



BIOLOGICAL SCIENCES 305

ANIMAL PHYSIOLOGY

SUMMER 2014 (1144)

INSTRUCTOR	OFFICE	PHONE	EMAIL
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COURSE PREREQUISITES

MBB 221 or 231 and PHYS 102 (or PHYS 121 or 126 or 141)¹

COURSE DESCRIPTION

This course introduces the major physiological systems with an emphasis on understanding mechanisms. The course emphasizes the Physics behind the Physiology and the exams involve substantial Physics concepts. The exams are based on deductive thinking (like math or physics exams) and memorization of facts plays almost no role in this class. Though all concepts and several examples to illustrate the application of concepts are presented in class and as part of the assignments, students are expected to search for additional material (e.g. exercise problems) on their own. The instructor and TA(s) are available for help but the emphasis of this course on Physics concepts in Physiology should not be underestimated.

COURSE OUTLINE

- Basic principles of neuroscience
- Sensory systems
- Muscle physiology
- Basic endocrinology
- Cardiovascular physiology
- Respiratory physiology
- Water balance

TEXTBOOKS

Copies of transparencies used in class will be made available on the web and in the library. A book is not required for this class though reading Animal Physiology (e.g. Eckert's Animal Physiology) and Neuroscience books (all available in the SFU library) is highly recommended.

MARK DISTRIBUTION

Midterm 1	30%	Assignments	20%
Midterm 2	30%		
Midterm 3	20%		

¹ Prerequisite Minimum Grade Requirement: Unless stated, a grade of C- or better is required on all Prerequisite BISC & MBB courses.