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 108
Email: tljkelly@yorku.ca

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

INTRODUCTION - WHEN, WHERE, TEXT ETC.

SC/Biol 2030 - 4.0 [Fall 2009]

Lectures: Tuesday & Thursday - 11:30 AM to 1:00 PM
Laboratories: Monday to Thursday - 2:30 PM to 5:30 PM [128/126 LB]
Monday to Thursday - 6:30 PM to 9:30 PM [128/126 LB]
[Labs start on September 21st 2009]

Text: Animal Diversity 5th edition
Hickman C.P., Roberts L.S., Keen S.L., Larson A. & Eisenhour D.J.
McGraw Hill

5th Edition Revisions

Can I buy the 4th Ed. (it’s cheaper!)
You must assume full responsibility for differences between editions
Details in Preface (pages xi – xii)
- updated phylogenies and taxonomies
- new and revised cladograms
- consolidated phylum characteristics
- redrawn illustrations (coupled with pictures)
- new pictures
- updated references
WHAT IS THE TEXTBOOK FOR?

Text: Animal Diversity 5th edition
Hickman C.P., Roberts L.S., Keen S.L., Larson A. & Eisenhour D.J.
McGraw Hill

1. Supplemental reading
   i.e. if something is not clear in class, use the textbook to gain a better understanding

2. Assigned reading
   i.e. reading material assigned in class (this is examinable!)

3. Laboratory reference/guide
   i.e. use illustrations/diagrams etc. to help in labs

Not all textbook material will be covered in class. Textbook material not covered in class won’t appear in exams

OUTLINE

Animal Architecture

1. Levels of Organization
2. Organ Systems & Extracellular Components
3. Tissue Types
4. Body Plans

Animal Diversity 5th Ed.
Chapter 3, Pages 55 - 71
(4th Ed. Chapter 3, Pages 53 - 71)

OTHER USEFUL MATERIAL

Dictionary of Biological Terms
- Highly Recommended!!
- Henderson’s Dictionary of Biological Terms, 14th edition
  [ISBN 0321505794, Ed. Eleanor Lawrence]
- ~ 22,000 entries
- deals with all major fields in biology and more

An Atlas of Invertebrate Structure
- Particularly useful for deciphering material to be observed under a microscope*
- One or two dissection drawings**
  - Lab 1*
  - Lab 2*
  - Lab 3*
  - Lab 5*
  - Lab 7**
- reserve copies in Steacie Library
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

LECTURE FORMAT

Organization and Coverage of Material
- “Phylogenetic 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

BIOL 2030 WITHIN THE BIOLOGY PROGRAM

2000 level courses must be selected with care!
- BIOL 2030 is a component required for areas of specialization that include:
  - Animal Biology
  - Ecology, Population Biology
- Although not required by all professional schools, BIOL 2030 may be an asset when pursuing additional scholarly pursuits pertaining to:
  - Veterinary Medicine
  - Medicine
  - Dentistry
LECTURE FORMAT (cont.)

• Lecture notes* will posted on-line at the end of each week (web address: www.yorku.ca/spk/biol2030.htm)

*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

• Email contact requires that you address the course director (i.e. Dear or Hello or Hi Dr. Kelly or just Dr. Kelly) and give your name and student number at the end of the email

LECTURE/LAB SCHEDULE

<table>
<thead>
<tr>
<th>SEPTEMBER 09</th>
<th>LABS</th>
<th>NOVEMBER 09</th>
<th>LABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th  - Introduction/Classification</td>
<td>2nd - Arthropoda I</td>
<td>7th – Arthropoda I</td>
<td>30th - Hemichordata Chordata I</td>
</tr>
<tr>
<td>15th - Animal Architecture</td>
<td>3rd - Arthropoda II</td>
<td>16th - Cnidaria</td>
<td>6th - Arthropoda II</td>
</tr>
<tr>
<td>17th - Protista</td>
<td>24th - Cnidaria</td>
<td>12th - Echinodermata</td>
<td>9th - Cnidaria</td>
</tr>
<tr>
<td>21st - Protista/Protozoa</td>
<td>26th - Cnidaria</td>
<td>19th - Fishes I</td>
<td>18th - Echinodermata</td>
</tr>
<tr>
<td>24th - Cnidaria</td>
<td>28th - Cnidaria</td>
<td>17th - Fishes II</td>
<td>20th - Cnidaria</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCTOBER 09</th>
<th>LABS</th>
<th>DECEMBER 09</th>
<th>LABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th - Acelomate Bilateria</td>
<td>5th, Nematomidae</td>
<td>9th, Arthropoda II</td>
<td>30th, Chordata III</td>
</tr>
<tr>
<td>6th - Porifera</td>
<td>6th - Nematoda</td>
<td>11th, Platyhelminthes</td>
<td>5th - Arthropoda II</td>
</tr>
<tr>
<td>8th - Mollusca I</td>
<td>13th, Mollusca</td>
<td>19th, Mollusca</td>
<td>12th - Echinodermata</td>
</tr>
<tr>
<td>24th - Mollusca II</td>
<td>24th, Annelida</td>
<td>20th, Hemichordata</td>
<td>17th - Echinodermata</td>
</tr>
<tr>
<td>29th - Mollusca II</td>
<td>21st, Protista</td>
<td>26th - Annelida</td>
<td>11th - Mollusca</td>
</tr>
<tr>
<td>30th - Mollusca II</td>
<td>28th - Porifera</td>
<td>27th - Mollusca</td>
<td>12th - Protista</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LABS</th>
<th>LABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd - Arthropoda I</td>
<td>3rd - Arthropoda I</td>
</tr>
<tr>
<td>3rd - Arthropoda II</td>
<td>5th - Arthropoda II</td>
</tr>
<tr>
<td>6th - Arthropoda II</td>
<td>9th - Arthropoda II</td>
</tr>
</tbody>
</table>

LABS

21st, Protista
28th, Porifera
Cnidaria
5th, Nematoda
Platyhelminthes
6th - Mollusca
24th, Cnidaria
26th, Annelida
27th - Mollusca Exam
30th - Mollusca

Lecture 1 - 16

GRADES

Final grades will be determined as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>20% *</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40% **</td>
</tr>
<tr>
<td>Laboratory Work</td>
<td>25%</td>
</tr>
<tr>
<td>Laboratory Exam</td>
<td>15%</td>
</tr>
</tbody>
</table>

* Multiple choice format – will include all lecture and reading material up to & including Oct 20th (i.e. up to and including Mollusca II)

** Multiple choice format – will include ALL lecture and reading material covered through the entire course

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
**ACADEMIC HONESTY**

All Senate Policies on Academic Honesty Apply  

Avoid ambiguous behaviour during exams

---

**Missed Exams**
- an exam missed due to illness requires an [Attending Physicians Statement](http://www.yorku.ca/grads/forms/NEW/attending_physician_statement.pdf)  
- midterm make-up exam will be in a written format (i.e., not multiple choice)

---

**BIOL 2030 Animals - Labs**

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

- **TA Coordinator:** Helen Chasiotis  
  - helenhc@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.
  - Permanent lab switches – only until 3:30 pm Sept. 25th…
    - We can’t guarantee a place for you in your desired lab section
  
  **QUESTIONS?**
BIOL 2030 Animals - Labs

• Read pp i-iv & 1-9 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 21st

BIOL 2030 Animals - Labs

• Before starting your first lab you must sign & submit Student Conduct Agreement
  – In your lab manual - sign & date both; hand in bottom copy to your TA & retain the other for your records.

LAB EXAM FORMAT

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

Dissection:
- 1.5 hour exam (immediately following digital bell-ringer
- Animal may or may not have been given in class
  - dissect, draw and label
  - answer associated questions
  - identify and pin out specific structures