Developmental and Cell Biology (DEV BIO)

Courses

DEV BIO 200A. Research in Developmental and Cell Biology. 2-12 Units.
Independent research with Developmental and Cell Biology faculty.

Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.

DEV BIO 200B. Research in Developmental and Cell Biology. 2-12 Units.
Independent research with Developmental and Cell Biology faculty.

Prerequisite: DEV BIO 200A
Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.

DEV BIO 200C. Research in Developmental and Cell Biology. 2-12 Units.
Independent research with Developmental and Cell Biology faculty.

Prerequisite: DEV BIO 200B
Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.

DEV BIO 200R. Research in Developmental & Cell Biology for First-year Students. 2-12 Units.
Independent research within the laboratories of graduate training faculty in the Department of Developmental and Cell Biology for first-year Ph.D. students.

Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be taken for credit 3 times.

DEV BIO 203A. Graduate Tutorial in Developmental and Cell Biology. 4 Units.
Advanced study in areas not represented by formal courses. May involve individual or small group study through discussion, reading, and composition. Time and subject matter arranged individually.

Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.

DEV BIO 203B. Graduate Tutorial in Developmental and Cell Biology. 4 Units.
Advanced study in areas not represented by formal courses. May involve individual or small group study through discussion, reading, and composition. Time and subject matter arranged individually.

Prerequisite: DEV BIO 203A
Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.

DEV BIO 203C. Graduate Tutorial in Developmental and Cell Biology. 4 Units.
Advanced study in areas not represented by formal courses. May involve individual or small group study through discussion, reading, and composition. Time and subject matter arranged individually.

Prerequisite: DEV BIO 203B
Repeatability: Unlimited as topics vary.
Restriction: Graduate students only.
DEV BIO 206A. Developmental and Cell Biology Journal Club. 2 Units.
Advanced study of various topics in cell biology.
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.

DEV BIO 206B. Developmental and Cell Biology Journal Club. 2 Units.
Advanced study of various topics in cell biology.
Prerequisite: DEV BIO 206A
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.

DEV BIO 206C. Developmental and Cell Biology Journal Club. 2 Units.
Advanced study of various topics in cell biology.
Prerequisite: DEV BIO 206B
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.

DEV BIO 207. Mouse Developmental Genetics. 4 Units.
Introduction to using the mouse in contemporary biomedical research. The biology and development of the laboratory mouse, methods for manipulation of the mouse genome and embryos, and examples of application of these methods to understand mammalian development and homeostasis.
Same as BIOCHEM 215.
Restriction: Graduate students only.

DEV BIO 208. Balancing the Academic Workload. 2 Units.
Students receive formal training in pedagogy and balancing graduate-level biology research with concurrent teaching commitment. Recommended for graduate students who have an active research program and are teaching in the same quarter.

DEV BIO 210. Advanced Developmental Genetics. 4 Units.
Focuses on discussion of critical concepts in developmental biology and regeneration, with emphasis on model organisms such as Drosophila, Zebrafish, and murine systems. Molecular mechanisms underlying key developmental decisions also discussed.
Repeatability: May be taken for credit 2 times.
Restriction: Graduate students only.

DEV BIO 212. Topics in Systems Biology. 2 Units.
Studies in selected areas of Systems Biology.
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.
Restriction: Graduate students only.

DEV BIO 213. Scientific Skills . 2 Units.
Addresses and promotes the development of essential skills required in scientific and research careers, including scientific writing, effective presentation and communication, and mentoring skills.
Grading Option: Satisfactory/unsatisfactory only.
Restriction: Graduate students only.
DEV BIO 214. Principles of Genomics. 4 Units.
A survey course of the principal subfields of genomics and their applications to biological and health sciences that will cover genome assembly and annotation, genome structure, comparative genomics, population genomics, functional genomics, and medical genomics.

Same as DEV BIO 214.
Restriction: Graduate students only.

DEV BIO 231B. Cell Biology. 4 Units.
A broadly based course including topics in extracellular matrix, cytoskeleton, organelle biogenesis, receptor-mediated endocytosis, signal transduction, cell cycle, and developmental biology.

Concurrent with BIO SCI D154.

DEV BIO 232. Systems Cell and Developmental Biology. 4 Units.
Introduces concepts needed to understand cell and developmental biology at the systems level, i.e., how the parts (molecules) work together to create a complex output. Emphasis on using mathematical/computational modeling to expand/modify insights provided by intuition.

Same as BME 213.
Restriction: Graduate students only.

DEV BIO 245. Stem Cell Biology. 4 Units.
The basic characteristics and development roles of embryonic, adult, and cancer stem cells in the human body and in model systems and the use of experimental and genetic methods to analyze and manipulate their properties.

Restriction: Graduate students only.

DEV BIO 290A. Colloquium in Developmental and Cell Biology. 2 Units.
Contemporary research problems. Research students, faculty, and other invited speakers introduce research and review topics.

Restriction: Graduate students only.

DEV BIO 290B. Colloquium in Developmental and Cell Biology. 2 Units.
Contemporary research problems. Research students, faculty, and other invited speakers introduce research and review topics.

Prerequisite: DEV BIO 290A
Restriction: Graduate students only.

DEV BIO 290C. Colloquium in Developmental and Cell Biology. 2 Units.
Contemporary research problems. Research students, faculty, and other invited speakers introduce research and review topics.

Prerequisite: DEV BIO 290B
Restriction: Graduate students only.

DEV BIO 292A. Scientific Communication. 2 Units.
Small group meetings for graduate students to practice scientific writing, debate, and presentation skills.

Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.

DEV BIO 292B. Scientific Communication. 2 Units.
Small group meetings for graduate students to practice scientific writing, debate, and presentation skills.

Prerequisite: DEV BIO 292A
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.
DEV BIO 292C. Scientific Communication. 2 Units.
Small group meetings for graduate students to practice scientific writing, debate, and presentation skills.

Prerequisite: DEV BIO 292B

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

DEV BIO 293. Seminar in Interactive Teaching in Biology. 2 Units.
Students receive formal training in use and assessment of interactive teaching strategies in university-level biology classes. Additional aspects of course design and implementation are covered. Recommended for graduate students who have or will be teaching discussion sections.

Repeatability: May be taken for credit 2 times.

DEV BIO 399. University Teaching. 4 Units.
Limited to Teaching Assistants.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.