

BIOLOGY 400 – HISTORY OF BIOLOGY

Summer 2017

Department of Biology, University of Victoria

Course Description

The historical development of the major techniques and ideas of biology, including the significance of the important contributors to biology. The treatment will be part chronological, part topical.

Instructor

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

Email: gregoryb@uvic.ca. If you send an email, please put "Biology 400" in the message line.

Office hours: Wednesday, 11:30 AM – 1:00 PM; or by appointment; or just drop by.

Prerequisite

Third year standing.

Meetings

Monday, Wednesday and Thursday, 1:30 – 3:20 PM, Cornett B112

Course Pack (required)

A course pack containing selected readings is available in the bookstore. Before each midterm exam and the final exam, I will inform you which readings will be tested.

Course Website

Biology 400 has a CourseSpaces site, on which you will find notices, marks and lecture notes. You should print and bring the relevant lecture notes to each class.

Evaluation

Midterm (Thursday, July 27) 40%

The midterm will be held in Bob Wright A104.

Final Exam (Monday, August 21) 60% (cumulative)

The final exam will be held in Bob Wright B150.

The midterm exam will be mixed format – part multiple choice, part written (short answer, longer answer).

The final exam will also be mixed format. It will consist of some multiple choice questions, and one written question: an essay question that will require a written answer of a couple of pages or so. This question will ask you will be asked to integrate various parts of the course.

Exam and Grading Policy

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

The midterm cannot be deferred. If you must miss the 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 final exam, and you will not incur any penalty. If you expect to miss the midterm for any of the above reasons, please notify me (gregoryb@uvic.ca) 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 me as soon as possible (gregoryb@uvic.ca). You must also fill out a Request for Deferred Exam form, available from the Records office or online (<http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>). You must complete this form to make UVic happy; it is not enough just to notify me.

If you must miss the final exam, it is your responsibility to contact me (gregoryb@uvic.ca) in the fall to arrange a time to write the deferred final exam.

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

Books on Reserve

A number of books bearing on the history of biology will be available on 2-hour reserve in the library. There are also biology texts listed under the courses Biology 150A, 150B, 184 and 186 that might be useful references for biological questions you might have. (Any biology text that you might have, even an old one, could be used as such a reference as well.)

Course Topics

- Introduction
- The roots of biology
- Biology in the ancient world
- The Islamic world and medieval Europe
- Hidden and mythical organisms
- The human body: the Scientific Revolution and after
- The early days of microscopy
- Biology and the emerging physical sciences: chemistry
- Describing and arranging organisms
- Biology and the emerging physical sciences: geology
- Evolution before Darwin
- Darwin
- Cells, the units of life
- Heredity
- Evolution and genetics come together
- The hereditary material
- TD Lysenko and Soviet biology