To complete this concentration, Biological Sciences Majors may choose any 3 of the following courses:

- **BIOL_SCI 332-0**: Conservation Genetics - Critical issues in the management and understanding of endangered populations. *Prereqs: BIOL_SCI 203-0 OR 215-0 OR ENVR_SCI 202-0.*

- **BIOL_SCI 341-0**: Population Genetics - Processes that affect allele frequency change and thus cause evolution. *Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202-0 OR 219-0, and a course in statistics.*

- **BIOL_SCI 353-0**: Molecular Biology Laboratory - Project-based approach to learning lab skills in eukaryotic molecular biology. *Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202-0 OR 219-0, BIOL_SCI 234-0 OR 222-0, and BIOL_SCI 301-0.*

- **BIOL_SCI 354-0**: Quantitative Analysis of Biology - Random genetic processes, gene expression, cell adaptation, cell cycle, developmental morphogens, phylgenomics. *Prereq: BIOL_SCI 201-0 OR 215-0, BIOL_SCI 202-0 OR 219-0.*


- **BIOL_SCI 390-0**: Advanced Molecular Biology - Nucleic acid structure; DNA mutation, repair, recombination, replication, restriction, and modification; translation. *Prereqs: BIOL_SCI 201-0 or 215-0, BIOL_SCI 202-0 OR 219-0, and BIOL_SCI 301-0.*

- **BIOL_SCI 391-0**: Development and Evolution of Body Plans - Molecular mechanisms underlying early embryonic development, including establishment of the body and organogenesis. Discussion of original literature. *Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202 OR 219-0, and BIOL_SCI 301-0.*

- **BIOL_SCI 392-0**: Developmental Genetics Laboratory - Development of independent projects alongside classic readings and experiments exploring key concepts in developmental biology. *Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202-0 OR 219-0, BIOL_SCI 234 OR 222-0, and BIOL_SCI 301-0.*

- **BIOL_SCI 393-0**: Human Genomics - This course will examine how the analysis of the human genome and its variation provides insight into diversity, human health and our evolutionary history. *Prereqs: BIOL_SCI 203-0 OR 215-0.*
Molecular Genetics - Exploration of recent advances that have revolutionized the fields of gene expression and cell regulation. Discussion of articles and primary research papers. *Prereqs: BIOL_SCI 203-0 OR 215-0; BIOL_SCI 202-0 OR 219-0; BIOL_SCI 301-0.*

Evolution and Diversity: Mushroom Genetics and Genomics – The occurrence of natural genetic variation is the raw material with which evolution has sculpted every species that has ever existed. In this laboratory-based course, students are immersed in the world of a widespread and biologically famous mushroom-forming fungus. *Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202-0 OR 219-0, and BIOL_SCI 301-0*