#### NAZARENE UNIVERSITY COLLEGE / ALLIANCE UNIVERSITY COLLEGE

## COURSE INFORMATION SHEET BIOLOGY 233 – Organismal Biology of Plants and Animals

Tentative Course Outline and Schedule for Winter semester, 2006.

Note : Credit for both Biology 233 and 205 will not be allowed.

**Time:** Lectures – Tues./ Thurs., 2:30-3:45 Labs - Mon, 2:30-3:45

- Instructor : Dr. Carol Kroeker Office : 519A Phone: 571-2556, ext 5910 Email: ckroeker@auc-nuc.ca
- Text : Biology, Seventh Edition Campbell, NA and JB Reece, Prentice- Hall

Note: An earlier edition of Campbell and Reece will be perfectly adequate for the course.

# Learning Objectives:

- 1. Students will gain a greater understanding of fundamental biological principles
- 2. Students will be able to discuss the evolutionary history, biological diversity and modern relationships between prokaryotes and eukaryotes
- 3. Students will learn laboratory techniques essential to research in biology-related fields.
- 4. Students will collaborate with peers to design and carry out a research project and be able to present this in written and oral formats

Mark Distribution	:	2 Midterm Exams	35%
		Laboratory Reports	20%
		Research Project	10%
		Final Exam	35%

This course consists of 3 hours of lectures per week, plus a 2-hour lab.

The midterm and final exam will be a combination of multiple choice questions, as well as short and long answer questions. While most questions will be based on lecture material, the textbook reading will absolutely help in the understanding of this material. Attendance at lectures will help ensure success on course exams and assignments.

<u>Dates</u>	<u>Topic</u>	Text Chapters
Week of		
Jan. 9	Introduction to Biology 233 / Animal biolog	gy 22
Jan. 16	Animal diversity	32-34
Jan. 23	Locomotion and Support	40
Jan. 30	Nervous System / Sensory System	48, 49
Feb. 6	/Homeostasis / Endocrine System	44, 45
Feb. 13	Exam I / Cardiovascular system	42
Feb. 20	Reading Week	
Feb. 27	Respiratory System / Urinary	42
Mar 6	Digestive System / Reproduction	41, 46, 47
Mar 13	Exam II / Algae	28
Mar 20	Terrestrial Adaptations – non-vascular plant Non-seed plants, gymnosperms, angiosperm	
Mar 27	Seedling Growth and Development Plant Structure and Growth- Secondary grow	38, 35 wth 35
Apr 3	Transport of water and nutrients, transpiration	on 35, 36
Apr. 10	Mineral Nutrition, Hormonal Control of gro	wth 39
Apr 17	Review	

# Laboratory Schedule

At this time, a lab manual is not available. Hand-outs will be given out before the labs each week. Lab topics will include: Anatomy and Physiology of specific body systems, and botany.

Attendance at the laboratory sessions is COMPULSORY. Any lab missed without a valid excuse cannot be made up. Lab coats are not required.

The lab portion of this course will consist of 3 lab assignments and 2 lab reports worth 4% each.

#### **Grading Scheme**

А	90-100%	С	63-65%
A-	80-89%	C-	60-62%
$\mathbf{B}+$	77-79%	D+	54-59%
В	73-76%	D	50-53%
B-	70-72%	F	Below 50%
C+	67-69%		