

## Correlated Curriculum in Cell and Molecular Biology, Fall 2010

### CBIO 453/455

The class meets Monday - Friday (9-11AM). Most class meetings will be held in W428. All lectures and reviews will be held in this room. We will inform you later about rooms for discussions. Exams will be held in room W428.

Text: Alberts et al. Molecular Biology of the Cell, 5th edition (Garland Science, ISBN 9780815341055). This text is available in the University bookstore in Thwing Center.

Organization of the course. The class is composed of 8 units. The first 7 units are lectures that are held every day from 9-11 AM. The 8th unit is the Methods unit with sessions distributed throughout the course.

Students who wish to take half the course should register for CBIO 453 or 455 and only attend the appropriate sessions. The first 4 units comprise CBIO 455 (8/23/10 - 10/13/10). The next 3 units comprise CBIO 453 (from 10/14/10 to the end of the course). The final unit (Methods) is divided between 453 and 455. Students taking half the course should attend the Methods lectures during the weeks when their part of the course is in session.

<b>Course</b>	<b>Unit</b>	<b>Director</b>	<b>Room</b>	<b>Phone</b>	<b>E-Mail</b>
455	Proteins	Dr. Vivien Yee	RT500-9	1184	vcy2
455	DNA	Dr. Guangbin Luo	BRB 727	4922	gxm26
455	Gene Expression I	Dr. Hung-Ying Kao	RT400-9	1150	hxx43
455	Gene Expression II	Dr. Jo Ann Wise	W217	1876	jaw17
453	Membranes/Organelles	Dr. Martin Snider	W433	5572	mds5
453	Cytoskeleton, Cell Division, Cell Adhesion	Dr. Susann Brady-Kalnay	W214b	0330	smb4
453	Cell Cycle and Cell Signaling	Dr. George Dubyak	E520	5523	gxd3
453/455	Methods	Dr. David Samols	W426	3520	drs10

Lectures. The lectures form the core of the course. The goal is to provide students with a solid grounding in the fundamentals of cell and molecular biology. Information will be presented in a way that provides the students with a clear understanding of the information, the important experiments that have allowed the development of the field, as well as the major unanswered issues.

Methods Unit. The goal of this unit is to provide students with an understanding of the key methodological approaches that have led to the explosive development of cell and molecular biology over the past several decades. The topics of each Methods lecture are matched as closely as possible with the material being covered in regular lecture. Sessions covering molecular and cell biology methods are held at the beginning of the relevant part of the course.

Readings. Readings have been assigned in Alberts. There may be additional readings assigned as well. These will be distributed in class. *You should look at every assignment in Alberts before it is covered in class.*

Exams: There will be six exams. Most of the exams will be 5-10 short essay questions worth 10-20% each. Instructors will provide old exams or practice questions prior to the exam. Material from the Methods lectures may be covered as well.

Exams will be held in room W428 from 8:30 - 11:30. It is our intention to have exams that require 1.5 - 2 h to complete. At the same time, we understand that English is a second language for some students. Consequently, the exam periods are longer to allow every student time to write an outstanding exam. You will have time to organize your thoughts and write clear, well-constructed answers.

Because of the large number of instructors in this course, each exam will be written by a different set of instructors. In order to decrease the challenge of taking exams written by different instructors, we will

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supply you with sample questions before each exam. If the instructors have not supplied these questions by 3 or 4 days before the exam, please ask for them.

In previous years, there have been concerns about the honesty of a few students in the class. As a consequence, you may bring only pens, pencils, erasers and (when indicated by the instructors) a calculator to the exams. Books, PDAs, cell phones, and notes should not be brought to the exam or must remain out of sight.

Each exam will be preceded by a review session. The purpose of this review session is to allow questions and discussion about all the material covered on the exam. These sessions are for your benefit. To use this time most effectively, *please come to these sessions prepared to ask questions and to identify areas you would like to have discussed.*

Discussion Sessions. To encourage students to begin reading and thinking about the scientific literature, the course has discussion sessions. One or more papers that are relevant to the lecture material will be covered in each discussion. The papers will be distributed one week prior to the discussion, so you will have enough time to prepare for the discussion. Please read the paper(s) carefully before the discussion.

The class will be divided into groups, with 10-15 students per group. These small groups will encourage student participation. The group assignments and locations will be announced before the first discussion.

Everyone-students and instructors-is interested in your opinion about the papers. We understand that everyone's background is different, so students will come to class with different levels of understanding. Nevertheless every student should be prepared to participate in class discussion, even if that means explaining what s/he did and didn't understand. *To encourage participation, instructors will call on students during the discussions.* Student performance will not be graded. However, attendance is mandatory and attendance will be taken. Students are allowed only 1 unexcused absence during the semester.

How to do well in this course. Because this is an intensive course, the exams are close together. There is an exam for every 10 sessions (every 2.5 weeks). Consequently, you must keep up with the material being covered in lecture. If you are having difficulty with some of the material, get help as soon as possible. The instructors will be happy to answer questions. We can also arrange for student tutors. However, you need to take the initiative to get help.

Class E-mail. We will send reminders and other info to the class via email. Most of this info will be distributed in other ways as well. E-mail will be sent to your CWRU account. We cannot send mail to other addresses.

Course Web Site. We will post as many course documents as possible on the class web site. These will include lecture presentations, papers for class discussion, handouts, and practice exam questions.

You can log into the web site at [blackboard.cwru.edu](http://blackboard.cwru.edu) using your Case username (e.g. abc23) and password. Once you have logged in, go to the site for CBIO 453 or CBIO 455. The web site provided by Blackboard is complex and has many areas. We won't use most of these areas. All information will be posted in the Course Documents area as Acrobat (PDF) or Powerpoint (ppt) files. If your web browser is appropriately configured, these can be viewed directly in the browser. Otherwise, you will need to download the documents to your computer and read them using Acrobat Reader.

Course Evaluations. In order to teach this class at the highest possible level, we ask students to evaluate each section of the course on the course web site. We will ask you to give us your opinions of the unit that has just ended by completing a survey in the class web site. We will not be able to see your responses, but we will be able to tell if you have completed the survey. This is a required course activity. Last year, there were some problems with the survey system in Blackboard. If you try to complete a survey and receive an error message, complete as many question as you can.

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**Instructors**

<b>Instructor</b>	<b>Room</b>	<b>Phone</b>	<b>Email</b>
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