Cellular Regulation

(SC/BIOL 4150 3.0) F2020

Prerequisites: SC/BIOL2020 4.0; SC/BIOL2021 4.0

Welcome to BIOL4150 remotely!

Course Description: A detailed examination of molecular, cellular and physiological processes associated with the action of peptide hormones, neuro-transmitters and growth factors. Emphasis is on cell receptors and signal transduction mechanisms from the membrane to the nucleus.

Contact: <u>mscheid@yorku.ca</u>. Please place "RE: 4150" in the subject line. I will be using a Filter to collect the emails, so you MUST put RE: 4150 in the subject line.

Course evaluation

Quizzes (40%)

- Five, worth 8% each.
- To begin at 2:35 PM sharp, 30 minutes total allowed time.
- Quizzes will be a combination of multiple choice, true/false and short answer questions. Quizzes will sequential.

Group project (30%)

- You will have the opportunity to select a group on Monday, September 14 at 8 AM. There are 8 groups assigned different subjects. There will be 30-minute breakout room discussions on every second Thursday.
- You must collaborate to make a video with graphics, animation or some other presentation. An individual paper will be due from each student on November 24 based on the Group project subject.
- Presentations will be held on the last two days of class. You must attend these presentations (attendance will be taken).
- Each presentation will be 12 minutes and 3 minutes for questions. I will randomly choose who goes first with 4 presentations on each day.
- Evaluation: 50% of the mark will be based on the individual paper. You can collaborate with your group colleagues on the subject and content, but the writing must be your own. You will be submitting by Turnitin..
- The presentation will be worth 50% of the Group project mark, and will be graded for the quality, scientific depth and creativeness of the presentation.

Final Exam (30%)

The Final exam will be a 2-hour, multiple choice or short answer test in Moodle. The exam material could include anything covered in the course, including the group presentations. I reserve the right to use ProctorTrack (see statement on next page).

Group Project Evaluation Breakdown

50% of the Group project evaluation will be based on the individual paper

- Must be 5 pages or less, single spaced, size 12 Calibri font with 2 cm margins all around
- Title page, references and figures are not included in 5 page limit
- Assessment of the writing score will use the letter grade scale of YorkU (A+, A, B+, etc).
- As a group, you may collaborate, discuss, edit each others work, but your writing must be your own. You cannot all hand in the same paper. For example, if you chose "Crispr and gene editing", you will all need to select different aspects of Crispr in gene editing to discuss in this topic.

Group Project Evaluation Breakdown

50% of the Group project evaluation will be based the Presentation:

- During the final two meetings, each Group will present a 12-minute presentation on their topic.
- This can be a live presentation using Powerpoint, Keynote, etc., or it could be a video using presentation software with animations and voice overs.
- Each member must contribute to the presentation and must be present during the presentation for questions.
- 3 minutes at the end of each presentation will be allowed for any questions.

The grade will be given for quality, scientific depth and creativeness of the presentation.

And now, the ProctorTrack Statement

"This course requires the use of online proctoring for examinations. The instructor may use an online proctoring service to deliver the exam(s), which would be administered through the Learning Management System (e.g. Moodle, Canvas, etc.). Students are required to have access to minimum technology requirements to complete examinations. If an online proctoring service is used, students will need to become familiar with it at least five days before exam(s). For technology requirements, Frequently Asked Questions (FAQs) and details about the online proctoring service visit [https://registrar.yorku.ca/proctortrack-faq]. Technology requirements are described within. Students are required to share any IT accommodation needs with the instructor as soon as they are able." Academic Integrity: Senate Policy on Academic Dishonesty Students are expected to be familiar with and follow York University's Policies regarding academic integrity.

Please consult the website below for more details: http://www.yorku.ca/academicintegrity/students.htm

Learning approach: This course will be taught using the primary literature and various online resources. In Zoom, I will be using a combination of the whiteboard and Powerpoint figures. There is no textbook.

Some examples:

Pubmed (https://www.ncbi.nlm.nih.gov/pubmed/)

Bookshelf (https://www.ncbi.nlm.nih.gov/books)

Journals (Cell.com, Nature.com, Science.com)