

CELL + MOLECULAR BIOLOGY-CM (CM)

Courses

CM 501 Advanced Cell Biology Credits: 4 (4-0-0)

Course Description: Cell structure and organelle function.

Prerequisite: BZ 310.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

CM 502 Techniques in Molecular & Cellular Biology Credits: 2 (1-3-0)

Also Offered As: NB 502.

Course Description: Current methods in molecular and cellular neurobiology.

Prerequisite: (BIO 100 to 481 - at least 4 credits or BZ 100 to 481 - at least 4 credits or LIFE 100 to 481 - at least 4 credits) and (BC 100 to 481 - at least 4 credits and PH 100 to 481 - at least 4 credits).

Registration Information: Written consent of instructor. Must register for lecture and laboratory. Credit not allowed for both CM 502 and NB 502.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

CM 510 Introduction to Cell and Molecular Biology Credit: 1 (1-0-0)

Course Description: Overview of CMB program and research opportunities; enhances writing and oral communication skills.

Prerequisite: None.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

CM 515 Computational Cell and Molecular Biology Credits: 2 (1-2-0)

Course Description: Survey of bioinformatics for students without a background in computer science or data science. A wide variety of computational approaches to solving biological problems and modeling biological processes are introduced and practiced.

Prerequisite: None.

Restriction: Must be a: Graduate.

Registration Information: Graduate standing. Must register for lecture and laboratory. Credit not allowed for both CM 515 and CM 580A3.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

CM 544 Reproducible Biomedical Research Methods Credits: 3 (3-0-0)

Also Offered As: MIP 544.

Course Description: Provides training in best practices for early-stage graduate students using a variety of cell and molecular biology approaches as examples.

Prerequisite: BC 463 or BZ 350.

Restriction: Must be a: Graduate.

Registration Information: Credit allowed for only one of the following: CM 544, CM 581A3, MIP 544, or MIP 611.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

CM 595 Independent Study Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

CM 644 Creative Science Writing Credits: 3 (0-0-3)

Also Offered As: E 644.

Course Description: An approach to science writing for diverse audiences as a simultaneously creative and strategic endeavor, through principles that apply to science writing from the journal article to the personal essay, with a particular focus on writing for audiences beyond the discipline. Read and discuss foundational science writing and science communication theory, practice writing about work for diverse audiences, and participate in extensive peer-review and workshopping.

Prerequisite: CM 500 to 799 - at least 3 credits or E 500 to 699 - at least 3 credits.

Restriction: Must be a: Graduate, Professional.

Grade Mode: Traditional.

Special Course Fee: No.

CM 666 Science and Ethics Credits: 3 (3-0-0)

Also Offered As: PHIL 666.

Course Description: Ethical issues of research on humans and animals; biosafety; fraud and deception in science; genetic engineering.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: Credit not allowed for both CM 666 and PHIL 666.

Term Offered: Spring (odd years).

Grade Mode: Traditional.

Special Course Fee: No.

CM 699 Thesis Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

CM 700 Critical Analysis of Scientific Literature Credit: 1 (0-0-1)

Course Description: Presentation and discussion of current literature of cell and molecular biology. Content varies each semester and may be centered on a popular science book, or a topic related to the core research areas of the CMB program.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: May be repeated for a maximum of 4 credits.

Term Offered: Fall.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

CM 701D Topics in Cell and Molecular Biology: Radiation Cytogenetics Credit: 1 (1-0-0)

Course Description:

Prerequisite: (BC 403 and MATH 255) and (CM 501).

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

CM 7011 Topics in Cell and Molecular Biology: Planning Research and Grant Proposals Credits: 2 (2-0-0)

Course Description:

Prerequisite: (BC 403 and MATH 255) and (CM 501).

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

CM 784 Supervised College Teaching Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

CM 792 Cell and Molecular Biology Seminar Credit: 1 (0-0-1)

Course Description: Experience research presentations from local, national and international scientists working in areas relevant to cell and molecular biology. Each seminar is accompanied by a student led pre-seminar group discussion. Engage in selection and invitation of speakers for the following semester and actively participate in hosting the speaker.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

CM 793 Seminar Credit: 1 (0-0-1)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

CM 795 Independent Study Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

CM 799 Dissertation Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.