MOLECULAR AND CELLULAR BIOLOGY (MCB)

MCB*6310 Advanced Topics in Molecular and Cellular Biology Fall Only [0.50]

This course will consider fundamental cellular processes from multiple perspectives: biochemistry, cell biology, microbiology, molecular biology and genetics, and plant biology. Topics will vary from semester to semester but a multi-disciplinary approach to advanced concepts and experimental strategies will be a common theme.

Department(s): Department of Molecular and Cellular Biology **Location(s):** Guelph

MCB*6370 Protein Structural Biology and Bioinformatics Unspecified [0.50]

This course explores structural biology from three perspectives: 1) the fundamental concepts in structural biology; 2) the methods used to determine structures (including x-ray crystallography, NMR, electron microscopy, and computational modeling); 3) the bioinformatic concepts and tools used to compare, contrast and assign biochemical function to protein structures and sequences. The course emphasizes building a conceptual and practical skill set that will be applicable to any structure related problem.

Department(s): Department of Molecular and Cellular Biology **Location(s):** Guelph

MCB*6500 MSc Research Topics in Molecular and Cellular Biology Unspecified [1.00]

This mandatory two semester course emphasizes the development and refinement of the skills of scientific communication. Students submit a written thesis proposal and present a public seminar on a contemporary subject in the molecular biosciences. MCB MSc students normally complete this course within the first two semesters of their program. Students will register in each semester and receive a grade of INP (in progress) at the end of the first semester and a grade at the end of the second semester.

Department(s): Department of Molecular and Cellular Biology Location(s): Guelph

MCB*6700 Special Topics in Systems Biology Summer, Fall, and Winter [0.50]

This is a modular course in which faculty present novel and complex concepts in the field of Systems Biology. Students review literature, analyze data, engage in discussions, examine case studies, and prepare oral presentations and written reports.

Restriction(s): Instructor consent required.

Department(s): Department of Molecular and Cellular Biology **Location(s):** Guelph

MCB*7500 PhD Research Topics in Molecular and Cellular Biology Unspecified [1.00]

This mandatory two semester course emphasizes the development and refinement of the skills of scientific communication. Students submit a written thesis proposal and present a public seminar on a contemporary subject in the molecular biosciences. MCB PhD students normally complete this course within the first two semesters of their program. Students will register in each semester and receive a grade of INP (in progress) at the end of the first semester and a grade at the end of the second semester.

Department(s): Department of Molecular and Cellular Biology **Location(s):** Guelph