BIOLOGY 184 – Evolution and Biodiversity

Summer 2017

Department of Biology, University of Victoria

Course Description
This course will survey all of biological diversity – prokaryotes, protists, plants, fungi and animals – and will use one of the fundamental facts of the living world, evolution, to tie together this diversity. It will also introduce genetics.

Lecture Meetings
TWF 8:30 – 10:20 AM, Cornett A125

Lecture Instructor
Dr. Greg Beaulieu, Petch 006, phone 250-721-7140.
Email gregoryb@uvic.ca. If you send me an email, please put "Biology 184" in the message line so I know it is not spam.

Office hours: Tuesday and Friday 10:30 AM – 12:00 noon; or by appointment; or just drop by.

Lab Coordinator
Alicia Rippington, Cunningham 010, phone 250-721-8713. Email: biologylabs@uvic.ca. Please put "Biology 184" in the message line.

Prerequisite
Any one of: Biology 11, Biology 12, Biology 150A, Biology 150B, Biology 186. A course in chemistry at either the high school or university level is strongly recommended.

Required Text
Campbell Biology, special UVic custom edition (a modification of the first Canadian edition), by Reece, Urry, Cain, Wasserman, Minorsky and Jackson. Available in the bookstore. This is the same book that will be used in Biology 186 during July – August.

A used copy of the text is acceptable.

We will not require you to purchase the text website maintained by the publisher.

Labs
Labs begin on Wednesday, May 10. Please purchase a lab manual from the bookstore and bring it to the first lab. **You must come to your first lab to hold your place in the course.**

Students sometimes have challenges and queries pertaining to lab assignments and exams. If you have such an issue, your TA and the senior lab instructor will be happy to discuss it with you, but please raise the issue with them within one week after receiving the marked assignment or exam. We cannot consider appeals after that.

Course Website
Biology 184 has a CourseSpaces website. There you will find lecture and lab notices, test results, practice questions, exam information, links and lecture notes. Please check the site before each class and lab.

Class Conduct
We would like to remind students that talking in class, texting, surfing, and reading a newspaper are all irksome to students sitting nearby and to the instructor. We ask that you be mindful of this and treat the people around you with respect and courtesy.

Evaluation

Midterm Exam (Friday, May 26)	25% (for the lecture part of the exam)
Final Exam (Friday, June 23)	35% (for the lecture part of the exam)
Lab (many components)	40%

The two exams will be written in class during the regular class period. They will include both lecture and lab questions, and will be mixed format exams.

The final exam will NOT be cumulative, unless you missed the midterm.

In Biology 184, you must pass the lab in order to pass the course. In order to determine if you have passed the lab, we will round your lab grade (out of 40) to the nearest whole number using our spreadsheet program, and if that rounded number is 20 or higher, you have passed the lab. So a mark of 19.6/40 would pass the lab, but 19.4/40 would not. If you do not pass the lab, a grade of F will be submitted for you, no matter what your aggregate course percentage is.

You do not have to pass either the lecture midterm or the lecture final exam to pass the course. To pass the course, it is necessary only that your total course mark is 50% or better (after rounding), and that you have passed the lab.

Midterm Exam and Final Exam Policy
No electronic devices will be permitted during an exam – that means no cell phone and no calculator. Turn off your cell phone and stow it.

You cannot have a pencil case on your desk during an exam. Before the exam begins, take out the writing materials you will need and stow your pencil case.

During the midterm exam and the final exam, the instructor cannot answer any clarification questions. However, if you believe a question is bad (garbled text, no correct answer, more than one equally correct answer), please bring your concerns to the attention of the instructor as soon as possible after the exam, preferably when you turn in your exam.

If you must miss the midterm exam for a valid reason (illness, accident, family affliction, or competition as a UVic athlete), you must notify Dr. Beaulieu in person or by email as soon as possible and provide suitable documentation for your absence. You will write a make-up midterm at the time of the final exam.

The final exam can be deferred in cases of illness, accident, family affliction, or commitments as a UVic athlete. If you expect to miss the final exam for any of these reasons, please notify Dr. Beaulieu as soon as possible, in person or by email. You must also fill out a Request for Academic Concession (RAC) form, available from Undergraduate Admissions and Records in the University Center or online (http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf).

Travel plans are not a valid reason for missing the midterm test or the final exam.

Grading

At the University of Victoria, grades are submitted by instructors only as percentages. These will be converted to letter grades by Records, according to the grading scale given in the university calendar. ***Please do not ask us to raise your percent grade in order to qualify you for a higher letter grade. We turn down all such requests.***

No supplemental final exam (second-chance final exam) will be given in this course, although, as described above, you may defer the final exam for any of the reasons given.

You will receive a grade of N in the course in either of these circumstances:

- you miss three or more labs, even with medical or other documentation
- you miss the final exam without a valid reason

You will receive a grade of F in the course in either of these circumstances:

- you do not pass the lab (20/40 or higher)
- your aggregate course grade is less than 50%

Lecture Topics

Lecture notes for each topic will be posted on the CourseSpaces site; please bring them to class. The notes will also include page readings from your text.

- Evolution and systematics
- The cell cycle and sexual life cycles
- Prokaryotes
- Protists
- Seedless plants
- Seed plants
- Fungi
- Introduction to animal diversity
- Invertebrates
- Deuterostomes and chordates
- Vertebrates
- Genetics
- Introduction to evolution
- Evolution of populations
- Speciation