BILD 1: The Cell (4 units) Christine Shulse Summer Session I, 2011 MTuWTh 8:00-9:20a Solis Hall, Room 104

## **COURSE SYLLABUS**

# Why should you take this course?

In this course, you will gain a basic understanding of the fundamental processes carried out by ALL cells – including those that make up your own body. This understanding is required to pursue a career in medicine, academic bioscience research, and the biotechnology industry, and will inform many of the decisions you vote on as a conscientious citizen (e.g. stem cell research, use of genetically modified organisms, etc.). After this class, you will be prepared to explore biological concepts in more depth, in courses such as Biochemistry, Cell Biology, Genetics, and Molecular Biology.

## LECTURE SCHEDULE

Rate/schedule of topics covered may change but exam dates will not.

		ı y c	READING (BIOLOGY, 8TH
#	DATE	TOPIC	ED.)*
1	Mon. 6/27	Themes in Biology	
2	Tues. 6/28	Building Blocks of Life	Ch. 2 pp. 32-37
3	Wed. 6/29	Carbon	Ch. 4 pp. 60-63, skim pp. 64-65
4	Thurs. 6/30	Macromolecules	Ch. 5 pp. 68-69
	Mon. 7/4	NO CLASS - HOLIDAY	
5	Tues. 7/5	Structure of the Cell	Ch. 6 pp. 94-97
6	Wed. 7/6	Membranes	Ch. 7 pp. 125-128
		EXAM I (short-answer & multiple	
	<b>Thurs.</b> 7/7	choice)	<b>Lectures 1-6; Chapters 2-7</b>
7	Mon. 7/11	Metabolism	Ch. 8 pp. 142-145
8	Tues. 7/12	Cellular Respiration	Ch. 9 pp. 162-166
9	Wed. 7/13	Photosynthesis	Ch. 10 pp. 185-188
10	Thurs. 7/14	The Cell Cycle	Ch. 12 pp. 228-230
11	Mon. 7/18	Meiosis	Ch. 13 pp. 248-249
		<b>EXAM II (short-answer &amp; multiple</b>	Lectures 1-11; Chapters 2-10,
	Tues. 7/19	choice)	12-13
12	Wed. 7/20	Medelian Genetics	Ch. 14 pp. 262-269
13	Thurs. 7/21	Chromosomes in Inheritance	Ch. 15 pp. 286-289
14	Mon. 7/25	Inheritance	Ch. 16 pp. 305-310
15	Tues. 7/26	Transcription & Translation	Ch. 17 pp. 325-331
16	Wed. 7/27	Regulation of Gene Expression	Ch. 18 pp. 351-356
17	Thurs. 7/28	Review Session	
	Saturday 7/30	FINAL EXAM 8:00-10:50 AM (short-answer & multiple choice)	Comprehensive

\* This material will be covered in the daily reading quizzes. Pages to "skim" will NOT be on the quizzes, but looking at that material before class will help you get the most out of lecture that day.

COURSE WEBSITE TEXTBOOK

www.biology.ucsd.edu/classes/bild1.SU1.11/index.shtml *Biology*, 8<sup>th</sup> Edition, Campbell and Reece

## **iCLICKERS**

iClickers will be used in this course to check both to check for understanding and facilitate peer instruction and will be worth 15% of your total grade broken down as follows:

**5%** - To check for understanding, I will administer daily reading quizzes. *Correct answers* will contribute to 25 pts out of 500 total pts in the course. I will drop the lowest four quizzes.

**10%** - Your clicker *participation* (answers do not have to be correct) during the rest of the class will contribute to 50 pts out of 500 total pts in the course. To get full credit you need to participate (=click) at least once in 80% of the lectures.

### **SECTIONS**

Sign up for a discussion section at <u>sections.ucsd.edu</u>. I will not be able to raise the enrollment limit for any section - these are set to ensure an appropriate student/TA ratio.

#### **EXAMS**

There will be three exams (two regular exams and one final exam). All exams are cumulative, since what you learn later in the course builds on what you learn at the beginning (and what you learn in subsequent courses will build on the knowledge you acquired in this course). Bring your ID and at least two pens to the exams. All exams will count towards your final grade. Make-up exams will be oral exams, and you must contact me within two days of the original exam date to schedule the make-up exam.

### EXAM REGRADE POLICY

Only exams taken in pen, with no whiteout or correction tape will be regraded. Please submit a cover letter indicating which question has an issue and describe your dispute. Provide your full name and email address in the cover letter. The entire exam will be regraded. To prevent cheating a subset of the exams are photocopied before they are returned.

## **OFFICE HOURS**

Tuesdays, 1:00 – 2:00 PM, Hubbs Hall 4130 (drop-in)

Wednesdays, 10:00-11:00 AM, HSS 1145D (drop-in), or by appointment

Office phone number: 858-534-6649 (I do not have voicemail)

Email: cshulse@ucsd.edu

## **COURSE ETIQUETTE**

Please turn off all cell phones, as texting in class is disruptive to your learning process and that of those around you.

ACADEMIC INTEGRITY (Adapted from the Academic Integrity Office)
To prevent cheating I require students to bring a photo ID to all examinations. All exams will be closed book (no notes). All suspicions of academic misconduct will be reported to the Academic Integrity Office according to university policy. The Policy on Integrity of Scholarship (academicintegrity.ucsd.edu) and this syllabus list some of the standards by which you are expected to complete your academic work, but your good ethical judgment (or asking me for advice) is also expected, as we cannot list every behavior that is unethical or not in the spirit of academic integrity.

Those students found to have committed academic misconduct will face administrative sanctions imposed by their college Dean of Student Affairs and academic sanctions imposed by me. The standard administrative sanctions include: the creation of a disciplinary record (which will be checked by graduate and professional schools); disciplinary probation; and attendance at an Academic Integrity Seminar (at a cost of \$75). Students can also face suspension and dismissal from the University; those sanctions are not at my discretion. Academic sanctions can range from an F on the assignment to an F in the class. The appropriate sanctions are determined by the egregiousness of the Policy violation. Students who assist in or are complicit with cheating could also be in violation of the Policy. Thus, students who become aware of their peers either facilitating academic misconduct or committing it should report their suspicions to me for investigation.

## SPECIAL ACCOMODATIONS

Students requesting accommodations and services due to a disability for this course need to provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), prior to eligibility for requests. Receipt of AFAs in advance is necessary for appropriate planning for the provision of reasonable accommodations. OSD Academic Liaisons also need to receive current AFAs. For more information, contact the OSD at (858) 534.4382 (V); (858) 534-9709 (TTY); osd@ucsd.edu, or <a href="http://osd.ucsd.edu">http://osd.ucsd.edu</a>.