BIOC299
Biochemistry for Non-Majors
CRN 20251
Winter 2020

Class time/location: Tues, Wed, Fri, 9:30 – 10:20, MacLaurin A144

Instructor: Dr. Doug Briant email: dbriant@uvic.ca
office: Petch 182

Office hours:**I will not be meeting students face-to-face**

- during Tuesday and Wednesday lecture periods, I will be on the CourseSpaces chat forum
- you can email me with other concerns

Textbook: Biochemistry, 9th Edition by Campbell, Farrell and McDougal.

CourseSpaces site: a CourseSpaces site will be maintained for this course. Some, but not all, lecture notes will be made available

Learning Objectives:

BIOC 299 introduces students to the various areas encompassed by the discipline. BIOC 299 requires a familiarization with organic chemistry and students should review functional group chemistry of organic molecules at the beginning of the course. Students must complete 2nd year organic chemistry before taking BIOC 299. Students should also review basic cell biology in preparation for this course.

Important dates and evaluation:

EVALUATION	Date
~~5~~ 10% Group Work 1	***in class*** Tuesday, January 28, 2020
~~25~~ 30% midterm 1 exam	***in class*** Friday, January 31, 2020
~~5~~ 10% group work 2	***in class*** Tuesday, March 03, 2020
~~25~~ 30% midterm 2 exam	***in class*** Friday, March 06, 2020
5% online quizzes (2 exams, 2.5% each)	***Due online, Wednesday March 25 and Wednesday April 01***
~~40~~ 15% final exam	***~~2 hours, set by registrar~~ Monday, April 20, must be completed between 9:00 – 11: am online (exam length will be equivalent to one hour in class exam)***

- Students are responsible for ensuring that they are properly registered in the course.

Tentative Class Schedule:

Date	Topic	Text
	Introduction to biomolecules	Ch.1
	Aqueous environment and pH	Ch.2
	Amino acids	Ch.3
	Protein structure	Ch.4
	Enzyme action	Ch.6
	Enzyme kinetics and regulation	Ch.6/7
	(continued)	
	Enzyme mechanisms	Ch.7
	(continued)	
	Lipids	
	Biological membranes	Ch.8
	(continued)	
	Signal transduction pathways	Ch.24
	(continued)	
	Metabolism overview and bioenergetics	Ch.15
	Carbohydrates	Ch.16
Feb. 17-21	**Reading Break**	
	Glycolysis	Ch.17
	Gluconeogenesis	Ch.18
	Citric acid cycle	Ch.19
	Citric acid cycle (continued)	
	Oxidative phosphorylation	Ch.20
	(continued)	Ch.20
	Nucleotides and nucleic acids	Ch.9
	DNA packaging and genome organization	
	DNA replication	Ch.10
	Transcription in prokaryotes	Ch.11
	Transcription in eukaryotes	Ch.11
	RNA processing in eukaryotes	Ch.11
	The genetic code	Ch.12
	Protein synthesis	Ch.12

Grading:

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

** N grades
Students who have completed the following elements will be considered to have completed the course and will be assigned a final grade:

- ***Both midterm exams and the final exam must be written to complete the course***

Failure to complete one or more of these elements will result in a grade of "N" regardless of the cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a student's GPA as 0. The maximum percentage that can accompany an N on a student's transcript is 49

DEPARTMENT INFORMATION AND POLICIES

1. The Department of Biochemistry and Microbiology upholds and enforces the University's policies on academic integrity. These policies are described in the current University Calendar. All students are advised to read this section.

2. Cell phones, computers, and other electronic devices must be turned off at all times unless being used for a purpose relevant to the class. Students having a cell phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.

3. Any recordings of lectures may only be performed with written permission of the instructor, and are for personal use only. The instructor retains copyright to such recordings and all lecture materials provided for the class (electronic and otherwise); these materials must not be shared or reposted on the Internet.

4. Course materials, such as notes, problem sheets, quizzes, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.

5. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm exam. The deferred exam must be written within five business days of the original exam. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking a deferred examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams for spring term courses will be arranged through Undergraduate Records and must be written before the end of the summer term as stipulated in the University Calendar.

6. Multiple choice scan sheets for machine scoring (bubble sheets) are considered the authentic exam answer paper and will be retained by the department for 1 year.

7. Professors may refuse to review/remark exams not written in indelible ink. In addition, requests for review/remark of a midterm exam must be made within one week of the exam being returned. Students are expected to promptly pick up midterm exams after marking has been completed, either in class or from the instructor.

8. Examination papers that have pages removed, or are mutilated will not be marked.

9. I reserve the right to use plagiarism detection software or other platforms to assess the integrity of student work."

Centre for Accessible Learning

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, approach the Centre for Accessible Learning (CAL) as soon as possible (https://www.uvic.ca/services/cal/) in order to assess your specific needs

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to your CES dashboard. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. I will remind you nearer the time but please be thinking about this important activity