Biology 266/2 section 02, Fall 2015

Lectures: Wednesday and Friday, 08:45-10:00

Lecture room: SP-S110

Instructor: Dr. Michael Sacher

Email: michael.sacher@concordia.ca
(I generally respond to emails within 24 hours. If you do not get a response, feel free to email again, pass by during office hours, or catch me at the end of a lecture)

Office: SP-457.01

Office hours: Wednesdays and Fridays, 12:00-13:00 or by appointment

Lecture notes and recordings: The lecture notes will be posted on the course website in Moodle in three sets. Units 1-3 will be posted at the start of the semester, Units 4-8 will be posted after the first midterm exam, and Units 9-13 will be posted after the second midterm exam. The notes will be posted in colour.

The audio for some or all of the lectures may be recorded and posted on the Moodle course website. Although the microphone should not pick up any sound other than the lecturer, it is possible that students' questions during class may be picked up. Please speak to the instructor if this will be an issue.

The recorded lectures and lecture notes are meant for the registered students of this section. Any sharing of the notes or recordings is a violation of both Copyright law and the Academic Code of Conduct (http://tinyurl.com/nexnno6). Violations of either one carry severe penalties.

The recorded lectures are meant to be used as review material. Studies indicate that students who attend and are engaged in lectures do better than those who do not. To simply rely on the lecture notes and recorded lectures in place of attendance would be a grave mistake. Please make sure to use them for the purpose that they are intended.

Note that photography of any type is strictly forbidden in this class. Anyone caught taking any type of photo will incur immediate and severe penalties including, but not limited to, grade reduction that may result in a failing grade in the course. An Academic Code of Conduct report will also be filed and, if upheld, will remain as a permanent notation on your transcript.
In short, don't do it.

Marking scheme: Two midterm exams (during class) worth 20% each, final exam (during final exam period) worth 55%, clicker questions/participation worth 5%.

Alternative grading scheme -

> If the final exam is higher than at least one of the midterm exams, then the final exam is worth 65%, the lowest midterm is worth 10% and the other midterm is worth 20%. Clicker questions/participation remains at 5%.

If you cannot attend one of the midterm exams, a valid, medical note must be presented to the instructor within one week of the exam. In such a case, if the note is deemed acceptable, the final exam will be worth 75%, the second midterm will be worth 20% and participation will be worth 5%. If you cannot attend the final examination for a valid reason, you must contact the Examination Office to schedule a deferred examination. Vacations and travel plans are not considered a valid reason for a deferral.

The first midterm exam will cover Units 1-3 and the second midterm exam will cover Units 4-8. The Final exam is cumulative with a slightly stronger emphasis on the material covered after the second midterm exam. All examinations will include material covered in the lectures and the lecture notes. The exams will be mainly multiple choice questions with a few short-answer questions. The numbers of each will be provided before the exam.

Grades: The following guidelines will be used for assigning the final grade in the course:

A+	90-100	C+	67-69
A	85-89	C	64-66
A-	80-84	C-	60-63
B+	77-79	D+	57-59
B	74-76	D	54-56
B-	70-73	D-	50-53

Note that a grade below 50 is considered failing for this course.

iClicker: The iClicker will be used during class. If you do not have one you can purchase one from the bookstore. You must register your clicker with your student ID so that your responses to questions can be associated with you. The iClicker is registered through the MyConcordia portal under the "student services" section. Instructions on how to register and use the iClicker can be found on the course website in Moodle. Note that older iClickers will also work in this class, but they do not have the small LCD screen.

For those who are not familiar with the iClicker, I will pose questions during class (usually multiple choice). You will then use the iClicker to register your response which will be attributed to your name. You will be graded on your responses over the course of the semester. Group responses to each question can be viewed, and depending on the outcome we may discuss the answers, both correct and incorrect, in more detail.

Recommended texts: Either of the following two texts are **strongly recommended**:
1. "*Essential Cell Biology*" by Alberts et al, 4th edition, Garland Publishing, Inc. (2014).
2. "*Cell and Molecular Biology*" by Karp, 7th edition, John Wiley and Sons, Inc. (2013).

Although either of these textbooks is recommended, neither of them is required. Earlier editions of these texts will also be useful, although they may lack certain sections and detail.

Other useful texts include "*Molecular Cell Biology*" by Lodish et al, 7th edition (W. H. Freeman and Company, 2013) and "*Molecular Biology of the Cell*" by Alberts et al, 6th edition (Garland Publishing, Inc, 2015). Examination questions will be based on lectures and lecture notes.

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Units by approximate lecture dates

Date	Unit	Topics	Essential Cell Biology	Cell and Molecular Biology
September 9	1	Cells and organelles (I)	Ch. 1	Ch. 1,5,6,12
September 11	1	Cells and organelles (I)	Ch. 1	Ch. 1,5,6,12
September 16	1	Cells and organelles (II)	Ch. 1	Ch. 5,8
September 18	1	Cells and organelles (II)	Ch. 1	Ch. 5,8
September 23	2	How cells are studied (I)	Ch. 1	Ch. 18
September 25	2	How cells are studied (I)	Ch. 1	Ch. 18
September 30	2	How cells are studied (II)	Ch. 1	Ch. 18
October 2	2	How cells are studied (II)	Ch. 1	Ch. 18
October 7	3	Membrane structure	Ch. 11	Ch. 4
October 9	3	Membrane structure	Ch. 11	Ch. 4
October 14	**FIRST MIDTERM TEST ON UNITS 1-3**			
October 16	4	Membrane proteins	Ch. 11	Ch. 4
October 21	5	Membrane transport	Ch. 12	Ch. 4
October 23	6	Protein sorting to organelles (I)	Ch. 15	Ch. 8,12
October 28	6	Protein sorting to organelles (I)	Ch. 15	Ch. 8,12
October 30	6	Protein sorting to organelles (II)	Ch. 15	Ch. 8
November 4	6	Protein sorting to organelles (II)	Ch. 15	Ch. 8
November 6	7	Principles of cell signaling	Ch. 16	Ch. 15
November 11	8	Signal transduction pathways (I)	Ch. 16	Ch. 15
November 13	8	Signal transduction pathways (II)	Ch. 16	Ch. 15
November 18	**SECOND MIDTERM TEST ON UNITS 4-8**			
November 20	9	Cytoskeleton	Ch. 17	Ch. 9
November 25	10	Mitosis and cytokinesis	Ch. 19	Ch. 14
November 27	11	Cell cycle control systems	Ch. 18	Ch. 14
December 2	12	Cell cycle checkpoints	Ch. 18	Ch. 14
December 4	13	Cancer and apoptosis	Ch. 18,20	Ch. 15,16