

**THESIS WRITING & COMMUNICATION IN GENETICS
FALL SEMESTER 2025**

COURSE SYLLABUS

Course Number:	01:447:414:01
Class Location:	Waksman 311
Class Meeting Times:	Tuesdays from 3:50 PM – 5:10 PM
Learning Management System:	canvas.rutgers.edu
Instructor:	Dr. Chris Rongo, Ph.D.
Office:	124 Waksman Institute (Busch)
Phone:	(848) 445-0955
Email:	crongo@waksman.rutgers.edu
Office Hours:	By Appointment

Course Description: Communication is an essential part of science. Whether it is communicating research findings to other scientists or conveying complex concepts to a lay audience, a scientist must have effective communication skills to succeed. Communication in science is typically through publications, posters, or oral presentations. The goal of this course is to provide students with guidance and practice in effectively communicating scientific findings, with particular emphasis on developing the written Honors thesis and becoming fluent in the background of their research discipline.

Course Goals: Students are expected to:

- Begin the writing of an Honors Thesis in the style appropriate for publication in a journal in the field of genetics. Such articles typically include at least the following: Title, Abstract, Introduction, Materials and Methods, Results, Discussion, Acknowledgements, and References. Emphasis in this first semester course will be on writing the Introduction and Materials and Methods sections of the thesis
- Find relevant research articles and reviews in the published literature using online databases such as Medline/PubMed (for backward searches) and Web of Science Cited Reference Search (for forward searches).
- Use the articles as the basis for writing the Introduction.
- Make an oral report of their work in the format of an interview, similar to an interview as part of an application to medical school, graduate school, or for a job in academia, industry, or government.

SAS Core Learning Goals Satisfied by the 447:414-415 combination:

WCr- Respond effectively to editorial feedback from peers, instructors, &/or supervisors through successive drafts & revision

WCd- Communicate effectively in modes appropriate to a discipline or area of inquiry.

Departmental Learning Goals:

- Use genetic information and ideas to critically analyze published research articles in genetics
- Design, conduct, analyze, and interpret experiments using appropriate laboratory techniques
- Effectively incorporate critiques from peers and faculty in their revision of written and oral communication

- Effectively describe their research, using relevant discipline-specific terminology with precision, accuracy & purpose
- Accurately and effectively present advanced scientific concepts through oral presentations.

Optional Textbook

[Writing in the Biological Sciences: A Comprehensive Guide to Scientific Communication \(Fifth edition\)](#), Angelika H. Hofmann, Oxford University Press, 2014; ISBN: 978-0197665404
The previous editions are perfectly fine as well, and cheaper used copies of them are available online.

[The Elements of Style \(Fourth Edition\)](#), Strunk, W. and White, E.B., Pearson Educational Limited, 2014; ISBN: 9780205309023. [PDF will be available on course canvas website.](#)

Course Purpose: This is the first of two one-semester courses titled *Thesis Writing and Communication in Genetics*. The emphasis this semester will be the writing of the Introduction, Materials & Methods, and Bibliography. These sections of the thesis will go through multiple drafts, with edits from the instructors and most of your student colleagues. During the second semester, students will complete their Honors Thesis by revising previous sections, as well as adding the Results and Discussion sections.

Course Expectations: This is a course in effective communication in the discipline of genetics. It includes multiple written assignments and an in-class discussions. This course is not a repeat of the English Department's Expository Writing course. A major part of the thesis is the Introduction section, which will include a critical summary of relevant published research articles and use that summary to provide a persuasive argument that the student's proposed work is feasible, novel and important. Other items for the thesis are listed separately. Students are expected to attend and participate in every class. Students will be responsible for material presented in class, as well as any instructions or syllabus revisions announced in class and/or sent to the students by email or posted on Canvas.

What is Expected of Students: Students will (1) read published research articles and review articles in order to provide a basis for parts of their Introduction; (2) write an Introduction appropriate for a Research Proposal, a Materials & Methods section modeled after such sections in research articles, and other sections; (3) respond to critiques of their written work; and (4) revise what they have written in response to the Instructor's critiques. Each week's task should be completed as described in the Assignments section. Students are expected to attend and participate in each class, and to submit correctly formatted Assignments to CANVAS before the due date and time.

Instructor's Role: The instructor will not teach how to write correct English grammar. Rather, the instructor will discuss published scientific articles as examples, will help to organize the content related to the student's thesis, will provide written critiques, and will provide the opportunity to revise material for each draft. The instructor will also demonstrate oral presentations in the form of interviews that would be part of an application for medical school, graduate school, or for a job.

Format: During each class, the instructor will give a lecture, ask questions, and/or lead a discussion of the assigned topic. The PowerPoint slides for the lecture will be available before the lecture on Canvas. **In case of in-class cancellations (e.g., disruptions due to weather**

events), the course *may* transition to Zoom, and the relevant Zoom information will be provided.

Technology: Students are expected to view and participate in each class. A desktop or laptop computer with a webcam, audio capability, and internet access are necessary in case we need to hold a class via Zoom. Adequate browsers include Firefox, Chrome, and Safari. If a Zoom meeting is required, the “join meeting” URL for Zoom will be available on the course Canvas site as an announcement and sent to students’ default email address (if it hasn’t been changed in Notifications). Information about Canvas and about Zoom can be found at the URLs listed below. Computer technical help is available from the Office of Information Technology, Email: help@oit.rutgers.edu or by phone [833-OIT-HELP](tel:833-OIT-HELP). **File formats for written assignments must be MS-Word docx.**

Canvas: <http://canvas.rutgers.edu>

The Learning Management System (LMS) Canvas will contain the following items in the Files tab: Syllabus with schedule of topics, Modules with due dates and materials for weekly assignments, lecture slides available before the lecture, and files with additional information. Student’s work will be submitted to Canvas as assignments through individual modules. Announcements will include any relevant course information. A student guide to Canvas is available at: <https://canvas.rutgers.edu/students/getting-started-in-canvas-students/>

Zoom: Although this course will be given in-person, there is always the possibility of a class cancellation because of inclement weather or other issues. In this case, lectures and discussions during class will be synchronous and live using Zoom. The recurring “join meeting” Meeting ID, Passcode, and URL for accessing the class on Zoom will be available as an announcement on the course Canvas site and sent to students’ email. Lectures will be recorded and available for viewing after class on the course Canvas site.

Academic Integrity Policy: Rutgers University takes academic dishonesty very seriously, and students in this course are expected to maintain the highest level of academic integrity. By enrolling in this course, you assume responsibility for familiarizing yourself with the Academic Integrity Policy and the possible penalties (including suspension and expulsion) for violating the policy. As per the policy, all suspected violations will be reported to the Office of Student Conduct. Academic dishonesty includes (but is not limited to):

- Cheating (e.g., the use or possession of inappropriate or prohibited materials, information, sources, or aids in any academic exercise)
- Plagiarism (e.g., submitting papers, research results or reports, analyses, and other textual or visual material and media as one’s own work when others prepared them)
- Aiding others in committing a violation or allowing others to use your work
- Failure to cite sources correctly
- Fabrication (e.g., synthesizing research data, altering data without describing the alteration methodology, or altering data with the purpose to deceive)
- Using another person’s ideas or words without attribution—re-using a previous assignment
- Unauthorized collaboration
- Sabotaging another student’s work (if in doubt, please consult the instructor)

Please review the [Academic Integrity Policy](#) or the [Academic Integrity Resources for Students](#)

Use of external website resources such as Chegg.com or other such websites to obtain solutions to homework assignments, quizzes, or exams is cheating and a violation of the

University Academic Integrity policy. Cheating in the course may result in grade penalties, disciplinary sanctions or educational sanctions. Posting homework assignments, or exams, to external sites without the instructor's permission may be a violation of copyright and may constitute the facilitation of dishonesty, which may result in the same penalties as plain cheating.

Almost all original work is the intellectual property of its authors. These works may include syllabi, lecture slides, recorded lectures, homework problems, exams, and other materials, in either printed or electronic form. The authors may hold copyrights in these works, which are protected by U.S. statutes. Copying this work or posting it online without the permission of the author may violate the author's rights. More importantly, these works are the product of the author's efforts; respect for these efforts and for the author's intellectual property rights is an important value that members of the university community take seriously.

For more instructions on copyright protections at Rutgers University, please refer to the [Rutgers Libraries](#).

Academic Penalties: Any violation of academic integrity is a serious offense subject to appropriate sanctions or penalties. Violations of academic integrity may result in academic penalties, educational sanctions, and/or disciplinary sanctions, including but not limited to the following: a grade of F in the course, suspension for one or more semesters, expulsion from the University with a permanent notation of disciplinary expulsion on the student's transcript.

Honor Pledge: To create a strong culture that promotes academic integrity, Rutgers has adopted the following honor pledge to be written and signed on examinations and major course assignments submitted for grading: ***On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.*** Participating in this class remotely, including submission of assignments, will be the equivalent to writing and signing the Honor Pledge.

Class Attendance (IMPORTANT-READ CAREFULLY): Students are expected to attend and be punctual for all classes. Attendance will be taken at the beginning of class. **Students will lose points for habitual lateness.** If you expect to miss a class, you **MUST** 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 the course instructor. If a student misses more than two classes prior to the withdrawal deadline, they will be asked to withdraw. Poor attendance is grounds for failure.

Assignment Due Dates and Lateness Penalties: Assignment deadlines are clearly indicated on assignments and on Canvas. Each assignment is due by the beginning of the class (5:00 PM).

Late assignments will be penalized 10% of the total grade for that assignment on the first day it is late, and another 10% for each additional 24-hour period past the deadline. Even one minute late counts as late! Don't wait until the last minute to submit an assignment. Internet connectivity problems or problems with Canvas will not be accepted as an excuse!

Please note that formatting is an important component of publications, presentations, and theses. **Students will lose points for failing to adhere to formatting guidelines. It is not unreasonable for an assignment to suffer a 10-20% penalty due to errors in formatting or failure to follow instructions.**

Disability Accommodations: Students in need of disability accommodations should register for accommodations and consult the policies and procedures of the Office of Disability Services website: <https://ods.rutgers.edu>. 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.

Performance Expectations and Evaluation Methods: Grades will be based on student performance on exams and homework assignments. Percent contribution towards the final course grade will be as follows:

- 10% Attendance
- 10% Assignment 1: Identifying the Key Questions
- 10% Assignment 2: Critical Review of the Literature
- 10% Assignment 3: Write a Specific Aims Page
- 20% Assignment 4: First Draft of Thesis
- 20% Assignment 5: Second Draft of Thesis
- 10% Assignment 6: Completed Interviewee Form
- 10% Assignment 7: Mock Interview

Grades will be calculated based on overall course performance. The following grading scale will be used:

90% A

85% B+

75% B

70% C+

60% C

I reserve the right to modify the grading scale downward (e.g., making the lowest A an 88%), but I will not adjust the grading scale upward. Grades below "C" will be determined based on the final score distribution at the end of the course.

Important: points will be taken off for not following instructions or not meeting deadlines!

Information for Student-Wellness Services:

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ 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. **Psychiatric Emergency: (848) 932-7884 (8:30AM-4:30PM, Monday-Friday), (855) 515-5700 (after 4:30 and on weekends)**

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / 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/>)

The Office of Disability Services works with students with a documented disability to determine the eligibility of reasonable accommodations, facilitates and coordinates those accommodations when applicable, and lastly engages with the Rutgers community at large to provide and connect students to appropriate resources.

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/dean-students-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>