

Research in Genetics – Writing Intensive (01:447:410)

Welcome to Research in Genetics Course

Research in Genetics- Writing Intensive is intended to provide you with an opportunity to engage in original laboratory research under the direct supervision of a faculty mentor, usually in the faculty member's research laboratory. You are expected to carry out your own research project. NOTE: this research requires a heavy commitment of time and effort and can impact your performance in coursework, especially if you have not yet managed the foundational material for the discipline. [Click here to see the expectations \(see page 2\).](#)

The Department of Genetics requires a **minimum of 6 credits of Independent Scholarship taken with a single advisor over two semesters** (except for the Genetic Counseling Rotation, which may be performed under more than one advisor). The Research in Genetics - Writing Intensive course, **447:410 (Fall/Spring)**, is one option to complete this requirement.

Course Syllabus for Research in Genetics (01:447:410 Fall/Spring)

Class location: Your research mentor's lab

Instructor:

Gary Heiman, PhD

Vice Chair & Undergraduate Director

Office address:

Nelson Biology Laboratories

Room B412

604 Allison Rd, Piscataway, NJ 08854

Phone: 848-445-9576: The preferred way to contact Dr. Heiman is by e-mail. The phone should be used only for absolute emergencies!!!

Email: heiman@rutgers.edu

Departmental Learning Goals:

- Integrate the material from multiple courses and research. That is, to think holistically and to see the whole as well as the parts.
- At the end of four years, all our students will be able to design an experiment, carry out the research using the appropriate laboratory techniques and analyze and interpret their data. They will also be able to communicate their discoveries through a written article appropriate for publication in a peer-reviewed Genetics journal, and through talks or posters appropriate for scientific meetings.

How to Begin This Class

1. Review the information below. Read each section carefully, taking note of the requirements, policies, and assignment due dates listed in the table at the bottom of the page.
2. Familiarize yourself with the [assignments and their deadlines](#)

If you need accessibility accommodations, please send your professor a copy of your Letter of Accommodations as soon as possible! If you have not yet registered to receive your Letter, please refer to the [Support Services](#) page for directions on how to do so.

Grading for the course:

Your **FINAL course letter grade** is converted from your overall number grade using the following grading scheme: A (90-100), B+ (87-89), B (80-86), C+ (70-79), C (70-76), D+ (67-69), D (60-66), F (0-59)

When your mentor gives you a **letter grade**, it is converted to the following number grade:

A (100), B+ (89), B (86), C+ (79), C (76), D+ (69), D (66), F (59)

The following table shows the percent breakdown for how final letter grade is calculated.

% grade	Description
85%	Research mentor's evaluation of your work. At the end of the semester, the department will send your research mentor a grading rubric through Qualtrics to provide his/her grade for your time in the lab and for your Semester Research Paper (see Research Mentor's Grade assignment for more details). It is your responsibility to alert your research mentor of this rubric.
15%	Completing other course requirements (ON TIME!) IMPORTANT: POINT DEDUCTIONS!!! • Points will be taken off for not following instructions COMPLETELY!! • Points will be taking off for submitting late assignments. <u>It is your responsibility to know when each is due.</u> I have set Canvas to take an automatic 15% reduction for each 24 hours the assignment is late (i.e., 25 hours = 30%). There are 4 assignments for this course- review the details for each on the Canvas course site. • 7% course grade: Submitting Detailed Proposal Form • 2% course grade: SURVEY: Current Independent Scholarship project and mentor information • 2% course grade: SURVEY: Additional research/independent scholarship credits • 4% course grade: Submitting your Semester Research Paper to this Canvas site Review each assignment for details.

VERY IMPORTANT: If your research mentor DOES **NOT** COMPLETE THE RUBRIC FORM BY THE TIME GRADES ARE DUE TO THE REGISTRAR, YOU WILL RECEIVE A **"TF" GRADE** FOR THE COURSE!!

Therefore, you need to alert your research mentor of the rubric deadline. AT THE BEGINNING OF THE SEMESTER, you should provide an electronic version (or hard-copy) of the expectations to your research mentor so that s/he will understand the course expectations. You can download this from the [student forms webpage](#) (choose the appropriate course). For more details on this assignment, see the **Research Mentor's Grade** assignment.

EXPECTATIONS OF THE STUDENT

To make the experience worthwhile for both the student and the research mentor, we expect you will commit a sizable amount of time to the time in the lab. This course is NOT, and should not, be “an easy A” course (many students do not get an "A"). **On average, you should expect to spend between 3 to 5 hours a week per credit in the lab during the Fall or Spring semesters.** Thus, for a typical three-credit course, students are expected to work 9-15 hours per week. During this period, you are expected to be in the lab conducting experiments, organizing data, reading background literature about your research project, attending lab functions and meetings, and completing reports. Finally, you must complete the Semester Research Paper (see below).

SEMESTER RESEARCH PAPER

At the end of each semester of research, you are required to write a research paper, the **Semester Research Paper**, which in the format of a scientific paper. You should submit draft of the sections **to your research mentor** well in advance of the due date, so that s/he can make corrections and provide you corrections/suggestions. The Semester Research Paper is a major part of the grade for this course, **graded by your research mentor**, and must be written in your own words. For more details, see assignment instructions for the **Semester Research Paper**.

HELP IN WRITING:

I have provided you a series of scientific writing videos to help you with your research paper. Feel free to review any or all of the videos. See section entitled "[Helpful writing videos](#)" within the Pages or Modules section.

If anything about the course assignments is unclear, please email me (heiman@rutgers.edu). You should do this BEFORE the particular deadline.

Information for Student Support and Wellness Services:

- Dean of Students – Student Support Office: <https://success.rutgers.edu/resource/dean-students-student-support-office>
- Student Success Essentials: <https://success.rutgers.edu>
- Student Academic 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>
- 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/>
- Office for Violence Prevention and Victim Assistance: vpva.rutgers.edu/
- Office of Disability Services: <https://ods.rutgers.edu/>
- UWill – Student Health and Wellness: <http://health.rutgers.edu/uwill/>