



IMMUNOLOGY

BIOL 462/2, BIOL 633/2

Fall 2014-2015

Department of Biology



1. General Information

Credits: 3

Prerequisites: BIOL 266, BIOL 364 and BIOL 367

Location: LOY CC-106 *Day:* Tuesday *Time:* 18:00-20:15

Professor: Dr. Sonish Azam

Office: SP 375.23

Tel: 514-848-2424 ex 3488

Email: sonish.azam@concordia.ca (Please mention BIOL 462 in subject)

Office hours: after the class or by appointment

2. Course Description

The role of the immune system in maintenance of body homeostasis will be presented with particular reference to cells and tissues of the immune system, their organization as well as their structural and functional relationships.

Topics include: maturation and differentiation of B and T lymphocytes; structure and properties of antibodies; immune responses to antigens; genetic aspects of antibody synthesis; immunological considerations in AIDS, cancer, and autoimmune diseases. Lectures and seminars.

Topics

LECTURE	DAY	TOPIC
1	Sep 2	Overview of Immune System
2	Sep 9	Molecular and Cellular mechanisms of Innate Immunity
3	Sep 16	Major pathways of Complement activation
4	Sep 23	Receptors and Signaling in T and B cells
5	Sep 30	Immunoglobulin Gene Structure Puzzle
Oct 7		MIDTERM (1 h)
6	Oct 7	Major Histocompatibility Complex
7	Oct 14	Development of T Cells
8	Oct 21	Development of B Cells
Oct 28		Presentation Session- I
Nov 4		Presentations Session - II
9	Nov 11	Effector Responses: Cell and Antibody mediated Immunity
10	Nov 18	Allergy, Autoimmunity and Transplantation
11	Nov 25	Immunodeficiency Disorders and Cancer
Dec 2		Review class

An in class activity will be adjusted somewhere during one of the lectures

3. Objectives

1. Learn structural features and functions of the components of immune system
2. Learn the immunology-related vocabulary
3. Learn to apply immunological information to clinical challenges
4. Become comfortable discussing immunological ideas with audiences

4. Course Material

PowerPoint slides from the lectures, reading lists and questions for the various topics will be posted on course Moodle in order to improve your understanding

of the material. For certain topics, multiple readings are provided to give different coverage of more complex topics.

Required: Kuby Immunology 7th edition by OWEN

Additional reading will be posted on moodle website and announced in class
Internet address: My concordia portal - moodle website

5. Grading:

The majority of marks in this course will be based on the final examination, midterm, in-class activity and presentation. **Final grades** will be determined from the cumulative exam score determined from the following weightings;

Evaluation:

Midterm	20%
In-class Activity	10%
Presentation	15%
Final exam	55%

Final exam will be held in the time slot scheduled by the University. Students with a valid reason for rescheduling the final exam must go through the examination office.

Exams will cover material presented in lectures and from the assigned readings. Questions will be both in the form of "multiple-choice" and "short answer" types. Bring your pencils, markers, pens and erasers. Use of electronic devices of any kind (calculators, electronic dictionaries, and especially cell phones) is not allowed.

Final exam will cover the entire course (cumulative)

There are no make-up exams or quizzes. If you miss the midterm exam on account of a genuine reason for which you can provide a medical note, then the final exam will count for more.

The following scheme will be used to translate the numbers to letter grades;

Grade	Percentage
A+	90-100 %
A	85-90%
A-	80-85%
B+	77-80%
B	73-77%
B-	70-73%
C+	67-70%
C	63-67%
C-	60-63%
D+	57-60%
D	53-57%
D-	50-53%
F	40-50%
R	0-40%

6. Rights and Responsibilities:

Plagiarism: The most common offense under the Academic Code of Conduct is plagiarism, which the Code defines as “the presentation of the work of another person as one’s own or without proper acknowledgement.”

This could be material copied word for word from books, journals, Internet sites, professor’s course notes, etc. It could be material that is paraphrased but closely resembles the original source. It could be the work of a fellow student, for example, an answer on a quiz, data for a lab report, a paper or assignment completed by another student. It might be a paper purchased through one of the many available sources. Plagiarism does not refer to words alone it can also refer to copying images, graphs, tables, and ideas. “Presentation” is not limited to written work. It also includes oral presentations, computer assignments and artistic works. Finally, if you translate the work of another person into French or English and do not cite the source, this is also plagiarism.

In Simple Words:

Do not copy, paraphrase or translate anything from anywhere without quoting where you obtained it from!

(Source: The Academic Integrity Website:

<http://provost.concordia.ca/academicintegrity/plagiarism/>)

Academic Code of Conduct:

I. Preamble

Introduction

The integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. As such, all students are expected to be honest in all of their academic endeavors and relationships with the University.

List of Services for the students

- Name of the Department's Academic Advisor
- Concordia Counseling and Development offers career services, psychological services, student learning services, etc. <http://cdev.concordia.ca/>
- The Concordia Library Citation and Style Guides:
<http://library.concordia.ca/help/howto/citations.html>
- Advocacy and Support Services
<http://supportservices.concordia.ca/>
- Student Transition Centre
<http://stc.concordia.ca/>
- New Student Program
<http://newstudent.concordia.ca/>
- Access Centre for Students with Disabilities
<http://supportservices.concordia.ca/disabilities/>
- Student Success Centre
<http://studentsuccess.concordia.ca/>
- The Academic Integrity Website
<http://provost.concordia.ca/academicintegrity/>
- Financial Aid & Awards
<http://web2.concordia.ca/financialaid/>
- Health Services
<http://www-health.concordia.ca/>

