

BIOLOGY 400 – History of Biology

Summer 2024

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 31196) ±Monday, Wednesday and Thursday 10:30 AM ±12:20 PM, David Turpin A110.

We will be taking a 10 minute break at 12:10 p.m. on Wednesdays. We will be taking a 10 minute break at 12:10 p.m. on Wednesdays.

Office: 006 Petch

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

Phone: 7247140

Office hours: Wednesday, 12:30 ±2:00 PM, or by appointment, or drop by

Prerequisite

Third year standing.

Readings

I will post pdfs of selected readings on the Brightspace site when they become relevant as we

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
Lysenko and Soviet biology

B. Evaluation

Components of your course grade

¼ Packback participation

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). It is not necessary to pass individual course components, the Packback component, the midterm, or the final exam in order to pass the course.

You will receive an N in the course if you miss the final exam 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 be contacted by the company about signing up.

Since Biology 400 has only three years 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 is that Packback will be able to bring together students with different knowledge, ideas, viewpoints and values

Cost

The cost is \$9+tax(CAN).

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

The idea behind the platform is that every week you will post

- x one discussion question related to the course material in some way
- x three responses to questions posted by other students

Each question and response is worth 3 points, a total of 12 points every week. You are to respond only to questions posted in the current one week period and not to earlier questions.

You should participate during every weekly cycle. Each cycle is 1 week long and you should post 2 questions and 3 responses in the next cycle.

The questions and responses that pertain to specific, easily identifiable matters get low scores more often than curiosity score at 60 which will be fairly easy to achieve. 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 that post. If your post goes below this 60 minimum, you will get 1.5 points. If you do not post at all that cycle, you get 0 points.

Although I have to allot marks for your Packback participation, you should not obsess about marks the way you might before a test. The minimum curiosity score of 60 is quite modest. The important thing is to enjoy participating in the discussions.

Your participation in Packback will be worth 10% of your course grade.

:KHQ \RX ORJ LQ WR 3DFNEDFN WKHUH ZLOO EH D EXWWRQ started.

Packback Deadlines

The deadline for your one question and three responses every week is Saturday at 11:59 PM, PDT. The full list of deadlines:

- Saturday May 18 11:59 PM (PDT) ±1 question, 3 responses
- Saturday May 25 11:59 PM (PDT) ±1 question, 3 responses
- Saturday June 1 11:59 PM (PDT) ±1 question, 3 responses
- Saturday June 8 11:59 PM (PDT) ±1 question, 3 responses
- Saturday June 15 11:59 PM (PDT) ±1 question, 3 responses
- Saturday June 22 11:59 PM (PDT) ±1 question, 3 responses

A few more notes

If you post your question early in the week, you have a greater chance that other students will respond to it., W ¶ V DOZD \V JUDWLI \LQJ ZKHQ DQRWKHU VWXGHQW post a response.

I will not be looking at all your posts, but I will be reading some of them. This is for my own interest., ZRQ ¶ W JHW XSVHW LI , UH DGI WLRQ DWLHQW GLVDJUH H V \ VWHP ¶ V JUDGLQJ

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

- x 'RQ ¶ W XVH IRXQ (X course). QJXD JH
- x 'RQ ¶ W LQVXOW DQ \ SHUVRQ RU DQ \ JURXS RI SHRSOH , group of people; disagreement by itself is not insulting and is not³ YHUEDO . But ROHQFH ' GRQ ¶ W FDOO SHRSOH QDPHV
- x 'RQ ¶ W DWWULEXWH VRPHRQH ¶ V VWDWLQJ QWKRURJUDSKYH MXVW VD \ LQJ WKDW EHFDXVH \RX DUH DQ ; ' 7KLV LV E disrespectful 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 a logical fallacy, 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).

- x Practice humility. You're not right about everything. Nobody. Maybe the point at issue is one of the things you are wrong about.

) L Q D O O \ G R Q ¶ W s i n c e y o u f e e x i o n d o n o t g e t a n y r e s p o n s e s . I h a v e s e e n e x c e l l e n t , t h o u g h p r o v o k i n g q u e s t i o n s t h a t n o b o d y r e s p o n d e d t o . S o m e q u e s t i o n s a t t r a c t m o r e r e s p o n s e s t h a n o t h e r s , b u t t h i s d o e s n o t n e c e s s a r i l y r e f l e c t o n t h e q u a l i t y o f t h e q u e s t i o n .

, ¶ Y H L Q F O X G H G V R P H c o m p a r y o n t h e W e b P a g e o f t h e C o u r s e O u t l i n e . I t t e l l s y o u h o w t o r e g i s t e r , a n d i t d i r e c t s y o u t o a Y o u T u b e v i d e o y o u s h o u l d w a t c h .

D. Important Dates

On the UVic website you will find a fuller list of

