

BIOL 315 - GENETICS
Syllabus, Fall 2020

Instructor: Dr. Barrie Robison <brobison@uidaho.edu> LSS 441A
Office hours: By Appointment
Cell Phone: 509 432 3782 (no calling or texting after 9pm)

Teaching Assistants: Sections 2 and 4: Salvador Castenada (salvadorc@uidaho.edu)
Sections 5 and 6: Andrew Rankin (rank3288@vandals.uidaho.edu)
Sections 1 and 3: Mason Linscott (tlinscott@uidaho.edu)

COURSE WEBSITE: The materials for the course can be accessed through the University of Idaho BbLearn System.

COURSE PREREQUISITES: Biology 310 is a co-requisite for this course. Biol 114: Cells and the Evolution of Life is a prerequisite. You should have at least one semester of chemistry. If you do not have these prerequisites, you should see Dr. Robison immediately.

LEARNING OUTCOMES: In accordance with *UI Learning Outcomes*, it is expected that students will:

Learn & Integrate: Students will apply their previous training in biology to test genetic hypotheses.

Think & Create: Students will be able to apply the concepts and approaches learned in this course to their future academic and/or professional careers. A strong emphasis will be placed on independent learning and individual accountability.

Communicate: Students will be expected to effectively communicate genetic concepts and data in written and visual formats.

Clarify Purpose & Perspective: All students will take responsibility for their learning and practice self motivation and time management.

Practice Citizenship: Every student should be able to articulate basic genetic concepts to a lay person, in a manner that demonstrates how fundamental genetics is to our everyday lives.

TEXT: *None*

LABORATORY MANUAL: The materials for lab will be posted on BbLearn.

OTHER CLASS MATERIALS: *Lab Handouts* will be posted on the course website. The lab will provide access to the supplies and equipment necessary to test genetic hypotheses.

GENERAL CONSIDERATIONS:

Lab fees will not be refunded to students who drop the course after the second week of class.

PROJECTS: You will conduct a series of independent projects during the course of the semester. Projects will either be observational/descriptive studies, tests of hypotheses, proposals, or short educational videos. A list of possible projects and their attendant point values is provided on the course website. A "guide for authors" that describes the required format for your reports will also be posted.

ALL PROJECT REPORTS MUST BE SUBMITTED FOR GRADING BY DECEMBER 18th. We strongly encourage you to submit your reports as you complete them, rather than waiting until the last minute. As an enticement, any reports submitted in the month of September will automatically receive 10% of their maximum point value as bonus points. Any reports submitted in the month of October will automatically receive 5% of their maximum value as bonus points. You will be required to submit two introductory projects by September 16th.

You may revise two lab reports to improve your grade, as long as the revisions are turned in by December 4th.

ATTENDANCE AND LAB SCHEDULE: The lab will be staffed full time during the week. You may always come to lab during your regularly scheduled lab period. You may come to lab to perform your research at any time it is staffed. During scheduled lab periods, priority will be given to students registered for that lab period. Other times are available on a first-come first-served basis. We will not require attendance, but you must sign in and out of lab when you perform your research.

The lab will be staffed by a TA and open according to the following schedule:

Monday - 8:00 to 4:00

Tuesday - 9:30 to 6:30

Wednesday - 8:00 to 4:00

Thursday - 9:30 to 6:30

Friday - 9:00 to 5:00

The following hours are for each specific TA

Mason

Monday and Wednesday 8:00 to 12:00

Tuesday and Thursday 9:30 to 12:30

Chava (Salvador)

Tuesday and Thursday 12:30 to 3:30

Wednesday 12:00 to 4:00

Friday 1:00 to 5:00

Andrew

Monday 12:00 to 4:00

Tuesday and Thursday 3:30 to 6:30

Friday 9:00 to 1:00

ACADEMIC HONESTY: All students are expected to uphold the highest standards of academic honesty. This includes but is not limited to: not cheating, not using the ideas of others without giving appropriate credit (including Wikipedia!), and not falsifying data. ***To facilitate enforcement of University policies, we will ask that electronic versions of all reports be submitted along with printed versions.*** Any incident of academic dishonesty will be handled according to the guidelines of the University of Idaho.

Falsification of data will result in an automatic grade of "F" for the course.

GRADING POLICY: Your grade will be based on a total of 1000 possible points. Your final grade will be the grade you earn - no deals, no plea bargains. The grading scale is standard: A (90 -100 %), B (89 - 80 %), C (79 - 70 %), D (69-60 %), F(below 60 %).

CONTINGENCY PLANS IN THE PANDEMIC: This year, we will offer a variety of online options to allow you flexibility in completing the requirements of Bio 315. In addition, we've implemented a variety of safety measures to minimize risk to students and the TAs.

Safety measures:

1. You are required to wear a labcoat (provided by you), gloves (provided by us), safety goggles (provided by us), and a mask (provided by us) when in the lab. Don't wear your normal "walking around town mask" in the lab. If you work in the fume hood with chemicals, we'd rather those chemicals stay on the disposable masks we provide for you.
2. You are required to "gear up" in your safety gear in the room adjacent to lab, and leave your backpacks in that room as well.

Online options:

1. You may use the evolutionary simulations to conduct all of your experiments this year. This allows for an online option in case you need to quarantine but are still able to continue your course work. It also allows us to quickly pivot to an all online mode should the University decide to stop delivering face to face instruction.
2. The evolutionary simulations are created by our game studio, Polymorphic Games. We will be deploying video tutorials for hypothesis testing and experimentation using these games.
3. The two games we will use are Darwin's Demons (available free on Steam) and Project Hastur. Please don't purchase Project Hastur. We will be provided Steam keys to those interested in using this game.