

# **BIOLOGY 400 – HISTORY OF BIOLOGY**

**Summer 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.

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

## **Office hours**

I will be having Zoom office hours. I will let you know the details.

I will also be happy to answer questions by email.

## **Prerequisite**

Third year standing.

## **Meetings**

There will be no set lecture times.

Every week, on the CourseSpaces site for Biology 400, I will post new chapters of lecture notes and an associated PowerPoint lecture. The PowerPoint will include both slides and audio. You can look at these materials on your own schedule.

## **Readings**

I will post pdfs of selected readings on the CourseSpaces site when they become relevant as we progress through the course.

## **Evaluation**

Online Midterm (Wednesday, June 3)           40%

Online Final Exam (Friday, June 26)           60% (cumulative)

The midterm and the final exam will be accessible through the Quiz tool on CourseSpaces. Both exams will be open to you for approximately 12 hours; I am still working out exact timings and details with Technology Integrated Learning.

The midterm exam 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 400-500 words or so; you will be asked to integrate various parts of the course in your answer to this question.

## **Topic Outline**

Introduction

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

Heredity

Evolution and genetics come together

The hereditary material