

BIOC 404 – Course Outline

Course Description

This course focuses on emerging and classical biochemical methods. Biochemical methods are covered from the perspective of theory, practical hands on data analysis and experimental design. We will cover many techniques relevant to modern day molecular biology-biochemistry research. The course is taught through a series of lectures, practical work sessions, hypothesis based grants and student led presentations.

Lecture Times

This course is scheduled across two terms, in term one the course is on Mondays and second term the course is on both Monday and Friday.

Course Objectives

While this is a methods based course, the objectives of the course go beyond simply learning the theoretical details of biochemical approaches.

This course aims to have students:

- Obtain a sense of the wide array of biochemistry and molecular biology techniques
- Learn a variety of classical techniques and emerging technologies
- Gain practical skills in RT-qPCR, molecular cloning and x-ray crystallography
- Gain experience reading scientific papers
- Gain experience giving formal presentations
- Transition to learning in a seminar style format
- Gain experience in productive group work
- Gain experience developing scientific hypothesis and research aims

Course Evaluation

	% of Final Grade
Assignments	
▪ RT-qPCR	5
▪ Cloning	5
▪ Protein Structure	25
▪ Grant Application	20
Presentation	25
Participation	5
Final Exam	15

Academic Misconduct

UBC and the Department of Biochemistry and Molecular Biology take the issue of academic misconduct very seriously; the honest assessment of student learning is key to both the success of the university and success for individual students. Cheating, in any form, undermines the value of a degree and can have serious consequences for your continued academic success. As such it is important to know what your responsibilities are, what constitutes misconduct and how you can avoid it. According to university policy, students are responsible for learning what the rules of academic honesty are and for applying those rules to their own work. While some forms of academic misconduct are relatively obvious, some may be less so and if you are ever in doubt it is best policy to check with your course instructor as soon as possible. What consequences can arise from academic misconduct? The severity of the discipline can range from a letter of reprimand or a zero on the assignment in question all the way to expulsion from the University. Perhaps the most common outcome in these cases are grades of zero in the course in which the misconduct occurred.

Course Communication

For all information pertaining to BIOC 404 please see the course website to obtain the most up to date information. On the website you will find the course schedule and required reading.

Contact Information

If you have any questions, concerns or comments always feel free to come discuss with me. I do not keep set office hours, but I am typically available most days. You are welcome to drop by my office anytime, however it is often best to email me so that we can arrange a time to meet.

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