

BSCI 330: Cell Biology and Physiology
Fall 2013

Lecture

Dr. I.Z. Ades

BPS 2248

Office Hours: Mon 10:00-11:00 BPS 2249; Fri 12:00-12:50 BPS 2249

izades@umd.edu

Laboratory

Dr. Hadiya Woodham

hwoodham@umd.edu

Course Website

Important course announcements, copies of lab exercises, review material, and previous exams will be posted for your use on ELMS at: <http://elms.umd.edu>

Textbook

Molecular Biology of the Cell, 5th Edition. B. Alberts et al, Garland Science, 2008.

Laboratory Manual

The laboratory manual is available online through the course's ELMS site. Be certain to download and print out the first laboratory exercise prior to the first lab meeting.

Prerequisites

The requirements are: Completions of BSCI105, CHEM131, and CHEM132 (with a grade of "C" or better in each case) or the equivalent.

Laboratory Activities

Policies applicable to the laboratory portion of BSCI330 are posted separately on the course's ELMS website. Please familiarize yourself with the details.

COURSE OUTLINE

| LECTURE TOPIC | TEXTBOOK SECTIONS |
|---|---|
| Overview of cells and viruses | |
| Properties of biomembranes and modulations of their compositions | Chapter 10 |
| The Nucleus: Composition and compaction of chromatin Structure and roles of the envelope | pp 202-218 p 705-707 |
| Passage through membranes: Channels, carriers, and pumps | Chapter 11 |
| Energetics and regulations of metabolic pathways Glucose utilization and production Mitochondrial pathways | pp 70-103 & 152-176 pp 813-840 & 855-870 |
| Endocytic pathways and vesicle targeting | Chapter 13 |
| Sorting of newly-synthesized proteins Co-translational and post-translational sorting Assemblies of mitochondria and of chloroplasts | Chapter 12 |
| Intracellular traffic and motility Elements of the cytoskeleton Microtubule-associated motors Actin-based movements | Chapter 16 |
| Regulation of cell proliferation | Sections from Chapters 15 & 20 to be specified, depending on time and coverage. |

COURSE POLICIES AND GRADING

Examinations

Three examinations worth a maximum of 300 points and a cumulative final examination worth 200 points are scheduled. Laboratory work will account for a maximum of 200 points. The exams will be based on lecture material and assigned text readings although lecture coverage will be more emphasized.

- Lecture Exam I: 100 points – Fri Oct 4.
- Lecture Exam II: 100 points – Fri Nov 1.
- Lecture Exam III: 100 points - Fri Nov 22.
- Final Exam: 200 points – 8:00-10:00 am on Thursday, Dec 19, in the regular lecture hall plus additional overflow rooms (to be posted on ELMS). The examination will cover material presented through the entire course.

The Final Exam is scheduled by the university, thus individual requests for changing the date of the exam will not be considered.

Final Grades

Lecture: 500 points

Laboratory: 200 points

Total = 700 points possible

Several considerations will be made in the assignment of the final course grades.

(1) On the basis of accumulated points: Except for cases listed in (2) below, students within the following ranges of accumulated points would be guaranteed to receive the indicated letter grade:

| | |
|----------------|----------------|
| A+ ≥ 665 pts | C+ = 540 - 549 |
| A = 635 - 664 | C = 485 - 539 |
| A- = 625 - 634 | C- = 465 - 484 |
| B+ = 610 - 624 | D = 390 - 464 |
| B = 560 - 609 | F < 390 |
| B- = 550 - 559 | |

(2) On the basis overall performances in the laboratory and lecture examinations:

- The laboratory is an integral part of the course. A student who misses three laboratory sessions for any reason (refer to the laboratory syllabus) would automatically fail the course regardless of performance on lecture examinations.
- A student who accumulates less than 285 points on the lecture examinations (including the course final) would not be able to receive a final grade higher than "D" regardless of performance in the laboratory portion of the course.

Missed Lecture Examinations

Refer to the Undergraduate Catalog for a complete description of the university's policy on make-up examinations. Examination dates apply to all students in the course and are considered to be Major Scheduled Grading Events. A student who misses a scheduled examination for a UM-recognized valid reason should request and will be given the opportunity to take a makeup examination covering the same material. Absences caused by recognized religious observances or participation in UM-sponsored activities at the request of university authorities may be excused if Ades is notified of the conflict ahead of time. Where the reason for the absence is known well in advance, for example, in the case of religious observance or participation in university activities, the student must inform Ades of the anticipated conflict by the end of the schedule-adjustment period.

To qualify for a makeup exam, a student must submit within three class periods of the date of the missed test a written statement outlining the reasons for missing the exam. The submission to Ades should include a filled request form (available on the course's ELMS site) along with any other supporting documents. **Requests made through email, unverifiable documentations, or supporting statements by relatives cannot be accepted, and a student presenting such would not qualify for a makeup and would receive zero for the missed work.** Make-up exams will be administered on Wed Dec 12 at 9:00 (location to be announced on ELMS). There will be no opportunity to reschedule a missed make-up exam, and only one missed regularly scheduled examination could be made up in the course.

Regrade Policy

Before contemplating submitting an exam for a regrade, you should carefully review the posted key. If you feel that on balance the exam paper has not been assessed correctly, then you should staple a neatly written or typed note to the exam justifying your request of a re-evaluation of the test and give the exam to Ades. Regrade requests must be submitted by the end of the week following the date of return of the exam to your lab section. Exams submitted after the deadline will not be considered. Ades will review the entire exam, and points may be added or subtracted if warranted as a result of that second full evaluation of the submission. The lecturer's judgment would be final.

Honor Code

The Honor Code states that all students of the university community have been equally entrusted by their peers to conduct themselves honestly on all academic assignments. The students of this college understand that having collective and individual responsibility for the ethical welfare of their peers exemplifies a commitment to the community. On your writing assignments, all outside resources or information should be clearly acknowledged. If there is any doubt or question regarding the use and documentation of outside sources for academic assignments, your GTA should be consulted. For all assignments, assume that the only person you may consult with is the instructor unless told otherwise. Violations of the Honor Code will be handled by the Honor Council. A suspicion of cheating on an exam will be treated seriously by referring the matter to the Council for review. In our view, the standard penalty for cheating in this course should be a grade of XF. For more information, please review the university policies on academic integrity at the following address:
<http://www.shc.umd.edu/SHC/Default.aspx>.

Academic Dishonesty

Any of the following acts, when committed by a student, shall constitute academic dishonesty:

- **Cheating:** Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise.
- **Fabrication:** Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.
- **Facilitating Academic Dishonesty:** Intentionally or knowingly helping or attempting to help another to violate any provision of this Code.
- **Plagiarism:** Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise.

Students with Disabilities

If you have been evaluated by Disability Support Services (DSS) and qualify for specific service, please inform Ades at the beginning of the semester. If you think that you may qualify for some accommodation but have not yet been evaluated, then please contact DSS (301/314-7682) to arrange for a consultation. Students who have not been evaluated by DSS will not be eligible for any alternative arrangement.

Examinations to be administered through DSS: The completed DSS test authorization form should be provided to Ades as early as convenient, but not later than four working days prior to a scheduled examination. The arrangement with DSS should be such that the examination would begin on the date and time specified for the rest of the class.

Use of Wireless Devices

Wireless phones ringing in class are an annoyance. Thus, phones and other devices that make noise should be silenced during lecture, lab, and exams. Camera phones and text messaging have the potential of being used inappropriately. Use of such devices is not permitted during exams.

COURSE EVALUATIONS

The university has instituted an online course evaluation system for student input and teaching assessments. The system will be accessible at: <https://www.courseevalum.umd.edu/>. It is important that we hear from you.

FINAL NOTE

The staff is dedicated to making this course an enjoyable worthwhile learning experience, and one of our primary aims is to provide students with a comfortable atmosphere that is conducive to learning. Don't hesitate to ask questions or come to us for help. We welcome your input.