

## **MBIOL 6420**

### **G3: Genetics, Genomes, and Gene Expression**

#### **Fall 2017**

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.

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.

**The entrance exam will be Thursday, August 17, 2017 at 9:00 a.m. in 210 ASB.**

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. The CD is only accessible with a PC or an older version of the MAC operating system.

If the student reviews the material in the booklet and CD, he/she should have no problem with the entrance exam.

Each student will need to contact the Bioscience PhD Programs Office for a permission numbers.

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