

Fundamental Concepts of Modern Biology

BILD 10

Fall 2009

Instructor: Cindy Gustafson-Brown (Dr. Gus)
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Phone: 534-4242
email: cgb@ucsd.edu (Put **BILD 10** in the subject line!)
office hours: Thurs 3:30-4:30 PM or by appointment

Questions about class material are best presented during office hours, not by email.
I cannot guarantee an answer to your email, unless it is an urgent issue.

Administrative questions: Biology Undergraduate Student Affairs Office
first floor of Pacific Hall

TA office hours

Time	TA	Location
Mon, 3-4 PM	Ricky Hu	The Grove
Mon, 3-4 PM	Jocelyn Hu	Tapioca Express
Tues, 10-11 AM	Nicole Constantz	Sungod Lounge (and by appt)
Tues, 11-12 PM	Paiyuam (Pi) Asnaashari	Café Roma
Wed, 4-5 PM	Brian Lew	Tapioca Express
Thurs, 3-4 PM	Victor Yoon	CLICS
Thurs, 4-5 PM	Tina Lu	Science and Engineering Library
Friday 2-3 PM	Linh Nguyen	AEP building (1 st floor)

You may attend the office hours of any TA.

Textbook: What is Life, by Jay Phelan (2010)
There will be copies on reserve at the Science and Engineering Library.

AS Lecture Notes: If there are AS Lecture Notes offered for this course, they will not be reviewed by the instructor. Use at your own risk.

Sections: There will be eight sections per week, reviewing the week's subject matter or discussing a paper. You may attend any or all sections as you choose each week. When there is a holiday, you are responsible to find another section to attend during the week. *There will be no sections or TA office hours until Mon, Sept 28.*

Section	Time	Location	TA	
A01	Mon 12-1 P	APM 2301	Ricky Hu	ryhu@ucsd.edu
A02	Mon 2-3 P	APM 2301	Paiyuam (Pi) Asnaashari	pasnaash@ucsd.edu
A03	Mon 4-5 P	APM 2301	Cancelled	
A04	Mon 5-6 P	APM 2301	Tina Lu	tlu826@gmail.com
A05	Wed 5-6 P	Center 207	Brian Lew	blew@ucsd.edu
A06	Wed 6-7 P	Center 207	Jocelyn Hu	j3hu@ucsd.edu
A07	Wed 7-8 P	Center 207	Nicole Constantz	nconstan@ucsd.edu
A08	Fri 3-4 P	Center 217B	Linh Nguyen	ltn010@ucsd.edu
A09	Fri 4-5 P	Center 217B	Victor Yoon	vsyoon@ucsd.edu

Films: There will be five required films. They are available for viewing online, streaming from the library. See the course web site for a link. You *must* access the films from a campus computer or use a proxy if you are off campus. If you are prompted for a username, then you are off campus and are not using a proxy. If you have problems click on the links for help.

The films will also be on reserve, available for viewing at the Film and Video Library in the basement of Geisel Library. However, do not assume you will view them just before an exam, because there is only one copy of each, and your classmates may have the same idea.

The Secret of Life (1993) part 3: Birth, Sex, and Death; part 6: Cell Wars
 This series reveals how scientists' ability to decipher and manipulate human genes will transform medicine and perhaps the human race. It chronicles the scientific findings in molecular biology through tales of discovery, personal case studies and engaging histories. Using three-dimensional animation and special photographic techniques, the series reveals an unseen world and showcases how DNA and proteins work.
These two episodes will be covered on midterm I.

Harvest of Fear (2001)
 Frontline and Nova explore the intensifying debate over genetically-modified (gm) food crops. Interviewing scientists, farmers, biotech and food industry representatives, government regulators, and critics of biotechnology, this two-hour report presents both sides of the debate, exploring the risks and benefits, the hopes and fears, of this new technology.
This 2 hour film will be covered on midterm II.

The Private Life of Plants (1995)
 part 2: Putting Down Roots, part 3: The Birds and the Bees
 David Attenborough explores the world of the plant kingdom through time-lapse photography in exotic world-wide locations.
These two episodes will be covered on the final exam.

Exams: The exams will be closed-notes/closed-book, primarily short answer, with a few true/false, multiple choice, and possibly short essay questions. You will be accountable for **all material covered in lecture, required textbook reading, assigned papers, handouts, and films**. The *recommended* textbook reading is not covered specifically on the exams, but is important to reinforce the lecture material. Your handwriting must be legible; we will disregard answers which cannot be deciphered. The final exam will be comprehensive, with emphasis on the last third of the course.

The TA's will be conducting a review session before each exam.

BRING STUDENT ID. It will be checked at the exam.

Missed exams: If you must miss an exam, you will be required to provide official documentation of an unavoidable emergency (e.g. serious illness, etc.). Without such documentation there will not be a make-up test, and you will receive a failing grade for that exam. Do not ask to reschedule an exam for any reason other than a *dire emergency*. In such a case an oral exam will be offered.

Regrades: Only exams written in non-erasable pen will be considered for a regrade, and white-out may not be present on such exams. If an error has been made in the grading of your midterm, you may submit it to Dr. Gus within *three days* of distribution for a regrade. Do not go to a TA for a regrade, although you may want to have one of them explain the answer to you before you come to me. Your midterm or final exam must be submitted with a *written* description of the grading error. I will not entertain discussions of such appeals before they are made in writing. I will consider *no more than three* "potential" errors per exam. If I think the TA was too generous grading it, I reserve the right to lower your score. Finally, it is critical that you *read the key* before submitting your regrade. It will be posted on the web site when the graded exams are distributed.

Course grade: This course will be graded on a curve. The class mean will be at the B-/C+ boundary. Each midterm: 25% Final exam: 50%

Cheating: Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Cheating will not be tolerated, and I will fail any student caught engaging in academic dishonesty. All exams will be closed-book and closed-notes, so all personal materials must be stowed under your seat. Only exams written in non-erasable pen will be considered for regrades. Many of the exams will be photocopied for comparison with submitted regrades. Because all three exams are required for satisfactory completion of this course, any student caught cheating on an exam will receive a failing grade for the course and will likely be suspended from UCSD.

BILD 10 Web site

<http://www.biology.ucsd.edu/classes/bild10.FA09>

(The “FA” must be in capital letters.)

The username is **bild10fa09** and the password is **Zebra**.

On the web site you will find announcements, photos of TA’s, information on sections/reviews/office hours, supplemental reading, information on films, handouts, study aids, PowerPoint slides from lectures, useful links, and more!

If you have problems accessing the web site, you may have typed the URL incorrectly. Instead, click on the link from the biology department page for students.

Be sure that you type the username and password exactly as they are presented above.

If it still does not work, try using different web browsers.

Also you may set up VPN, which is a free download from www-no.ucsd.edu/documentation/vpn. By running this application (vpn) it makes your computer look like it is on campus, which will put you into the UCSD only sites. The instructions on the download page are very good as to how to load and use vpn.

Alternatively, you may also try contacting biology computer services for advice at help@biology.ucsd.edu.

If nothing else works, then use a UCSD computer.

Tentative Class Schedule

Date	Session	Topic	Required reading*	Recommended*
Sept 24	1	Introduction; scientific method	1.1-1.16	
Sept 29	2	Sci method; Biological molecules	2.17, 2.19, 2.20	
Oct 1	3	Biological molecules; Cells		2.1-2.21
Oct 6	4	Cell structure and function	3.1-3.5	3.8-3.11
Oct 8	5	Cell structure and function		3.13-3.21
Oct 13	6	Energy	4.4-4.6, 4.12	
Oct 15	7	Energy		4.13-4.15
Oct 20	8	Midterm I		
Oct 22	9	DNA	5.1-5.3, 5.5	
Oct 27	10	DNA		5.6, 5.8
Oct 29	11	Biotechnology	5.11-5.13, 5.19	
Nov 3	12	Chromosomes and cell division	6.1-6.7	6.8-6.9
Nov 4	13	Meiosis and fertilization	6.10, 6.15	
Nov 10	14	Genetics	7.1-7.5	
Nov 12	15	Genetics; Diversity of life	10.4	7.6-7.8
Nov 17	16	Midterm II		
Nov 19	17	Diversity of life; Microbes	10.14-10.17, 13.1-13.3	
Nov 24	18	Microbes; Fungi	13.9, 13.12-13.13, 13.15, 12.13	
Nov 26	--	HOLIDAY		
Dec 1	19	Plants	12.1, 12.5, 12.8-12.9	12.2-12.4
Dec 3	20	Animals	11.1-11.2, 11.4, 11.12	11.7-11.9, 11.13- 11.16, 11.18-11.20
Dec 11		Final Exam (7-10 PM)		

* Readings in *What is Life*, by Jay Phelan, 2010

Additional articles may be posted on the course web site during the quarter.

Adding and dropping the class:

This class is still open.

You may add the class on a first come, first served basis via WebReg during the first two full weeks of the quarter (Sept 24-Oct 9).

If you have any problems, contact Bio Student Affairs, 534-0557.

Last day to add is Friday, Oct 9.

Last day to drop without a "W" is Oct 23.

Last day to drop with a "W" is Nov 30.

Tips for success in BILD 10

Come to class and sit in the front.

Review your notes within 24 hours of the lecture.

Even more effective: rewrite (outline) your notes within 24 hour of the lecture.

Review the PowerPoint slides in conjunction with your lecture notes.

Review vocabulary. Practice writing the definitions. Say the unfamiliar words out loud until they come naturally.

Do the reading. If you bump into material that is too technically challenging, *don't get bogged down*. Skip it (temporarily). Return to the most difficult material later. Write notes in your book.

Outline the important points as you read. This will help you remember the flow of information and contextualize the details.

Study a little bit every day, or a few times per week. Repetition over time is the key to retaining information. Your goal is to establish new neural pathways in your memory and fire them often! Cramming does not accomplish this.

Study with other students, and choose those who are serious about academics.

Use the study aids in your book and Prep U.

Go to your discussion section. The material discussed will be on the exams.

Go to the office hours of the TA and the instructor. This will encourage you to review the material, in order to have questions to discuss.

Go to the review sessions.

Prioritize your studying if you run out of time:

1. Lecture notes
2. Other materials

If you apply these principals, it is nearly impossible to do poorly in this course.

If you are having academic difficulty, OASIS can help. They provide tutoring, as well as classes in study skills and time management. <http://oasis.ucsd.edu/>

If you are having personal difficulties, do not hesitate to seek help at Psychological and Counseling Services (which is free to students). They can help you get over many types of hurdles. psychservices.ucsd.edu/resources_students_web/resources_students.html

Their self-help library covers many relevant topics, and can be accessed at psychservices.ucsd.edu/self_help_library_web/self_help_library_home.html