

BIOLOGY 400 – History of Biology

Summer 2022

Department of Biology, University of Victoria

Welcome back to normal life (almost)

Biology 400 will be fully in-person this summer. This has not happened in this course since the summer term of 2019.

The virus has never tired of throwing us curve balls, and we should keep in mind that anything can happen, but there is good reason for optimism. As of this writing, the university maintains its policy direction from the PHO that masks are encouraged but not required.

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

Tuesday, Wednesday and Friday, 2:30 – 4:20 PM, Engineering and Computer Science 123. This room seats 299; at the moment, there are 118 students registered in the course, so you can spread out if you wish to keep some distance between yourself and others.

Instructor

Dr. Greg Beaulieu

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

Phone: 721-7140

I will have office hours on Tuesdays, 12:00 noon – 2:00 PM. I will also be available for Zoom appointments outside my office hours.

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 to buy.

Course website

Biology 400 has a Brightspace website. As a registered student in this course, you will automatically be enrolled in this site.

On the site you will find course business notices, lecture PowerPoints and pdfs, test results and so on. Please check the site before each class.

Course Topics (tentative; I might not get to all of these 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

B. Evaluation

Components of your course grade

Packback participation	25% (See C below)
Midterm exam (Friday, June 3)	30%
Final Exam (Friday, June 24)	45%
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	100%

Exam formats

The midterm and final exam will be in-person.

The midterm will have both multiple choice and written questions (short answer to 2-3 sentences).

The final exam will have two parts:

- a noncumulative multiple choice section worth half of the exam points; these questions will be concerned with material we have covered since the midterm
- an 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. This essay will be worth the other half of the final exam points.

The final exam is an essential component of the course; if you do not write the final exam, you will receive a grade of N.

Missed exams

If you must miss the midterm exam because of illness, accident, family affliction, or competition as a UVic athlete, you must notify Dr. Beaulieu as soon as possible (gregoryb@uvic.ca). **You will not be required to provide a medical note or other documentation.**

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 course coordinator (Dr. Beaulieu) as soon as possible, either by phone, email or in person. **You will not be required to provide a note or other documentation.** You must fill out a Request for Academic Concession (RAC) form, available from Undergraduate Admissions and Records in the University Center or online:

<http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>

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

Grading Policy

At the University of Victoria, grades are submitted by instructors as percentages. These will be converted to letter grades by administration, 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 change a submitted course grade is if I have made a calculation error, or if a student has deferred the final exam, received an N, and then written a deferred final.

Please do not ask me to raise your percent grade in order to qualify you for a higher letter grade. I turn down all such requests.

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

You will receive an N in the course if you miss the final exam in June and do not write a deferred final exam.

No supplemental final exam (second-chance final exam) will be given in this course, although, as described above, you may defer the final exam for any of the reasons given.

C. Packback

What is it?

Packback is an online platform for discussion among students. You will probably have been contacted already by the company about signing up.

Since Biology 400 has only third-year standing as a prereq, there are students from many different academic backgrounds registered here. That has always been one of the strengths of the course and one of its pleasures to me. I am hoping that Packback will be better able to bring together students with different knowledge, ideas and values than has previously been the case in Biology 400.

Cost

The cost is \$29 (CAN); it is less if you have used the platform in previous courses at UVic. The Bookstore used to sell a course pack for Biology 400 at a cost of \$29, but I have moved this material online for free, so you are not paying more than what students have traditionally paid in this course.

How it works, what you will do, and how you will be assessed

The idea behind the platform is that you will post one discussion question per week, related to the course material in some way, and respond to three questions from other students per week. Each question and response is worth 3 points, or 12 points per week total. You don't have to respond only to questions posted that week; it's fine if you respond to earlier questions. Your response will be time-stamped, and will count toward the current week's participation.

Your participation has to be every week. You can't let the first week slide and then post 3 questions on 9 responses in the fourth week.

The questions will be assessed for their quality by the platform's AI. Questions that pertain to closed, easily-lookupable issues ("When was Aristotle born?") get low marks; more open-ended questions score higher. The score a post gets is called its "Curiosity Score". I have set the minimum curiosity score at 60. After the AI tells you what it thinks of your question or response, you may edit and improve it. It is only your edited post that will count, or your original post if you choose not to edit.

If the AI thinks your final post deserves a score of 60 or more, you get 3 points in the course grade book for the post. If your post goes below this 60 minimum, you will get 1.5 points.

Your participation in Packback will be worth 25% of your course grade. The platform determines your grade, not me. Therefore I will not mark you up or down depending on what I read. In the calculation of your final Packback score, your lowest week will be tossed. Your score will therefore come from your best five weeks.

When you log in to Packback, there will be a button to click ("Packback Tutorial") to get you started.

Deadlines

The deadline for your Packback posts each week is Saturday at 12:00 midnight, PST. The full list of deadlines:

Saturday, May 14, 12:00 midnight (PST)

Saturday, May 21, 12:00 midnight (PST)

Saturday, May 28, 12:00 midnight (PST)

Saturday, June 4, 12:00 midnight (PST)

Saturday, June 11, 12:00 midnight (PST)

Saturday, June 17, 12:00 midnight (PST)

Coupla more notes

I will not be looking at all your posts and replies, but I will be reading some of the posts every week. This is for my own interest. I will not interfere with the system's grading.

When you post either a question or a reply, please try to bear in mind the valuable academic habit of respectful, impersonal discourse.

- Don't use foul language.
- Don't insult any person or any group of people. It's alright to disagree with a person or a group of people; disagreement is not insult. But don't call people names.
- Don't attribute someone's statements or values to group membership ("You're just saying that because you are an X.") This is bad for two reasons. One, it is stereotyping and assumes the person to be no more than a mindless member of a group, rather than a thinking individual. And two, it commits the Genetic Fallacy (evaluating the truth value of a statement according to who says it, or their motive for saying it, instead of the evidence for or against it).

D. University Statements and Policies

Cheating and Plagiarism

The University and the Biology Department deal with cheating and plagiarism as a serious matter, since ignoring it could be interpreted as endorsing dishonest practice in one's later professional career. To claim ignorance of the University's policy on academic integrity is, therefore, not excused. Please read the policy carefully to avoid unpleasant misunderstandings. The policy can be found on the online UVic calendar:

<https://web.uvic.ca/calendar2022-01/undergrad/info/regulations/academic-integrity.html>

The University of Victoria Department of Biology reserves the right to use plagiarism detection software or other platforms to assess the integrity of student work.

UVic official territory acknowledgement

“We acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.”

E. Important Academic Dates

On the UVic website you will find a fuller list of important dates, but the ones we have listed below are the ones that will matter to students in Biology 400 and to students wishing to add the course this term. The dates as listed here are not official. For the University’s official list of dates, go here:

<https://www.uvic.ca/calendar/undergrad/index.php#/policy/BJxDO92eP>

Keep in mind also your weekly Packback question and responses, which are due every Saturday at 12:00 midnight, from May 14 – June 17.

Course-specific dates are bolded.

Monday, May 9	First day of classes
Sunday, May 15	Last day to drop a course with 100% fee reduction
Monday, May 16	Last day to add a course
Monday, May 23	Victoria Day; no classes
Thursday, May 26	Last day to drop a course with 50% fee reduction
Friday, June 3	Midterm, Biology 400
Wednesday, June 8	Last day to drop a course without penalty of failure; no fee reduction
Friday, June 24	Final exam, Biology 400