

Seminar in Microbiology: 11:680:495

Description: The objective of the course is to broadly examine and discuss current issues in Microbiology and by doing so, develop effective written and oral communication skills, critical thinking and the ability to analyze, interpret and present scientific data in microbiology. These skills will be developed through written assignments and oral presentations.

Seminar in Microbiology is a 1 credit course with one 1 hour 20 min lectures plus a mandatory 3 hour laboratory each week.

This course is offered each Fall semester.

Prerequisites and Registration Restrictions: This course is open to all senior microbiology majors.

Faculty: Dr. Costantino Vetriani: e-mail: Vetriani@marine.rutgers.edu

Text: There is no text for the course.

Grading: 50% presentations & written assignments; 50% participation in class

Topics: Topics covered are dependent on student choices of papers from the literature and presentation topics.

Learning Goals for Seminar in Microbiology:

Overall Learning Goal: At the end of the course you should have a good understanding on how to read and analyze a scientific article, how to organize experimental data and how to present a talk.

1. Students will develop critical thinking and analytical skills and be able to read and interpret primary literature.
2. Students will develop oral scientific communication skills by preparing and presenting data on an approved topic in microbiology.
3. Students will develop effective skills in scientific writing in microbiology and related fields.

Assignments:

1. "Journal Club"

Presentation and Discussion of recent "primary" articles.

Choose a recent primary research article (within the last year) from one of the ASM journals (Journal of Bacteriology, Applied and Environmental Microbiology, or Journal of Virology). Prepare a 10-minute presentation of the objectives of the work, key results and main conclusions. Critique the paper. Be prepared to answer questions and lead a discussion on the topic. Prepare a one-page summary handout to accompany your presentation. .

2. Topic Presentation "Giving a talk"

Prepare a 20 minute presentation on an approved topic in microbiology. Be prepared to answer questions and lead a discussion on the topic

3. Attending Research Seminars

Attend and report on 4 research seminars in the area of microbiology (these can be departmental seminars, Ph.D. theses defense seminars or seminars at scientific meetings, e.g. Theobald Smith Society). Provide a 1-page synopsis of each (speaker, seminar title, date, **key findings & "take home message"**).