2023-2024 Cell and Developmental Biology Concentration

Major in Biological Sciences

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


- **Biol Sci 327-0** Biology of Aging - Biological aspects of aging, from molecular to evolutionary. Prerequisite: Biol Sci 201-0 and Biol Sci 202-0.


- **Biol Sci 360-0** Principles of Cell Signaling - Emphasis on principles, components, and logic that are common to different cell signaling systems. Modern experimental strategies for studying cellular signaling as well as the implications of disrupting cell communication pathways in disease will be described. Prereqs: Biol Sci 202-0 and Biol Sci 203-0.

- **Biol Sci 377-0** Human Microbiome - Course explores different communities of microorganisms in the human body - the gut, urogenital, oral, and skin microbiota, and how these communities contribute to or are altered in health and disease. Prereqs: Biol Sci 202-0, Biol Sci 203-0, and Biol Sci 301-0.


- **Biol Sci 381-0** Stem Cells and Regeneration - Developmental and molecular biology of tissue regeneration, with regard to regeneration from embryonic or adult stem cells. Discussion of conserved developmental pathways necessary for regeneration. Prereqs: Biol Sci 203-0 or 215-0 and Biol Sci 202-0 or 219-0.

**BIOL_SCI 391-0**  
**Developmental Biology** - Molecular mechanisms underlying early embryonic development, including establishment of the body and organogenesis.  
*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 234-0 OR 222-0, and BIOL_SCI 301-0.*