

BIOLOGY 351 – THE BIOLOGY BEHIND THE NEWS

Spring 2018

Department of Biology, University of Victoria

Course Description

An examination of the biological science that bears on current environmental, social, ethical and political issues. Emphasis on how an understanding of the science might inform decision-making by individuals and groups.

Instructor

Dr. Greg Beaulieu, 006 Petch, 250-721-7140.

Email: gregoryb@uvic.ca. If you send an email, please put "Biology 351" in the message line.

Office hours: Wednesday, 1:30 – 3:00 PM; or by appointment; or just drop by.

Prerequisite

Third year standing.

Meetings

Tuesday, Wednesday and Friday, 9:30 AM – 10:20 PM, Bob Wright A104

Readings

Textbook – This course does not have a textbook. However, I recommend that you have a biology textbook close at hand, so you can read about some of the biology I will mention. If you already have a biology textbook from a previous course, you can use that. If you don't have a text, I have several in my office I am not using. You are welcome to borrow one for the term. Alternatively, you could buy one at Subtext or online. The edition does not have to be recent.

Handouts – I will be handing out photocopies of readings in class.

Course Website

Biology 351 has a CourseSpaces site, on which you will find notices, marks and lecture notes. You should bring the relevant lecture notes to each class.

Evaluation

Midterm 1 (Friday, February 9)	25%
Midterm 2 (Friday, March 16)	25% (not cumulative)
Final Exam (April exam period)	50% (cumulative)

The midterms and the final exam will be mixed format.

Exam and Grading Policy

No electronic devices will be permitted during the midterms or final exam.

The midterms cannot be deferred. If you must miss a midterm for a valid reason (illness, accident, family affliction, or commitments as a UVic athlete), your final mark will be calculated on the basis of the other components of the course, and you will not incur any penalty. If you expect to miss a midterm for any of the above reasons, please notify the instructor as soon as possible and produce supporting documentation upon your return.

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 the instructor as soon as possible. You must also fill out a Request for Academic Concession form, available from the Records office or online. The RAC form can be found at <http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>

A deferred final exam will normally be written at the end of July, although other arrangements can be made.

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

Course Topics (aspirational)

Introduction

Seeing reason

Molecules

The chemistry of life, here and elsewhere

Biofuels

DNA markers and DNA fingerprinting

CRISPR

The Human Organism

The immune system in fact and in fiction

Concussion and sports

Life extension

Environment

Biological consequences of climate change