

01:447:382 GENETICS LABORATORY SYLLABUS
SPRING 2024
RUTGERS UNIVERSITY- GENETICS

PREREQUISITES

01:119:117 BIOLOGICAL RESEARCH LABORATORY

CREDIT(S)

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COURSE URL

Canvas

COURSE DESCRIPTION

A laboratory that focuses on analysis and interpretation of genetic information. This is a computational lab, in that all genetic data are either by hand or computer simulation. Subjects include genetic-models for, and analysis of data generated from Mendelian inheritance. Specifically, we consider dominant, recessive, and sex-linked modes of inheritance. Data analyses consist primarily of goodness of fit tests applied to data to determine the correct inheritance patterns. There are additional labs on infectious disease, and Hardy-Weinberg Equilibrium.

INSTRUCTOR

Elizabeth Rosenzweig

E-mail: ear164@dls.rutgers.edu

Office: Virtual via WebEx, see link below

Hours: Thursdays, 10:30 am - 12:30 pm, 1 pm - 2 pm

Website: <https://rutgers.webex.com/meet/ear164/>

Sections: 90, 91

TEACHING ASSISTANTS (TAs)

Erica Cho

E-mail: eec66@sebs.rutgers.edu

Office: Virtual

Hours: Fridays, 10 am - 1 pm

Website: <https://rutgers.webex.com/meet/eec66/>

Sections: 92, 93

Connor Mattivi

E-mail: clm350@rwjms.rutgers.edu

Office: Virtual (In person to be determined)

Hours: Tuesdays, 12 pm - 3 pm

Website: <https://rutgers.webex.com/meet/clm350/>

Sections: 94, 9A

Tori Rosen

E-mail: trr54@sebs.rutgers.edu

Office: Virtual via WebEx, see link below

Hours: Tuesdays, 11:30 am - 2:30 pm

Website: <https://rutgers.webex.com/meet/trr54/>

Sections: 98, 99

Prateeksha Rout

E-mail: pr398@gsbs.rutgers.edu

Office: Virtual via WebEx, see link below

Hours: Mondays, 9:30 am - 11:30 am, Fridays, 12 pm - 1 pm

Website: <https://rutgers.webex.com/meet/pr398/>

Sections: 96, 97

GUIDELINES FOR CONTACTING YOUR TAs AND PROFESSOR

All TAs greatly appreciate if students e-mail time at least 24 hours in advance if they plan to attend office hours (although this is not required). If you cannot attend your TA's office hours, you are welcome to go to any TA for help during their office hours.

We will reply to emailed questions within 24 hours during weekdays. Please do not wait until the last minute to contact your TAs about questions regarding the module. The TAs are under no obligation to answer any student emails sent between Thursday at 5pm and Friday at 7am. Each TA's responsibility is to respond by Monday of the following week – not before.

COURSE MATERIALS AND POLICIES

Required text, assignment due dates, and policies regarding cheating or plagiarism.

1. REQUIRED TEXT: There is no required text. Each lab you will see Information from websites or slide presentations.
2. WEBSITE is [Rutgers Canvas Links to an external site.](#). You can also find the home page by typing "Rutgers Canvas" on your preferred internet browser. Your username and password are the same as for your netID login.
3. Lab assignments open each Friday at 7am and are due the next Fridays at 7am.
 - a. For the fall, you will get one lab assignment per week. You should do the labs sequentially (e.g., Lab 01, Lab 02, Lab 03, etc..)
4. All students are expected to act in accordance with the [Academic Integrity Policy Links to an external site.](#) Behavior (such as cheating) that violates this policy will be dealt with in the following manner: A student found cheating will be given a 0 for that particular assignment (e.g., plagiarizing others' published or unpublished material). Further actions may be taken, as described in the University Code of Student Conduct. Contact the [Rutgers Office of Student Conduct Links to an external site.](#) for more information.

ASSIGNMENTS AND GRADING

Several of the assignments you will receive in this class are multiple choice or essay-type questions. For these types of assignments, you will be able to see your grade after submission (multiple choice) or after the TA grades the assignment (essay-type).

Final course grade calculations

Assignments: 40%

Final Exam: 15%

Quizzes: 25%

Participations: 5%

Discussion Forums: 15%

In lieu of extensions, we will drop the two lowest assignments, and the lowest quiz grade. Your final grade will be computed based on all other assignments.

Graded Tasks – detailed information

FOR ALL TASKS, YOU NEED TO SHOW WORK AND PROVIDE EXPLANATIONS IN ADDITION TO PROVIDING ANSWERS. PLEASE DO NOT WAIT UNTIL THE LAST MINUTE TO WORK ON YOUR TASKS. THERE ARE NO EXTENSIONS FOR ANY TASKS - NO EXCEPTIONS.

All assignments together represent 40% of the final grade.

Note: grading for all assignments is based on the following rule: for each question, you will receive 1/2 credit for a correct answer, and 1/2 credit for showing work. The assignment may be a mixture of open-ended questions, multiple-choice quizzes, and/or other types of assessment material.

Assignments – detailed information

If an assignment requires that you upload a document, these are the proper ways to proceed:

- i. All assignments must be TYPED. Providing scanned copies of handwritten answers or pictures of solutions created by smart phones/other devices is not acceptable and credit will not be given.
- ii. The only document types that may be uploaded are .txt, MS Word, Word Perfect, and PDF. Google Docs and links to online documents are NOT acceptable. Zipped files are not allowed either. If you don't have MS Word, there are numerous computers on campus that do have it. And every computer has a text editor.
- iii. Screen shots or other imbedded information are not allowed in any assignment. If you use a website that creates a table, then you must type out that table by either using the Table feature in MS Word, or copying a table you have created through Excel. This point will be emphasized for lab assignments that may utilize website tables.
- iv. All assignments must contain the following information in the following order:

Your name.

Your TA's name.

Your assigned Student Number for this class. **Student Numbers will be assigned in the first module where the homework requires one (usually mid-semester). You do not need it until then.**

The name of the assignment.

For the assignments, INCLUDE every problem, numbered, with the question restated and your answer to that question. If you don't provide this information, you will lose two points off your assignment (even if all your answers are correct and you showed all your work).

Please show your work for each assignment.

Quizzes

Questions are created using material from a current lab. There are multiple different formats of quizzes, from essay-question answers, to multiple choice. Taken together, all quizzes represent 25% of the final grade.

Participation questions

These are designed to provide the instructor with feedback regarding particular aspects of the course. For example, one week's question might be "What did you find most difficult about this week's material?" Students must write two informative sentences in answer to the question. Also, we ask that any criticism be constructive (information where we can possibly make changes). The instructor will take a random sample of the answers, read them, and write a summary report that will be provided to the students. They are worth 5% of your grade.

Each participation is worth two points, one point each for each sentence. The participation question will not be opened until 24 hours before the assignment is due. The reason is that it gives the student a chance to work on the assignment before making an evaluation.

Discussion Forums

The forums are assigned throughout the semester. You are given a news article or research article to read and provide feedback. The article will be related to some topic covered in the course. You will be asked to respond to the professor's question, and to comment on at least one other student's response. The forums are worth 15% of your grade.

Final exam

This exam is cumulative; it contains information from all labs. The final exam is worth 15% of the final grade, and it is usually multiple choice.

Question formats

Your solutions to open-ended (e.g., essay questions) tasks are uploaded before the end of the time for that week's lab. That is, you are given one week (with the exception of Lab 01) to perform these. NO LATE SUBMISSIONS ARE ALLOWED. If you miss your due date for particular tasks (e.g., assignment, quiz, etc.), you will receive a 0 grade for that task.

Missing assignments

A full description regarding Rutgers School of Arts and Sciences' policy on brief student absences (a day or two) and missing assignments may be found at the Academic and Advising Service Department. The Dean of Students requests that you use the [Student Support Links to an external site.](#) information, specifically the [Self-Reporting Absence Site Links to an external site.](#), to report brief absences.

If you are experiencing chronic health issues of a physical and/or emotional nature, please contact [University Health Services Links to an external site.](#). Please note, students who miss three or more complete sets of lab assignments will be advised to drop the course, as their probability of passing will be low.

Student Support and Mental Wellness

- Student Success Essentials: <https://success.rutgers.edu>
- Student Support Services: <https://www.rutgers.edu/academics/student-support>
- The Learning Centers: <https://rlc.rutgers.edu/>
- Rutgers Libraries: <https://www.libraries.rutgers.edu/>
- Bias Incident Reporting: <https://studentaffairs.rutgers.edu/bias-incident-reporting>
- Dean of Students – Student Support Office: <https://success.rutgers.edu/resource/deanstudents-student-support-office>
- Office of Veteran and Military Programs and Services: <https://veterans.rutgers.edu>
- Student Health Services: <http://health.rutgers.edu/>
- Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services (CAPS): <http://health.rutgers.edu/medical-counseling-services/counseling/>
- UWill: free immediate access to teletherapy; you can choose a therapist based on your preferences including issue, gender, language, ethnicity. <http://health.rutgers.edu/uwill/>
- Office for Violence Prevention and Victim Assistance: www.vpva.rutgers.edu/
- Office of Disability Services: <https://ods.rutgers.edu/>
- Basic Needs Assistance (food, housing, and other essentials): <https://ruoffcampus.rutgers.edu/basic-needs>
- Rutgers Student Food Pantry: <https://ruoffcampus.rutgers.edu/food-pantry>