BIOLOGY 400 – HISTORY OF BIOLOGY

Spring 2020 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, 1:30 - 3:00 PM; or by appointment; or just drop by.

Prerequisite

Third year standing.

Meetings

Tuesday, Wednesday and Friday, 12:30 - 1:20 PM, Bob Wright B150

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 1	(Friday, February 7)	25%
Midterm 2	(Friday, March 13)	25% (not cumulative)
Final Exam	(April exam period)	50% (cumulative)
The two midterm exams will be all multiple choice. The final exam will be mixed format, and		
will include an essay question that will require a written answer of a couple of pages or so; you		
will be asked to integrate various parts of the course in your answer to this question.		

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 (http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf); it is not enough just to notify the instructor. Deferred final exams are normally written at the end of July, although other arrangements can be made if necessary.

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 (tentative)

- > 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