LECTURE OUTLINE

- Introduction to BIOL 2030 - Animals - Lectures
- Introduction to BIOL 2030 - Animals - Labs
- Animal Classification and Relationships
  - Animal classification and relationships
  - Modern phylogenetic systematics and cladistic analysis
  - Reading Material

INTRODUCTION - PEOPLE

Course Director: Dr. Scott P. Kelly
Location: Farq Room 021 (basement)
Telephone: 416 736 2100 Ext. 77830
Email: spk@yorku.ca
Office Hours: Fridays 2-3 PM or by appointment

Lab Director: Dr. Tamara Kelly
Location: Farq Room 105
Email: tjkelly@yorku.ca

TA Coordinator: Helen Claseols
Location: Farq Room 021 (basement)
Email: hclaseols@yorku.ca

INTRODUCTION - WHEN, WHERE, TEXT ETC.

SC/BIOL 2030 - 4.0 [FALL 2008]

Lectures: Tuesday & Thursday - 11:30 AM to 1:00 PM
Laboratories: Monday to Thursday - 2:30 PM to 5:30 PM (124/126 LB)
Monday to Thursday - 6:30 PM to 9:30 PM (128/129 LB)
[ Labs start on September 8th 2008 ]

Hickman C.P., Roberts J.S., Keen S.L., Laurens A. & Eisenhour D.J.
McGraw Hill
[Biology, 7th edition, Campbell and Reece]

INTRODUCTION - COURSE GOALS

An introduction to the diversity of animals

- The provision of factual and conceptual information about animals
- Provide an opportunity to develop dissection skills and appreciate the internal architecture and organization of various animal groups
- Facilitate the development of observation, interpretation and note-taking skills

3rd Edition Revisions

- Chapter 2. Animal Ecology
  - expanded the principles of ecology, intraspecific and interspecific competition, community ecology, and invasion in light of changes in animal populations

- Chapter 5. Protozoan Groups
  - illustrates protozoan phyla and their relationships to the animal kingdom
  - provides an introduction to the anatomy and physiology of protozoa
  - revised to include recent research findings

Other Revisions
- revised to improve the flow of information and make it more accessible to students

4th Edition Revisions

- updated phylogenies and taxonomies
- new and revised cladograms
  - Cnidaria
  - Platyhelminthes
  - Porifera & Oligochaeta, etc.
- expanded coverage of vertebrates origins
- ecological physiology
- role of Hox genes & developmental changes
- recent fossil discoveries
- redrawn illustrations
LECTURE FORMAT

Organization and Coverage of Material
"Phylogeographic Approach"
- Classification and Characteristics
- Form and Function (whole animal to cellular level)
  - Locomotion
  - Feeding and Digestion
  - Excretion and Osmoregulation
  - Reproduction and Life Cycles
  - Nervous System and/or Sensory Systems
- Research Focus and/or Additional Material

LECTURE FORMAT (cont.)

- Lecture notes* will be posted online at the end of each week
  (web address: www.yorku.ca/spk)
- Research Focus and/or Additional Material lecture notes will be
  absent in most cases!
- When possible (or necessary), lecture notes will be posted
  directly after class
- Lecture note posting policy WILL NOT CHANGE
- Questions during lecture are welcome
- Respect your classmates
- Email contact requires that you address the course director
  (e.g. Dear Dr. Kelly or Dr. Kelly) and give your name and student number at the end of the email

LECTURE SCHEDULE

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LECTURE EXAM FORMAT

Midterm Exam:
- 75 minute exam
- 40 multiple choice questions
- Balanced according to material covered

Final Exam:
- 3 hour exam
- 80 multiple choice questions
- 20 pre-midterm questions
- 60 post-midterm questions
- Balanced according to material covered

In both cases, example questions will be given in review sessions

GRADES

Final grades will be determined as follows:
- Midterm Exam 20%
- Final Exam 40%**
- Laboratory Work 25%
- Laboratory Exam 15%

*Multiple choice format - will include all lecture and reading material up to & including Oct 14* (i.e. up to and including Module 11)
** Multiple choice format - will include ALL lecture and reading material covered through the entire course
**LECTURE OUTLINE**

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- Introduction to BIOL 2030 - Animals - Labs
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    - Animal classification and relationships
    - Modern phylogenetic systematics - cladistic analysis
    - Reading Material

**BIOL 2030 Animals - Labs**

- Lab Director: Dr. Tamara Kelly
  - tkelly@yorku.ca
  - 108 FS
  - ext 22972
  - Office hours by appointment

- TA Coordinator: Helen Chasiotis
  - helench@yorku.ca
  - 021 FS
  - Office hours: Tuesday & Thursday, 1-2 pm
  - If can't make office hours, e-mail to set up appointment

**BIOL 2030 Animals - Labs**

- Lab Attendance is MANDATORY!
  - If you miss a lab, or know in advance that you can't attend a lab, contact HELEN (TA Coordinator) by email/phone.
  - You MUST receive written permission from HELEN to attend an alternate lab section.
  - If you miss a lab, you must present HELEN with an acceptable reason for your absence (e.g., original, signed, & dated doctor's note)

**BIOL 2030 Animals - Labs**

- Switching Lab Sections:
  - Lab sections are all full!
  - If you need to switch lab sections, email HELEN:
    - Your name
    - The lab section you are currently enrolled in.
    - The lab section you would like to switch into.
  - We cannot guarantee a place for you in your desired lab section 😞

**QUESTIONS?**

**BIOL 2030 Animals - Labs**

- Read pp 1-7 of your lab manual
- Labs = 25% of your final course mark
- Lab exam = 15% of your final course mark
  - Set in December exam period
- Labs BEGIN the week of September 8th (that's next week)

**BIOL 2030 Animals - Labs**

- Before starting your first lab you must sign & submit Student Conduct Agreement
  - Located online
  - Print out both copies, sign & date both; hand in 1 copy & retain the other for your records.
BIOL 2030 Animals - Labs

• The purpose of the labs are to:
  1. Introduce you to animal diversity & taxonomic organisation of animals.
  2. Introduce you to relationships between structure and function.
  3. Allow you to develop your dissection & observational skills.

BIOL 2030 Animals - Labs

• Lab Grading:
  • Each lab is graded out of 10 marks.
    • Pre-lab quiz = 5 marks
    • Lab performance = 5 marks
  • Only your best 9 of the 10 labs will be used to calculate your final lab grade.

BIOL 2030 Animals - Labs

• Pre-lab quiz
  • ~ 10 mins, at beginning of each lab; don’t be late!
    • Materials & observations from previous lab
    • Taxonomic characteristics from current lab
  • : You MUST read & study the labs ahead of time!

• NOTE: There IS a quiz in the FIRST LAB!

BIOL 2030 Animals - Labs

• Lab Performance
  • Preparedness for labs (e.g., safety glasses, lab coat, dissection kit)
  • Dissection skills
  • Completeness & quality of notes & drawings
  • Completion of assigned questions from the manual
  • Safety & clean-up in the lab

LAB EXAM FORMAT

Digital Bell-Ringer:
• 30 minutes
• 30 multiple choice questions
• Various material

Dissection:
• 1.5 hour exam
• Animal may or may not have been given in class
  • dissect, draw and label
  • answer associated questions
  • identify and plot out specific structures