

MBIOL 6420 | Fall Semester 2019

G3: Genetics, Genomes, and Gene Expression

Description: This course covers transmission genetics, methods of genetic and genome analysis in model systems and humans, as well as transcriptional and post-transcriptional mechanisms of gene regulation. Lectures cover both classical achievements and recent advances in these fields, with readings based chiefly in the primary literature. Grades are based on exams and problem sets.

In previous years, we have found that some students have struggled in this graduate level course in Genetics. This may be because the student did not have adequate preparation in Genetics (such as a comprehensive undergraduate course in Genetics), or they may have been working in a lab for a number of years and it has been some time since their Genetics course.

Prerequisite: To prevent such problems, we have two prerequisites for the course:

- First, all students must have taken a comprehensive undergraduate course in Genetics.
- Second, all students wishing to take this class will be given a simple exam at the beginning of the semester. Those who do not pass the entrance exam will not be able take the course.

Placement Test: The Placement Test will be Thursday, August 15, 2019 at 9:00AM Room 1750 HSEB (Health Sciences Education Building). If the student reviews the material in the booklet and CD, he/she should have no problem with the entrance exam.

The entrance exam will cover basic concepts in Genetics. A CD-Rom/Booklet entitled "*Interactive Genetics*" can be checked out from the Bioscience PhD Programs Office (3650 HSEB). It may also be purchased from Hayden-McNeil Publishing, ISBN: 0-7380-1546-6. The price is \$16.00 with CD.

Please Note: The CD is only accessible with a PC or an older version of the MAC operating system. See below for details.

Permission Code: Each student enrolling in the MBIOL 6420 course will need to contact the Bioscience PhD Programs Office for a permission numbers. Program Office information is listed below:

Program Office | 801-581-5207 | bioscience@genetics.utah.edu