

BIOC 301 (3) **Biochemistry Laboratory**

Techniques by which the chemical and physical properties of fundamental components of the cell are studied. [0-3-1]

Corequisite: One of BIOC 302, BIOC 303.

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The Bioc 301 lab consists of one lecture per week (Tuesday, 12:30 in Wesbrook 100 for Term 1) and one lab section (One of Tuesday through Friday 2-5pm in BioSci 3014).

Over the two-terms of the winter session, we will cover DNA isolation, polymerase chain reactions, Sanger sequencing, restriction digestion of DNA, plasmid extraction and manipulation, DNA cloning, recombinant protein expression, qPCR, Western blotting and spectrophotometry.

At the end of the course in addition to familiarity with the above techniques we will be practising scientific communication (written and oral), experimental design and data analysis.

The course does not have a required textbook but standard lab safety equipment will be required (lab coat and goggles).

Assessment of our learning will be based on a number of methods. These include lab reports, presentations, lab work, quizzes, assignments and exams. An approximate break-down of the weighting of each of these components towards the final grade in the course is lab reports 45% (two in term 1, 1 in Term 2), presentation 10% (Term 2), lab work 15% (7.5% for each Term), Assignments/exam 30% (Mid-course and final exam periods). Exact values will be provided in the course handbook at the beginning of instruction.

Requested re-grading of assessments will be dealt with on an individual basis. Late submissions are typically penalised at a rate of 10% per day up to 5 days at which point a grade of zero will be assessed unless previous arrangements are made.

Information on any resources to support student learning that are supported by the academic unit responsible for the course.

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious, spiritual and cultural observances. UBC values academic honesty and students are expected to acknowledge the

ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available [here](#).