



**INTRODUCTION TO BIOLOGY
BIOLOGY 20
TICKET #: 22120, 22125 and 22130
Syllabus for FALL 2009**



IMPORTANT INFORMATION

Instructor: Steve Teh
Phone: (949) 582 - 4741
Email: steh@saddleback.edu

Office: SM 254
Office Hrs: MW 1130 – noon and 200 – 230 PM
TTh 9:30 - 10:30 AM & 12:00 – 12:30 PM
Other times by appointment

Webpage for lecture outlines, grades, quizzes, assignments, study guides, etc
<http://www.saddleback.edu/faculty/steh> (click on the Bio 20 link)

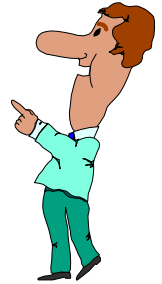


OBJECTIVE: Biology 20 is a lecture and laboratory course designed to introduce students to the major principles and concepts of biology, including cellular biology, energy relationships, biological systems, heredity, evolution and ecology.



IMPORTANT DATES

September 4	Last Day to apply for a refund
September 25	Last Day to withdraw without a “W”
November 5	Last day to withdraw with a “W”
November 27	Article Critique Due



Test Dates (Subject to change):

Exam 1	Sept 20	Exam 2	Oct 25	Exam 3	Dec 4
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Comprehensive Final Exam: Thursday, December (10:15 AM – 12:15 PM)



Required Textbook: Biology, Concepts & Connection (6th Ed.), 2008
Authors: Campbell, Reece, Taylor and Simon
Online Resource: www.campbellbiology.com

Required Lab Manual: Introduction to Biology, Biology 20 Laboratory Exercises



LECTURE SUPPLIES:

4 Scantron # 882
1 Scantron # 884
5 Scantron # 815

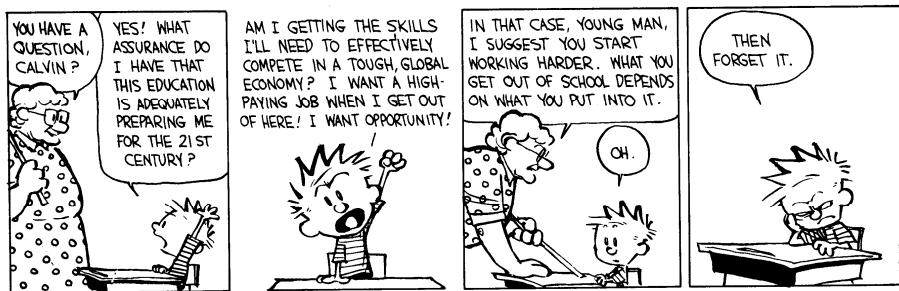
LAB SUPPLIES (Steve’s Lab Only):

1 Scantron # 882
10 Scantron # 815
basic calculator – cell phones do not count!

****Do not write your name on the Scantron forms, just paper clip them together along with the student information sheet. Turn them into to my office SM 254 before Sept. 10, 2009.****

There is an IQ test for this assignment – Let’s see who can follow directions.

**STUDENTS ARE RESPONSIBLE FOR ANY ANNOUNCED CHANGES
IN THIS SYLLABUS**



Biology 20 LECTURE SCHEDULE Fall 2009



WEEK	DATE	LECTURE TOPIC	READING
1	AUG. 25	Introduction	Ch. 1
	27	Introduction & The Chemistry of Life	Ch. 1 & 2
2	31	The Chemical Basis of Life	Ch. 2
	SEPT 3	The Molecules of Cells	Ch. 3
3	8	The Molecules of Cells	Ch. 3
	10	Living Membranes	Ch. 5 (pp. 79 – 86)
4	15	Living Membranes	Ch. 5 (pp. 79 – 86)
	17	Tour of the Cell	Ch. 4 & Ch. 16 (pp.334 – 335)
5	22	Tour of the Cell	Ch. 4 & Ch. 16 (pp.334 – 335)
	24	Exam #1	Chapters 1 – 4, Parts 5
6	29	Energy & Enzymes (Covered in Lab)	Ch. 5 (pp. 70 – 78)
	OCT 1	Photosynthesis: Using Light to Make Food How Cells Harvest Chemical Energy	Ch. 7 Ch 6
7	6	The Cellular Basis of Reproduction	Ch. 8 (pp. 126 – 138)
	8	The Cellular Basis of Inheritance	Ch. 8 (pp. 138 – 150)
8	13	Molecular Biology of the Gene (Structure & copying DNA)	Ch. 10 (pp.180–190)
	15	Molecular Biology of the Gene (Flow of information)	Ch. 10 (pp. 190 – 206)
9	20	DNA Technology	Ch.11 & 12 (portions)
	22	Patterns of Inheritance (partially covered in lab)	Ch. 9
10	27	Patterns of Inheritance (partially covered in lab)	Ch. 9
	29	EXAM #2	Chapters 5 – 8, 10 & 12
11	NOV 3	How Populations Evolve	Ch. 13
	5	The Origins of Species	Ch. 14
12	10	Tracing Evolutionary History	Ch.15
	12	Biosphere & Population Dynamics	Ch. 34 & 36
13	17	Communities & Ecosystems	Ch. 36 & 37
	19	Animal Structure & Function	Ch. 20
14	24	Animal Reproduction	Ch. 27
	26	HOLIDAY - TURKEY DAY	Do Something Biological
15	DEC 1	Circulation	Ch. 23
	3	Respiration: The Exchange of Gases	Ch. 22
16	8	EXAM #3	Chapters 9, 12-15, 34-37
	10	Digestion	Ch. 21
17	15	FINALS WEEK - NO CLASS TODAY	
	17	**FINAL EXAM 10:15 AM - 12:15 PM**	Everything from above



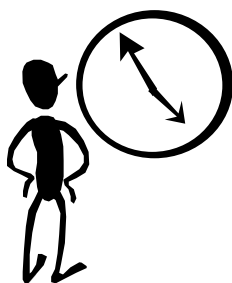
Biology 20 Laboratory Schedule Fall 2009



Week	Week of:	Lab Activity	Page #
1	Aug. 24 th	Introduction and Lab Safety Scientific Method and Hypothesis Testing	1 3
2	31 st	Metrics, Measurement and Graphing	11
3	Sept. 7 th	Macromolecules	21
4	14 th	Microscopes & Cells	27
5	21 st	Physical Transport of Matter	39
6	28 th	Enzymes and Cellular Respiration	51
7	Oct. 5 th	Photosynthesis	65
8	12 th	Mitosis – Asexual Reproduction	75
9	19 th	Meiosis and Mendelian Genetics	85
10	26 th	DNA Fingerprinting & Protein Synthesis	99
11	Nov 2 nd	Natural Selection and Population Growth	111
12	9 th	Plant Diversity and Reproduction	125
13	16 th	Animal Diversity, Taxonomy & Cladistics	139
14	23 rd	Animal Reproduction	149
15	30 th	Brief Introduction to Anatomy and Physiology	161
16	Dec 7 rd	Lab Final	
17	14 th	Finals Week – No Laboratory Classes	

THERE WILL BE NO MAKE-UP QUIZZES OR EXAMS! If there is a problem with the exam or quiz dates, see me well in advance so other arrangements can be made. If you miss an exam or quiz (lab only), this will be the exam or one of the quiz (lab only for Steve) scores that are dropped. Exams and quizzes will be given at the beginning of class. If you show up late, you will not be allowed to take the exam or quiz and it will be one of the quiz scores dropped. Students who fail to take two exams will be dropped from the course. The final must be taken and will not be the exam score dropped.

ATTENDANCE: Since many of the questions on the tests will come from the lecture material, it is critical that students attend all class meetings. If you must miss a class, it is your responsibility to get the notes from a fellow student. If your number of absences exceeds the number of hours the class meets in two weeks, you will be dropped from the course. After **November 5, 2009** you cannot officially be dropped from the course. This is the last day you can receive a "W" (Withdrawal). After this date you **must** be given a grade in the course. If you are late to class, it is your responsibility to report it to the instructor at the end of class. If you don't, it will be counted as an absence. Three times late to class counts as one absence. **Your grade will be lowered for excessive absences. It is ultimately the student's responsibility to drop themselves from the course if they decide not to attend the class.** Poor attendance after the drop date will result in the loss of one grade level (i.e. a student will fall from an "A" to a "B") in the final analysis of your grade.



POLICY ON ACADEMIC INTEGRITY: Cheating and Plagiarism are violations of the college's policy and are considered serious offenses. The Department of Biological Sciences takes all incidences of academic dishonesty seriously and acts accordingly. I reserve the right to give an "F" for the assignment, test and/or class and the matter will be brought up to the Director of Student Affairs as stated in the school's current College Catalog. In other words, **"DON'T CHEAT OR PLAGIARIZE!!!!!!!"**



MSE Academic Integrity Policy: <http://www.saddleback.edu/ap/mse/integrity.pdf>

GRADING: Your course grade will be comprised of the following:

Lecture Portion (60%):

3 Midterm Exams (100 pts each).....	200 pts
(Best 2 of 3 – The lowest exam score will be dropped)	
1 Final Exam.....	125 pts
(The final exam must be taken!!)	
Article Critique.....	25 pts
Lecture Quizzes / Assignments	50 pts
Scantrons.....	<u>10 pts</u>
	435 pts



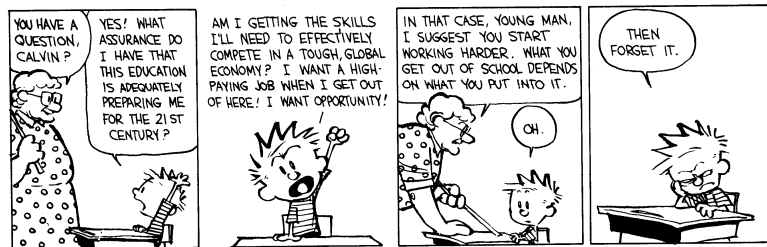
Points and assignments are subject to change at the instructor's discretion to facilitate a more productive learning environment.

Lab Portion (40%): To be determined by your laboratory instructor, Pierre Nguyen, Julie Wells or myself.

Steve's Lab Section Only:

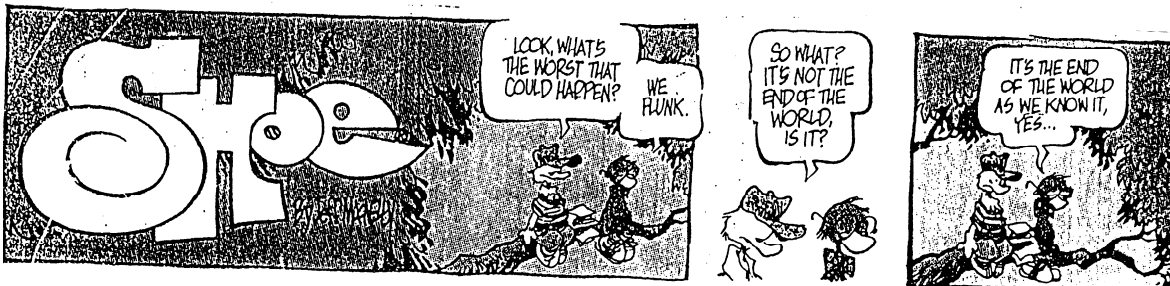
Best 12 Quizzes (10 pts each).....	120 pts
15 Labs (10 pts each).....	150 pts
Lab Final.....	50 pts
Lab Scantrons	<u>10 pts</u>
	330 pts

Lab clean up is an essential aspect of your lab grade. If the lab is left messy and I have to clean up after you guys, I will deduct 10 points per minute for cleaning – and I clean very slowly!!! This includes not properly putting things away or in the correct/specified location(s).



Calculating your grade:

Take you lecture percentage as a decimal (68% = .85) & multiply by 0.6.
 Take you lab percentage as a decimal (88% = .95) & multiply by 0.4.
 Add the two numbers together to get you **OVERALL** Percentage.
 For example: (0.68 x 0.6) = .408 (0.88 x 0.4) = .352;
 Overall: 0.408 + 0.352 = .76 => 76% => C



Quizzes: There may be unannounced lecture quizzes throughout the semester based on what we have covered thus far. Be prepared! Quizzes may consist of multiple choice, matching, true/false, fill-in and short answer. Under normal circumstances, **there will be no opportunity for making up quizzes!** You will be given a zero for that quiz (exception of college excused emergencies). Because most of the quizzes will be taken at the beginning of the class time, it is **critical** that you be **on time**. Latecomers will be given quiz materials only if there is sufficient and reasonable time remaining to warrant an attempt.

ACCOMMODATION: All reasonable efforts will be made to accommodate students with disabilities. It is your responsibility to provide documentation of your disability and resolve the appropriate accommodation(s) at the very beginning of the semester. **NO students** may use dictionaries or electronic translation devices during lecture exams or quizzes, including international students.

Bleepers, Pagers or Cellular Phones must be set on vibrate or another silent alert mode during class. Students that disrupt the class with these auditory devices may be removed from the class for that day and **lose 10 points** for each offense **AND HAVE TO DANCE TO YOUR RINGTONE INFRONT OF THE ENTIRE CLASS**. Some of you cannot afford to lose points nor dance!!!

Where to get Study Guides, Exam scores, Article Critique Guidelines, etc.

Web page: www.saddleback.edu/faculty/steh (click on the Bio 20 link)

I can't afford the textbook:

- There's a textbook in the **LIBRARY** at the **RESERVE DESK**
- There's also an e-book that's available for less (<http://www.aw-bc.com/campbell/>)

CALVIN AND HOBBS By Bill Watterson

