#### COURSE OUTLINE Grading Systems



# School of Arts & Science

# BIOL 080 Inquiry into Life WINTER 2011

# COURSE OUTLINE

#### 1. Information

Course Description

This course is intended for the student interested in learning about the structure and function of the human body. The major areas of study are cell biology and human anatomy and physiology. This course provides Grade 12 biology equivalency.

Prerequisites: English 10 or assessment.

Time and Location

| Section | Lab Time               | Class Time             |
|---------|------------------------|------------------------|
| 002 A   | Wed 6:30-7:50PM (F226) | Mon 6:30-9:20PM (F306) |
| 002 B   | Wed 8:00-9:20PM (F226) | Mon 6:30-9:20PM (F306) |
|         |                        |                        |

#### 2. Instructor Information

Instructor: David Raju

Office hours: TBA

Office location: FISHER 352

Phone: 370-3925

e-mail: raju@camosun.bc.ca

## 3. Required Materials

- (a) Textbook: TBA
- (b) BIOL 080 Laboratory Manual. Winter 2011. Camosun College Biology Faculty.

4. Content and Schedule The following tentative schedule is subject to change if deemed necessary by the instructor.

|    | ie ionowing a | sindire schedule is subject to change if de |        |                               |
|----|---------------|---|--------|-------------------------------|
| WK | DATE          | TOPIC (D) /                                 | Week # | LAB TOPICS                    |
|    | (week of)     | CASE STUDY (C)                              |        | (Lab #)                       |
| 1  | Jan 10-14     | Some Fundamentals of Biology (D)            |        |                               |
|    |               | Scientific Inquiry (C)                      |        | Greetings/ Safety/Intro       |
|    |               |   | 1      |                               |
|    |               |   |        |                               |
| 2  | Jan 17-       | Introduction to Cell Biology (D)            |        |                               |
|    | 21            | Stem Cell Research (C)                      | 2      | (1) Metric Measurements       |
| 3  | Jan 24-28     | Plasma Membranes (D)                        |        |                               |
|    |               | Diffusion and Osmosis (C)                   | 3      | (3) Microscopy/Cell Structure |
| 4  | Jan 31-       | Enzymes (D)                                 |        |                               |
| •  | Feb 4         | Organic/Inorganic Catalysts (C)             | 4      | (4) Diffusion/ Osmosis        |
|    | 1051          |   | •      | "Fag Version"                 |
| 5  | Feb 7- 11     | Organic Cods (D)                            |        |                               |
| Ŭ  |               | What's in your diet? (C)                    | 5      | (5) Enzyme activity           |
|    |               |   | 5      | (b) Enzyme delivity           |
|    |               |   |        |                               |
| 6  | Feb 14-       | Cell Division (D)                           |        | (2) Organic Compounds         |
| Ŭ  | 18            | The Life of a Cell (C)                      | 6      |                               |
|    | 10            |   | Ũ      |                               |
| 7  | Feb 21-23     | Nutrition (D)                               |        | NOLAB                         |
|    | 1 00 21 20    | What's in your Diet (C)                     | 7      |                               |
|    |               | I AB EXAM 1 REVIEW                          | ,      |                               |
|    |               | NO CLASS THURS or FRI                       |        |                               |
| 8  | Feb 28-       | Lecture Exam 1 Review                       |        |                               |
| Ũ  | March 4       |   | 8      |                               |
| 9  | March 7-      | Introduction to Genetics (D)                | 0      |                               |
| 5  | 11            | Genetics Problems (C)                       | a      | (6) Scientific Method/Fitness |
|    |               |   | 5      |                               |
|    |               |   |        |                               |
| 10 | March 14-     | Applied Genetics (D)                        |        |                               |
|    | 18            | DNA Investigations Activity (C)             | 10     | (7) Nutrition                 |
| 11 | March 21-     | Human Anatomy (D)                           |        |                               |
|    | 25            | Organ Case Study (Ć)                        | 11     | (8,9) Human Organ Systems     |
|    |               |   |        |                               |
| 12 | March 28-     | Human Physiology 1(D)                       |        |                               |
|    | April1        | Physiology Case Study (C)                   | 12     | (8.9) Human Organ Systems     |
|    |               | Lab exam 2 Review                           |        |                               |
| 13 | April 4-8     | Disease Case Study (C)                      |        |                               |
| -  |               | Lecture Exam 2 Review                       | 13     | LAB 2 EXAM                    |
| 14 | April 11-     | LECTURE FXAM 2                              | 14     |                               |
|    | 15            |   |        | NO LAB                        |

## 5. Intended Learning Outcomes

- 1. Describe cellular structure and explain cellular processes such as respiration and protein synthesis.
- 2. Discuss cancer and genetic engineering in the context of cellular processes.
- 3. Describe the structure and function of the human digestive system, cardiovascular system, respiratory system, nervous system, urinary system, and reproductive system.

## 6. Basis of Student Assessment

| Labs/Cases/Assignments | 30% |
|------------------------|-----|
| Lecture Exam 1         | 10% |
| Lecture Exam 2         | 20% |
| LAB EXAM I             | 20% |
| LAB EXAM II            | 20% |

Lab exams will be unit exams. Please bring a pen *and* pencil to all exams.

## 7. Grading System

The following percentage conversion to letter grade will be used:

| A+ = 90 - 100% | B+ = 77 - 79% | C = 60 - 64% |
|----------------|---------------|--------------|
|                | B = 73 - 76%  | D = 50 - 59% |
| A = 85 - 89%   | B- = 70 - 72% | F = 0 - 49%  |
| A- = 80 - 84%  | C+ = 65 - 69% |              |

# ADDITIONAL INFORMATION

#### General:

Be sure that you are familiar with the General Department Policies, which are stated in the lab manual. A student conduct code will also be observed.

# ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html

Please note: Plagiarism will not be tolerated in any form, and may result in "0".

No programmable devices are allowed in exams.

Each student is required to sign a Laboratory Safety Contract and give it to the instructor prior to commencing laboratory work in the course.

#### Attendance:

You are expected to attend all classes and labs, and be on time. It is your responsibility to acquire *all* information given during a class missed, incl. notes, hand-outs, assignments, changed exam dates etc.

#### Exams:

Missed lab exams cannot be made up. Missed lecture exams cannot be made up except in case of documented emergency or illness (doctor's note required). Unless prevented by emergency, you need to contact the instructor prior to the exam being missed in order to be eligible for the make-up exam.

#### Labs and Case Studies:

You need to attend. Please come prepared with a pencil and a few sheets of unlined and graph paper, in case drawings are required. YOU CAN NOT TURN IN A LAB OR CASE STUDY FOR MARKS IF YOU DID NOT PARTICIPATE IN THE ACTIVITY DURING ITS SCHEDULED TIME PERIOD!

#### Assignments:

Unless otherwise stated, all assignments are due at the <u>beginning</u> of the lab/class of the due date. A **professional format** is expected, i.e. a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty or reduced marks. If the assignment is more than one page, separate pages **must be stapled**.

# LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at <a href="http://www.camosun.bc.ca">http://www.camosun.bc.ca</a>