

BIOCHEMISTRY 300B
Course Outline: Summer 2017

Place: David Turpin A 102

Time: Mondays: 8:30 am – 10:20 am
Tuesdays, Fridays: 10:30 am - 12:20 pm.

Textbook: Biochemistry by Berg, Tymoczko, and Stryer, 7th edition

Web site: Course Spaces

Instructors: **Dr. Juan Ausió (Jul 17 – Aug 21)**
(Course coordinator) Office: Petch 260
Email: jausio@uvic.ca

Office hours: 9:00 am-5:00 pm *

Dr. Julian Lum (Jul 7 – 14)
Email: JLum@bccancer.bc.ca

* No office hours will be offered the day before an exam.

Lecture Content:

Each lecture will conform approximately to the organization used in the text. If additional material and examples are used, they will be posted on CourseSpaces. The lecture schedule given below is a close approximation of what will be followed. Readings from the text for each lecture have been assigned and must be read *prior* to the lecture. Information designed to guide students with the readings is available on CourseSpaces.

Course Organization:

Three examinations will be held:

The first exam will cover material taught from July 7 to July 17 inclusive, and will be held during class time on July 21. The second exam will cover material taught from July 18 to August 1 inclusive, and will be held during class time on August 4. The third exam will be held August 21 and will encompass what has been taught during the last section. **The final grade will be obtained from the average of the grades obtained in each of these parts.**

Conversion of Marks to Final Letter Grades: Total marks from exams and assignments will be calculated, weighted and converted to a percentage and letter grade as follows:

| | | | | | | | |
|----------------------|---------|----------------------|---------|----------------------|---------|-------------|------|
| A⁺ | 90 -100 | B⁺ | 77 - 79 | C⁺ | 65 - 69 | F | < 50 |
| A | 85 - 89 | B | 73 - 76 | C | 60 - 64 | N ** | < 50 |
| A⁻ | 80 - 84 | B⁻ | 70 - 72 | D | 50 - 59 | | |

**** N grades**

Only students who have completed the three exams will be considered to have completed the course and will be assigned a final grade.

Failure to complete one or more of these exams will result in a grade of “N” regardless of the cumulative percentage on the other exams of the course. An N is a failing grade, and it factors into a student’s GPA as 0. The maximum percentage that can accompany an N on a student’s transcript is 49.

| Week | Instructor | Date | Topic | chapter |
|------|------------|--------|--|-------------|
| 1 | Lum | Jul. 7 | Bioenergetics/Glycolysis | 15 |
| 2 | Lum | 10 | Gluconeogenesis/Citric acid cycle | 16 |
| 2 | Lum | 11 | Citric acid cycle/Oxidative phosphorylation | 17/18 |
| 2 | Lum | 14 | Lipid catabolism | 22 |
| 3 | Ausió | 17 | Amino acid catabolism I | 23/4 |
| 3 | Ausió | 18 | DNA structure | 4 (110-122) |
| 3 | Ausió | 21 | EXAM I | |
| 4 | Ausió | 24 | Recognition of DNA by proteins/topological properties of DNA | handout |
| 4 | Ausió | 25 | Topological properties of DNA (cont.)/DNA replication | 28 |
| 4 | Ausió | 28 | DNA replication in vivo (cont.)/ Fidelity of DNA replication | 28 |
| 5 | Ausió | 31 | Fidelity of DNA replication (cont.) | 28 |
| 5 | Ausió | Aug.1 | RNA Synthesis | 29 |
| 5 | Ausió | 4 | EXAM II | |
| 6 | Ausió | 7 | RNA processing | 29 |
| 6 | Ausió | 8 | Protein synthesis | 30 |
| 6 | Ausió | 11 | Protein synthesis | 30 |
| 7 | Ausió | 14 | Regulation of gene expression | 31 |
| 7 | Ausió | 15 | Regulation of gene expression in eukaryotes | 32 |
| 7 | Ausió | 18 | review | |
| 8 | Ausió | 21 | Third Exam | |

DEPARTMENT INFORMATION AND POLICIES

1. The Department of Biochemistry and Microbiology upholds and enforces the University's policies on academic integrity. These policies are described in the current University Calendar. All students are advised to read this section.
2. Cell phones, computers, and other electronic devices must be turned off at all times unless being used for a purpose relevant to the class. Students having a cell phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.
3. Any recordings of lectures may only be performed with written permission of the instructor, and are for personal use only. The instructor retains copyright to such recordings and all lecture materials provided for the class (electronic and otherwise); these materials must not be shared or reposted on the Internet.
4. Course materials, such as notes, problem sheets, quizzes, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.
5. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm exam. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking a deferred examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams for spring term courses will be arranged through Undergraduate Records and must be

written before the end of the summer term as stipulated in the University Calendar.

6. Multiple choice scan sheets for machine scoring (bubble sheets) are considered the authentic exam answer paper and will be retained by the department for 1 year.
7. Professors may refuse to review/remark exams not written in indelible ink. In addition, requests for review/remark of a midterm exam must be made within one week of the exam being returned. Students are expected to promptly pick up midterm exams after marking has been completed, either in class or from the instructor.
8. Examination papers that have pages removed, or are mutilated will not be marked.
9. The instructor reserves the right to use plagiarism detection software or other platforms to assess the integrity of student work.”