

**COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.**

Seminar in Microbiology  
11:680:495 Fall Only  
Tuesdays or Wednesdays

**CONTACT INFORMATION:**

Instructor(s): Ines Rauschenbach  
Office Location: Lipman Hall 215  
Phone: (848) 932-5635 Email: [inesrau@SEBS.Rutgers.edu](mailto:inesrau@SEBS.Rutgers.edu)  
Office Hours: By Appointment

**COURSE WEBSITE, RESOURCES AND MATERIALS:**

- Canvas

**COURSE DESCRIPTION:**

The objective of the course is to broadly examine and discuss current issues in Microbiology. The goals are to develop effective oral communication skills, critical thinking and the ability to analyze, interpret and present scientific data in microbiology. At the end of the course you should have a good understanding on: How to search the reference database, how to read a paper and how to present data, how to organize a talk, how to synthesize information.

**LEARNING GOALS:**

**After this course, students will be able to:**

- Effectively communicate in written and oral form
- Apply critical thinking and the ability to analyze, interpret and present scientific data in microbiology

**ASSIGNMENTS/RESPONSIBILITIES, GRADING & ASSESSMENT:**

**1. Presentations**

**“Journal Club” (Presentation and Discussion of a recent peer-reviewed, original research article of your choice in microbiology).**

Assignment:

Search the literature for a recent original research paper (within the last few years) from one of the mainstream microbiology journals (e.g., Applied and Environmental Microbiology, FEMS Microbiology Ecology, Journal of Bacteriology, International Journal of Systematic and Evolutionary Microbiology, Journal of Virology, Frontiers in Microbiology, ISME Journal). Discuss the article in a 20 to 30-minute presentation: you must use the original paper itself in your presentation and highlight the objectives of the work, key results and main conclusions. Critique: Be prepared to answer questions and lead a discussion on the topic. A 1-page handout is allowed (and encouraged). Your "potential" journal article is due Sept. 10 (please email pdf); I will clear the topic with you before posting it in the modules.

**Giving a review talk (Presentation of a topic of your choice in microbiology).**

Assignment:

Search the literature for a review paper on a microbiology topic of your choice. Prepare a 20 to 30-minute power point presentation on the topic of your choice. Be prepared to answer questions and lead a

discussion on the topic. Your "potential" review paper is due Oct. 15 (please email pdf); I will clear the topic with you before posting it in the modules.

## **2. Summaries**

For each journal club paper, briefly address one of the questions (your choice) posed in the document posted in the modules. Please also include in one sentence what you learned from the paper and one sentence about what you would propose should be done as follow up to the study.

For each review paper, please write a paragraph summarizing what you learned (in your own words).

## **3. Attending Research Seminars**

Assignment:

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"). Synopses Due Dec. 1st

## **4. Participation in class discussions**

Assignment:

Reading the papers, getting ready with questions, observations, and a critique about the discussion paper/topic. Participate in class discussion.

**Grading:**

20% Journal Club Presentation/Review Talk Presentation

20% Summaries/Discussion Questions

20% Seminar Summaries

30% Participation in class

10% Attendance

## **ACCOMODATIONS FOR STUDENTS WITH DISABILITIES**

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu/>

Enter additional text here if you wish

## **ABSENCE POLICY**

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me.

## **COURSE SCHEDULE:**

The course is divided into two major themes – presenting an original research article and present original research (if possible) or review paper.

## **FINAL EXAM/PAPER DATE AND TIME**

Online Final exam Schedule: <http://finalexams.rutgers.edu/>

## ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

## STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

#### Scarlet Listeners

(732) 247-5555 / <https://rutgers.campuslabs.com/engage/organization/scarletlisteners>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.