussions.
- The major initiative in the class will be a perspective piece intended for publication in a scientific journal, collaboratively written by students and the instructor.

Class Format

- Lectures
 - *Guest lecturers as available*
- Discussion (15% of grade)
 - *in class following most lectures*
- Readings
 - *Basic concepts assigned before a class*
 - *In-depth articles assigned after a class*
- Assignments (60% of grade)
 - *Written homework, will be used to build the final project*
 - *Submit online via Canvas or in class*

Final Project: 25%, option 1

- Whole class + instructor co-write a perspective piece on microbes and social equity and submit it to a journal for publication
 - *Students who opt for this final project will be main authors on this publication, and the instructor will be last author.*
- The manuscript will be a scientific literature review of relevant information on previous studies, as well as perspective based on discussions in class.
- Each student who participates will be graded on a stand-alone portion writing during previous assignments,
 - *as well as for their review of other student's work,*
 - *and for their contributions/efforts to the collaborative paper which will incorporate all student contributions.*

Final Project: 25%, option 1

- Submission to a journal for review will be performed by the instructor on the last day of class, once all contributing authors have agreed to the final version.
- The students will not be responsible for paying any costs associated with publishing.
- The students are required to supply an email address at which they can be contacted up to 6 months after the conclusion of the class to allow time for manuscript review.
- The students will not be required to perform any revisions after the conclusion of the class, but they must be reachable to approve any final version of the manuscript for publication.

Final Project: 25%, option 2

- Students may opt not to participate in authoring the group paper,
 - *instead submit their final project as a separate entity,*
 - *no penalty or difference in grading scale.*
- The solo submission will not be used towards the group paper, and students may not choose to contribute to the group paper once the final project has been submitted.
- Students may use material they generated in assignments, but you may not submit it these in the exact same version – you will need to rewrite them in some way.
- Students will be graded on the quality of information and the effectiveness of their communication.

Where can I find information?

■ Syllabus – online on Canvas

- *Gives homework, reading, and lecture info by date*
- *Has my contact information*
- *If I update it I will notify the class*

■ Contact:

- *Sue Ishaq (publication name)*
- *Sue Pellegrini (Microsoft exchange name)*
- *sueishaq@uoregon.edu*
- *Office hours by appointment*
- *Biology and the Built Environment Center, 103 Pacific Hall*

University of Vermont:

BS Animal Science 03-07,

PhD Animal, Nutrition and Food Science 10-15



PhD



Post-Doc (specialization after graduation)

- April 2015- April 2016
 - *Montana State University, Animal and Range Sciences*
 - *Bioinformatics of host-associated projects*
 - *Worked on over >1,000 samples in >6 different projects*

- May 2016- May 2017
 - *Montana State University, Land Resources and Environmental Management*
 - *Soil microbial ecology, Plant-soil microbe interactions in agricultural systems*



Research Assistant Professor

■ Biology and the Built Environment Center

