Syllabus – BILD1 Winter Quarter 2010

Welcome to BILD1! The goal of this course is for you to gain a basic understanding of biology on a molecular level. We will discuss a wide range of topics including cellular metabolism, DNA replication and cell division. Most importantly, I hope this class will give you a solid foundation for your future studies. While we have to cover a lot of material this quarter, I hope to minimize the details you are required to know so that you can focus more on understanding the mechanism of a process and how each specific process affects the cell as a whole.

My name is Brian Sato and I am a Faculty Fellow. I earned my Ph.D. from my thesis work in the Hampton lab studying protein quality control in the Endoplasmic Reticulum. Currently, I'm studying mRNA localization in the Wilhelm lab. Feel free to email me **anytime** with questions at **bsato@ucsd.edu**.

Office Hours – 3124B Pacific Hall
Tuesday 10:00-11:00 am
Thursday 3:00-4:00 pm

If you cannot make these office hours, **please email me** and we will set up another time to meet.

Website
http://www.biology.ucsd.edu/classes/bild1.WI10/
Login: bild1wi10 pw: Tomato41 (case specific)

Please check the website often as I will use it to post class news, TA email addresses/sections/office hours, lecture slides, problem sets, and other kinds of biology goodness.

Requirements
Midterm #1 25% - Tuesday, January 26th, 8:00-9:20am (location TBA)
Midterm #2 25% - Tuesday, February 16th, 8:00-9:20am (location TBA)
Final 50% - Thursday, March 18th, 8:00-11:00am, will be cumulative (location TBA)

Exams must be taken at the indicated times. If an emergency (a real emergency!) arises, you must let me know as early as possible before the actual exam. Please check your finals schedule now, as having to study for too many finals at once is not an emergency. Also, students with learning disabilities recognized by the university, please let me know in advance so I can set up whatever you need for exams.

Lecture
Lecture is twice a week, Tuesdays and Thursdays from 8:00-9:20am. All the information required for exams will be from lecture. Please **DO NOT** ask if something will be on the test. If it's in the lecture, it could be on the test.

Discussion
Attendance at discussion sections is highly encouraged although not mandatory. Sections will be an excellent place to review the week's material. Please sign up for sections in the lobby of Pacific Hall during the first week of class. Discussion sections will begin on **Monday January 11th**.

Problem Sets
Each week, problem sets will be posted by Friday evening. They are not required and will not be turned in for a grade, but the questions will be representative of what you will see on the exams. Answers will probably not be posted (to encourage people to attempt the problems rather than memorize the answers), but you can ask the TAs or me for help anytime on specific problems.

The Book
Biology (8th edition) by Campbell et.al. Readings will be provided to supplement each lecture, but reading the textbook will not be required. I have copies of the book placed on hold in the Science and Engineering library.

Tips for Success
1. Attend lecture
2. Do the problem sets (as they are released) – get help for questions you do not understand
3. Rewrite your lecture notes
4. ASK QUESTIONS – in class, after class, through email, in section, in office hours, etc….
5. Look over readings

Academic Honesty
All students are expected to follow UCSD's policy of academic integrity (for more info go to http://www-senate.ucsd.edu/manual/appendices/app2.htm). While it is acceptable and even encouraged for you to study with classmates, all exams are to be completed individually and without the use of any prohibited aids. Failure to comply with this policy will result in disciplinary action.

Class Schedule

01-05 (Tu)	Introduction, Chemical bonds
01-07 (Th)	Small Molecules
01-12 (Tu)	Macromolecules
01-14 (Th)	Metabolism
01-19 (Tu)	Cellular Respiration
01-21 (Th)	Photosynthesis
01-26 (Tu)	**Midterm** (in class)
01-28 (Th)	Mendelian genetics
02-02 (Tu)	Mendel on the cellular level
02-04 (Th)	DNA, DNA replication
02-09 (Tu)	Transcription, regulation of gene expression
02-11 (Th)	Translation
02-16 (Tu)	**Midterm** (in class)
02-18 (Th)	Viruses
02-23 (Tu)	Membrane structure/function
02-25 (Th)	The Cell: What's Inside? Part 1
03-02 (Tu)	The Cell: What's Inside? Part 2
03-04 (Th)	Cell signaling
03-09 (Tu)	Cell cycle
03-11 (Th)	Stem cells
03-18 (Th)	**Final** (8:00am-11:00am)