



COURSE INFORMATION SHEET

BCH 397 Advanced Biochemistry

Fall 2013

Course description:

This advanced course in Biochemistry involves detailed investigation of selected topics involving biological macromolecules and their chemistry. These topics include; current advances in cancer research, drug discovery, bacterial pathogenesis and cell biology. Research-style articles will be actively discussed, providing students with background information on these molecules, as well as the principles and most current techniques employed to study them.

Course objectives:

1. Students will learn about the multidisciplinary applications of Biochemistry.
2. Students will learn how to critically examine research-style articles.
3. Students will learn to translate these research-style articles to scientific presentations.
4. Students will develop and enhance public speaking skills.

Class schedules:

Time and venue to be determined.

Instructor: Jessmi Ling, PhD.

Office: A2158

Email: jling@ambrose.edu

Telephone: 1-403-410-2000 ext. 2919.

Course prerequisites: BCH 297 Introductory Biochemistry, CHE 251 Organic Chemistry I.

Required textbook:

Chemical Biology. 2009. Waldmann H. and Janning P. (Eds). Wiley-VCH, Weinheim. ISBN: 978-3-527-32330-2

Attendance:

Attendance is compulsory for each class. Allocated marks will not be awarded if a student is absent without notice and adequate reason. Extensions to deadlines for any assignment must first be requested by email. These time extensions are not guaranteed.

Class activity:

Class sessions will variably consist of two components. The first component covers background information and techniques, presented in lecture format or as reflective discussions. The second component will be presentations from students in PowerPoint format; two presentations per session. These presentations will focus on the principal techniques that were applied in a case study assigned from your course textbook. The presentations will also explain

how the applied technique was used to arrive at the conclusions drawn in the case study. It will further assess the validity of those conclusions.

Each student will do four presentations over the course of the term. These presentations will be staggered over the full term. Grading of presentations will be both peer and instructor based. Presentations will be 40 minutes in length. They will be cut-off promptly at the 40 minute time limit and graded based upon the materials presented to that point.

All 17 assigned chapters will have to be read, studied, and understood by all students participating in the course. The content of these chapters are assessed in the presentations. In addition each student will submit four written summary and critique of research papers on fields that are of interest to them, whose authors have used a principal technique or experimental approach described in the chapters. Deadlines for these written assignments vary with each student. Please refer to the assignment instruction document.

There will be no final exam and no midterms.

Topics schedule:

Date (week of...)	Topic
Sept 5	Course introduction - Course outline, expectations, approach of the course etc.
Sept 12	Chapter 1: Instructor-based Powerpoint presentation (Demonstration)
Sept 19	Chapter 2 and 3 (two student presentations, A & B)
Sept 26	Spiritual Emphasis Day (No daytime classes)
Oct 3	Chapters 4 and 5, student presentations (C & D)
Oct 10	No class
Oct 17	Chapters 6 and 7, student presentations (A & B)
Oct 24	Chapters 8 and 9, student presentations (C & D)
Oct 31	No class
Nov 7	Chapters 10 and 11, student presentations (A & B)
Nov 14	Chapter 12 and 13, student presentation, (C & D)
Nov 21	No class
Nov 28	Chapter 14 and 15, student presentations (A & B)
Dec 5	Chapter 16 and 17, student presentations (C & D)

Dec 9-13	No class.
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Mark distribution:

Each student presentation is marked by fellow students (30%) and the instructor (70%). The breakdown of marks for each presentation is as follows:

Clarity	20
Depth of Understanding	20
Presentation Style and format	20
Background Research and Support	20
Critical review of the case study	10
Knowledge and ability to field questions	10

In addition, individual student participation as an audience member for each presentation carries 10 marks, to be assessed by the instructor and is based upon; the quality of questions asked of the presenter, respectful deportment, and evidence of comprehension/attentiveness.

The total marks for each presentation will be scaled to 100, which translate to 400 for 4 presentations. In addition, 12 student participation evaluations (10 marks each) will give an additional total 120 marks. A total mark for all student presentations and participation is 520.

Each written assignment is worth 50 marks, based on clarity of the summary (10), student's depth of understanding (15), constructive criticism (15) and suggestions for additional use or modification to the approach (10). The four assignments will contribute a total of 200 marks.

Tally of marks from presentations and written assignments will be adjusted to percentages and grades assigned according to the grading scheme below.

Grading scheme:

A+	93 – 100%	C+	66 – 69%
A	86 – 92%	C	62 – 65%
A–	82 – 85%	C–	58 – 61%
B+	78 – 81%	D+	54 – 57%
B	74 – 77%	D	50 – 53%
B–	70 – 73%	F	Below 50%

Important dates:

Residence opens: Sunday, September 1.

Fees due: Wednesday, September 4.

Convocation Chapel: Thursday, September 5.

Last day to enter course without permission; last day to withdraw from a course, change to audit, and receive tuition refund: Sunday, September 15.

Spiritual Emphasis Day: Wednesday and Thursday, September 25 – 26.

Graduation application deadline: Friday, October 18

Last day to request revised time for a final exam: Monday, October 28.

Last day to withdraw from courses without academic penalty: Thursday, November 12.

Last day to apply for time extension for coursework: Monday, November 25.

Last day of classes: Monday, December 9.

Residence closes: Friday, December 20.

Please note that final grades will be available on your student portal. Printed grade sheets are no longer mailed out.

Other Syllabus Features:

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Student Handbook and Academic Calendar. Personal information, that is information about an individual that may be used to identify that individual, may be collected as a requirement as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a "Course Extension" from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the appropriate deadline (as listed in the Academic Calendar <http://www.ambrose.edu/publications/academiccalendar>). Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar and the Student Handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean.

Students are advised to retain this syllabus for their records.

Course changes, including adding or dropping a course, may be made during the Registration Revision period, as outlined in the Calendar of Events. All course changes must be recorded on a Registration form, available from the Office of the Registrar. Due to circumstances such as class size, prerequisites or academic policy, the submission of a Registration form does not guarantee that a course will be added or removed from a student's registration. Students may change the designation of any class from credit to audit up to the date specified in the Calendar of Events, although students are not entitled to a tuition adjustment or refund after the Registration Revision period.

Withdrawal from courses after the Registration Revision period will not be eligible for tuition refund. Students intending to withdraw from some or all of their courses must submit a completed Registration form to the Registrar's office. The dates by which students may voluntarily withdraw from a course without penalty are listed in the Calendar of Events. A grade of 'W' will be recorded on the student's transcript for any withdrawals from courses made after the end of the Registration Revision period and before the Withdrawal Deadline (also listed in the Calendar of Events). 'W' grades are not included in grade point average calculations. A limit on the number of courses from which Academic a student is permitted to withdraw may be imposed. Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Office of the

Registrar in writing within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal to review final grades. If the appeal is sustained, the fee will be refunded.

Academic dishonesty is taken seriously at Ambrose University College as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to give credit to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from Ambrose. Students are expected to be familiar with the policy statements in the current academic calendar and the student handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.