

Cell Biology, Biol 360, Summer 2019

Goals for this course:

I selected interesting and complex topics of cell biology in order to introduce you with major concepts and working techniques of cell biology. I want you to understand general principles of cell organization, intracellular transport, cell communication, signal transduction pathways & cell cycles including apoptosis. Occasionally I include peer reviewed research papers in order to show you how textbook knowledge is created and how experiments are performed. I want you to understand experimental set up and be able to interpret figures presenting research results. My main goal is to teach you the scientific way of thinking. I look forward to the continuing studies of the fascinating world of cell biology!

Class time and location: Tuesday, Wednesday and Friday 8.30 am -10.20 am in Cun146. Classes start Tuesday May 14th and end Friday June 28th.

Prerequisites: Biol230, Bioc 299 or pre or corequisite 300A or 300B. Please be aware that if you drop a co-req the system will automatically drop you from this course as well!

Instructor: **Dr. Barbara Ehling** (Course coordinator)

email: behlting@uvic.ca

office: Petch 005

office hours: Thursdays 10.30-noon or by appointment or simply drop by.

Office hours are for you to connect with us, review exams, discuss lecture material and get to know each other. It is easier for me to write a reference letter for you if I know you!

Textbook: Molecular Biology of the Cell, 6th edition, Alberts B, Johnson, A, Lewis J, Morgan, Raff M, Roberts K, Walter P, Garland Science, ISBN 978-0-8153-4432-2

The book is available to you in various forms:

- the textbook can be purchased at the bookstore NEW \$285.75
- USED text: \$214.75
- Looseleaf: \$167.75
- Etext is available via VitalSource.com for \$227.50
- At reserve, UVic library

Lecture notes will be posted on a CourseSpaces website for you. I recommend that you bring the lecture notes to classes to add comments on slides and answer questions. **Provided lecture slides are for personal use ONLY and are not allowed to be distributed without permission from the publisher.**

Tentative Class Schedule

- Welcoming, rules and regulations,
- Introduction to Cell Biology (parts of chapters 1,3, 4, 12, 14)
- Working with cells: visualizing cells and manipulation of cells (chapters 8, 9)
- Membranes (chapter 10)
- Membrane transport of small molecules & the electrical properties of membranes (chapter 11)
- Intracellular Compartments and Protein sorting (chapter 12)
- Intracellular vesicular Traffic (chapter 13)
- Cell communication and signaling pathways in cells (chapter 15)
- Cytoskeleton (chapter 16)
- Cell cycle (chapter 17)
- Apoptosis (chapter 18)
- Cancer (chapter 20)
- Wrap up and catch up, Review, evaluation...

How to be successful

I know that students like to take notes on laptops. HOWEVER, I want you to know that **off – task activities** like checking email, surfing the internet, checking social network sites, is **negatively affecting students' grades by more than 10%**. This is true for the student involved in the off-task activities, but also affecting students sitting nearby (Sana *et al*, 2013). Because of that I please ask you to actively **TURN OFF your internet, email and cellphone during class time!!! We also recommend that you turn off your electronic devices during your study time at home to allow you to focus and not be distracted by social media and other non-course related sites.**

Evaluation:

Midterm 1	28.5%	Wednesday May 29 th	(2-phase exam: 25.65% + 2.85 %)
Midterm 2	28.5%	Wednesday June 12 th	(2-phase exam: 25.65% + 2.85 %)
Final	35%	Last day of class, Friday June 28 th , cumulative, individual/traditional exams (110 min)	

Paper assignment 8% (completed during class time as a group, TBA)

2-phase exam: The first 50 min of the exam will be as usual (everybody writes their own exam). This will account 90% of your midterm grade (25.65% overall). After 50 min all exams will be collected, students will be grouped randomly in groups of approximately 5 students and write a very similar exam as a group. This will account 10% of your midterm grade (2.85% overall).

No electronic devices of any kind will be permitted during the exams.

If you cannot attend an exam for a valid reason (illness, accident, family crisis), it is your responsibility to inform the course coordinator (BE) as soon as possible and provide suitable documentation (doctor's note or counselor's note).

There will be no supplemental midterm exams. If you are excused from a missed midterm test the course coordinator (BE) will inform you how your final course mark will be calculated. You are eligible to write the deferred final exam (date would be announced if necessary) if you have a valid reason for missing the final exam.

General regulations:

Grading system:

In determining final grades for the course, our spreadsheet will round your course score to the nearest whole percent. That is the official course grade that will be submitted for you. Under a new policy, instructors at UVic no longer submit letter grades for students.

We cannot change your grade for any reason, except if we have made an error calculating it. There is no extra work that you can do to raise your grade.

Failure to complete at least one midterm and the final exam 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.

Please read the appropriate section of the current UVic Academic Calendar regarding your rights and obligations.

You are expected to observe UVic standards of scholarly integrity especially with regards to plagiarism and cheating. If you cheat during an exam you will be graded with 0 for this exam and the incident will be reported. Further consequences might apply.

UVic and we as instructors are committed to promoting, providing and protecting a supportive and safe learning and working environment for you and us.

Stay healthy!

A note to remind you to 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. All of us benefit from support during times of struggle. **You are not alone.**

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.* <https://www.uvic.ca/services/counselling/>

Health Services - *University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.* <http://www.uvic.ca/services/health/>

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

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, staff, faculty and administration in Indigenous ways of knowing and being. <https://www.uvic.ca/services/indigenous/students/programming/elders/index.php>

Sexualized Violence Prevention and Response at UVic

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out: Where: Sexualized violence resource office in EQHR; Sedgewick C119, Phone: [250.721.8021](tel:250.721.8021), Email: svpcoordinator@uvic.ca, Web: www.uvic.ca/svp

I hope that you are enjoying a great summer term with Bio360 Cell Biology!