

## **Graduate Minor in Genetics 10\_23\_2019**

1) Selecting a Genetics minor advisor: A faculty member whose primary affiliation is with the Department of Biology, and who has expertise in Genetics, must join the student's Advisory Committee and must participate in designating required course work. This minor advisor will determine whether courses meet the minor requirement in accordance with the rules set out in the program.

(2) Number of credits: A Genetics minor requires a minimum of 6 credits of graduate courses. The Genetics minor may be fulfilled from any of the courses beginning on page 2. A course may not simultaneously satisfy both major and minor course requirements. Course offerings not on the list below can be used to satisfy the Genetics minor only if prior approval is obtained from the minor advisor, the GCDB Graduate Program Director and the Graduate School. In addition to preliminary emails, official approval requires routing a "Request for Substitution or Waiver of Program Requirements" edoc that can be found on One IU.

(3) Grades: An overall average of B- (2.7) or better is required in a course to be counted towards the Genetics minor.

(4) Transferring in credit for the Genetics minor: A student may apply courses taken for a MS degree at another university if the transfer is approved by the student's advisory committee, the minor advisor, the GCDB program director, and the Graduate School.

## Course Listings for Genetics Minor<sup>1</sup>

- BIOC-B680 Molecular Mechanisms of Cancer (1.5cr)
- BIOC-B512 Biochemical mechanisms of DNA repair (1.5cr)
- BIOC-B513 Cell response to DNA damage (1.5cr)
- BIOL-L511 Transcription, Epigenetics, and Human Disease (3cr)
- BIOL-L533 Evolution of Genes and Genomes (3cr)
- BIOL-L567 Evolution (3cr)
- BIOL-L568 Evolutionary Genetics (3cr)
- BIOL-L585 Genetics and Bioinformatics (3cr)<sup>2</sup>
- BIOL-L586 Cell Biology (3cr) <sup>2</sup>
- BIOL-L587 Developmental Biology (3cr) <sup>2</sup>
- BIOL-Z620 Bioinformatics-2-Go (1.5 cr) <sup>2</sup>
- BIOL-M511 Molecular Biology of Prokaryotes (3cr)
- BIOL-M541 Bacterial Pathogenesis and Virology (3cr)
- BIOL-M585 Microbial Genetics and Virology (3cr)
- BIOL-Z620 Bacterial Genetics and Molecular Virology (1.5 cr)
- BIOL-Z620 Evolution of Proteins and Cells (3cr)
- BIOL-Z620 Introduction to Computational Data Processing in Biology (1.5cr)
- BIOL-Z620 Introduction to Computational Workflow Design in Biology (1.5cr)
- BIOL-Z620 CyberInfrastructure-enabled Computational Genome Science (3cr)
- BIOL-Z620 Phylogenetics (3cr)
- BIOL-Z620 Evolution (3cr)
- BIOL-Z620 Introduction to Genomics and Bioinformatics (1.5cr)
- BIOL-Z620 Genetics of Behavior (1.5cr)
- BIOL-Z620 Microbial Genetics and Techniques (1.5cr)
- BIOL-Z620 Chromosome and Genome Biology Journal Class
- BIOL-Z620 Cell Biology Journal Class
- BIOL-Z620 Methods in Epigenomics
- BIOL-Z620 The Legacy of *Drosophila* (3cr)

- INFO-I519 Introduction to Bioinformatics (3cr)
- INFO-I590 SNP Discovery and Population Genetics (3cr)
- PHSL-P550 Physiology of Cancer Journal Class
- MSCI-M 550 Seminar in Cancer Biology
- BIOL-Z620 Digital Imaging and Light Microscopy (1.5cr)
- BIOC-B680 Digital Imaging and Light Microscopy (1.5cr)
- BIOL-Z620 Biological Electron Microscopy (1.5cr)
- BIOL-Z620 Biological Electron Microscopy (1.5cr)
- MSCI-M580 Molecular Biology of Cancer (3cr)
- PSY-P467 Diseases of the Nervous System (3cr)
- PSY-P526 Neurobiology of Learning and Memory (3cr)
- PSY-P566 Molecular and Cellular Neurobiology (3cr)

<sup>1</sup> Or an equivalent course at IU, or graduate work transferred from another university, with approval of the GCDB Graduate Program Director, and Graduate School. Note that some of the courses on this list may not be in the current version of the Graduate Bulletin and will require routing of a "Request for Substitution or Waiver of Program Requirements" edoc that can be found on One IU.

<sup>2</sup> GCDB students cannot use these courses for the Genetics minor due to overlap with major degree requirements.