

# **BIOLOGY 400 – History of Biology**

**Fall 2025**

**Department of Biology, University of Victoria**

## **A. Basic Course Information**

### **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.

### **Meetings**

A01 (CRN 10405) – Tuesday, Wednesday and Friday, 12:30 – 1:20 PM, Engineering and Computer Science 123

### **Instructor**

Dr. Greg Beaulieu

Office: 006 Petch

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

Phone: 721-7140

Office hours: by appointment

### **Prerequisite**

Third year standing.

### **Readings**

I will post pdfs of selected readings on the Brightspace site when they become relevant as we progress through the course. There is no text or course pack.

### **Course Website**

Biology 400 has a Brightspace website. There you will find lecture notes, notices, marks and links. You should look on the website before each class and bring the lecture notes posted there. The lecture notes (in pdf form) that I post are skeletal notes only, and you should expand upon them during class with your own elaborations, questions, comments and clarifications.

Please be aware that the lecture notes are for personal use only and must not be published, distributed, sold or posted anywhere else.

### **Course Topics (tentative)**

- Introduction
- The roots of biology
- Philosophy, science and natural history in the ancient world
- Medicine in the ancient world
- 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
- Nineteenth century medicine
- Evolution and genetics come together
- The hereditary material

### **Learning Outcomes**

By the end of this course, you will have learned:

- the kinds of questions that interest historians and the kinds of sources they use
- how the study of life developed into a science from pre-scientific origins, beginning in the ancient world and continuing through the Scientific Revolution and the modern period
- how expanding biological knowledge informed the practice of medicine and the understanding of the human organism
- how older explanatory concepts in biology were dropped in favour of more useful ones
- how different eras and cultures contributed to the development of biology
- how the idea of evolution in the nineteenth century brought together many currents of biology that had been developing since the beginning of the Scientific Revolution
- how the study of evolution and the study of inheritance were unified in the twentieth century

## **B. Evaluation**

### **Components of your course grade**

Midterm exam 1 (Wednesday, October 8)	30%
Midterm exam 2 (Friday, November 7)	30%
Final exam (December final exam period; cumulative)	40%
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	100%

Writing the final exam and at least one of the midterms are essential components of the course. If you do not do both essential components, either at the regular time or deferred, you will receive a grade of N.

### **Midterm exams**

Format: approximately 30 multiple choice questions, 45 minutes; in class, during the regular lecture period.

### **Final exam**

The final exam will be written during the final exam period (Saturday, December 6 – Saturday, December 20). The specific day and time for Biology 400 will be arranged by the Registrar's office and announced in October.

Because the final exam period ends for all faculties on Saturday, December 20, the university's last exam will be in the evening of that day. Your last exam might be on this date, or it might be earlier – you will know for sure only when the final exam schedule is drawn up and posted in October.

Travel plans are not a valid reason for missing a midterm or the final exam. Please do not make plans to leave Victoria in December without being sure that your final exams in all your courses will be over.

The final exam will be mixed format, with two parts.

Part 1 – This will be a noncumulative multiple choice section. These questions will be concerned with the material we have covered since Midterm 2.

Part 2 – This part will consist of one essay question that will require a written answer of 500 – 600 words or so; you will be asked to integrate various parts of the entire course in your answer to this question. You will have a choice of 4 or 5 topics for your essay.

### **Exam Policy**

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

If you must miss a midterm or the final exam for a valid reason (illness, accident, personal or family affliction, participation in an important cultural, community or sporting event), your course grade will be calculated on the basis of the other components of the course, and you will not incur any penalty.

### **Deferred exams**

The final exam can be missed and deferred for the same reasons listed above for missing a midterm (illness, accident, personal or family affliction, participation in an important cultural, community or sporting event).

- If you expect to miss the final exam for any of the above reasons, please notify Dr. Beaulieu by email as soon as possible (gregoryb@uvic.ca). You will not need supporting documentation if you miss the midterm for a medical reason, but you will need to show documentation for any other reason.
- *Holiday travel plans are not an acceptable reason to miss the final exam.*

- To make your deferred status official in the eyes of the university, you must fill out a [Request for Deferral form](#). Note that you should send it to [studentsupport@uvic.ca](mailto:studentsupport@uvic.ca), not to the course coordinator.
- Here is more general information about the [types of concessions and accommodations available to UVic students](#). It might come in handy in other courses you take.
- A writing of the deferred midterm and deferred final exam will be offered to you on Saturday, January 10, 2026, at 10:00 AM, in Engineering and Computer Science 124. This constitutes your official notification of the deferred exam time and place. If you are not able to make this writing, please contact the course coordinator, Dr. Beaulieu, by email as soon as possible ([gregoryb@uvic.ca](mailto:gregoryb@uvic.ca)).

### Grading Policy

At the University of Victoria, grades are submitted by instructors as percentages. These will be converted to letter grades by the Registrar, according to this grading scale:

A+	90 – 100%	B+	77 – 79%	C+	65 – 69%
A	85 – 89%	B	73 – 76	C	60 – 64%
A-	80 – 84%	B-	70 – 72%	D	50 – 59%

The only circumstances under which I would change a submitted course grade are as follows:

- a) if I have made an error in recording or calculating your grade, or
- b) if a student has deferred an exam, received an N, and then written the deferred exam

**Please do not ask me to raise your percent grade in order to qualify you for a higher letter grade.**

You will receive an F in the course if your aggregate grade is less than 50% (rounded to the nearest whole number by Excel). It is not necessary to pass the individual course components in order to pass the course.

You will receive an N in the course if you miss the final exam in June or miss both midterms. The N will be updated to a revised grade once you write the deferred exam.

No supplemental final exam (second writing of the final exam to improve your grade) will be given in this course.

## **C. Important Dates for Biology 400**

On the UVic website you will find a fuller list of important UVic academic dates, but the ones listed below are the ones that will matter to students in this course and to students wishing to add the course. Items in **bold** are worth points in the course.

Wednesday, September 3	First day of classes for first term; first day of class for Biology 400
Tuesday, September 16	Last day for 100% reduction in fees for standard courses
Friday, September 19	Last day for adding courses that begin in the first term
Tuesday, September 30	Last day for paying first term fees without penalty
Tuesday, September 30	National Day for Truth and Reconciliation; UVic closed
Tuesday, October 7	Last day for 50% reduction of tuition fees for standard courses
<b>Wednesday, October 8</b>	<b>Midterm Exam 1; in class</b>
Friday, October 31	Last day for withdrawing from first term courses without penalty of failure
<b>Friday, November 7</b>	<b>Midterm Exam 2; in class</b>
Tuesday, November 11	UVic closed (Remembrance Day); no classes
Monday, November 10 – Wednesday, November 12	Reading Break; no classes
Wednesday, December 3	Last day of class for first term courses; last day of class for Biology 400
<b>Saturday, December 6</b>	<b>First day of final examinations period</b>
<b>Saturday, December 20</b>	<b>Last day of final examinations period</b>
<b>Saturday, January 10</b>	<b>Deferred midterm and final exam</b>

## **D. University Resources, Statements and Policies**

### **Club life**

UVic has an active student club scene. Check out your choices; you might want to get involved. The friendships you make in class or outside of class will enrich your university experience, and can last long after your UVic career is over.

### **Diversity**

This course welcomes all students regardless of income level, political and social views, religion, age, nationality, ethnicity, gender and sexual orientation.

Part of the value of a university education comes from interacting with students with different backgrounds, opinions and world views. Curiosity, civility, and respect are the important guiding principles of these interactions.

### **Special Resources**

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

Counselling Services - *Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.*

Health Services - *University Health Services (UHS) provides a full-service primary health clinic for students, and coordinates healthy student and campus initiatives.*

Centre for Accessible Learning - *The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.*

### **Academic Integrity**

The University of Victoria and the Department of Biology take academic integrity (including plagiarism) as a serious matter. Please review the undergraduate academic calendar for more information.

### **Fair Dealings**

All course materials (including but not limited to lecture slides, recordings, exam questions, and in-class activities) are made pursuant to the Fair Dealing Guidelines of the University, library database licenses, and other university licenses and policies. These materials are made available by your instructor for educational purposes and for the exclusive use of students registered in our class. The material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act. Sharing course content (such as including but not limited to lecture slides, recordings, exam questions, and in-class activities) through note-sharing sites or other means violates UVic's policy on academic integrity.

Violations may result in disciplinary action under the Resolution of Non-Academic Misconduct Allegations policy (AC1300).

### **Indigenous Academic & Community Engagement (IACE)**

Indigenous UVic students have access to many sources of support on campus including a centrally located First Peoples House. Before, during and after your time at UVic, you are encouraged to explore programs and services available to you, such as Indigenous counselling services and the Elders in Residence, as well as non-academic programs that may be of interest to you.

Elders' Voices - The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students and other university community members.

### **Learn Anywhere**

Learn Anywhere is UVic's student portal with a full range of student and academic support services including:

- [Learning Commons](#)
- [Library](#)
- [Computer Help Desk](#)

### **UVic Territory Acknowledgment**

“We acknowledge and respect the Ləkʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Ləkʷəŋən and ƛ̓SÁNEĆ Peoples whose historical relationships with the land continue to this day.”