

Lecture And Laboratory Schedule

Version 21 August 2009

Week	Dates	Lecture Day	Topic	Laboratory Day	Topic (Lab Exercise)
1	Aug.	25	T Introduction; Systematics and Prokaryotes	T	Randomization
		27	Th Prokaryotes and Protista Safety Assignment due	Th	Prokaryotes
2	Sept.	1	T Protista (cont'd) Autobiography due	T	Protista
		3	Th Protista, Fungi (through Basidios) Lab Fees due	Th	Protista, Fungi
3		8	T Fungi, Plant Biology	T	Fungi, Plantae (through Bryos)
		10	Th Plant Biology	Th	Plantae (through Conifers)
4		15	T Plant Biology	T	Plantae (Conifers through Anthophytes)
		17	Th Plant Biology	Th	Plantae (structures)
5		22	T LECTURE EXAM 1	T	Review
		24	Th No Lecture	Th	LAB EXAM 1
6	Oct.	29	T Animal Systematics	T	Invertebrates (through Radiata)
		1	Th Invertebrates cont'd.	Th	Invertebrates (through Mollusca)
7		6	T Invertebrates cont'd	T	Invertebrates (through Arthropoda)
		8	Th Vertebrates (through Amphibia)	Th	Finish Invertebrates
8		13	T Reptilia, Aves	T	Skeletal/Muscular Systems
		15	Th Mammalia, Population Dynamics	Th	Skeletal/Muscular Systems
9		20	T Population Dynamics, Biomes Bring in copy of Science	T	Skeletal/Muscular Systems
		22	Th Ecosystem Energetics	Th	Chordates
10		27	T Chemical cycling, Ecosystem Dynamics	T	Chordates / Sheep heart
		29	Th Global Climate Change, Pollution	Th	Review
11	Nov.	3	T No Lecture	T	LAB EXAM 2
		5	Th LECTURE EXAM 2	Th	Tissues
12		10	T Animal Behavior	T	Tissues
		12	Th Excitable tissues, Muscular System	Th	Integument and Blood
13		17	T Nervous System, Senses & the Endocrine System	T	Sheep Brain and Eye
		19	Th Senses, cont'd	Th	Fetal Pig Dissection
14		24	T Cardiovascular and Respiratory Systems	T	Fetal Pig Dissection
		26	Th THANKSGIVING HOLIDAY – NO CLASS		
15	Dec.	1	T Lymphatic and Immune Systems	T	Fetal Pig Dissection
		3	Th Digestive and Urinary Systems	Th	Fetal Pig Dissection

16	8	T	Male and Female Reproductive Systems	T	Fetal Pig Dissection
	10	Th	No Lecture	Th	LAB EXAM 3
17	15	T	LECTURE EXAM 3	T	No lab session
	17	Th	EXAM MAKE-UPS OR RETAKES		

Dates shown in black boxes (*e.g.*, 29 October, 01 December) are possible dates for Artifact of Learning group presentations.

General Information

Instructor: Rob Mustard. **Office:** NS-207E. **Phone:** (760) 744-1150, ext. 5450

Address: c/o Dept. of Life Sciences, Palomar College; San Marcos, CA 92069

Email: rmustard@palomar.edu. **Web page:** <http://faculty.palomar.edu/rmustard/>

Academic Department Assistant: Karen Beuhler, ext. 2275, Email: kbeuhler@palomar.edu

Life Sciences Department Office: NS-307B

Required resources:

- Dissection kit, \$22.00 (Discussed under “Laboratory” below)
- Journal subscription (discussed under “Journal Subscription,” below – approximately \$50.00)
- Appropriate eye protection (safety glasses)

Required Texts:

- Biology 201 Lecture Outline and Study Guide by Daniel Sourbeer (download from Blackboard)
- Biology by Campbell, Reese, and Mitchell; 7th ed. or later (*or* any major’s level college biology textbook, such as Life, the Science of Biology, 6th ed. or later, by Purves)
- A Guide to the Biology Lab by Thomas G. Rust; 3rd ed., *or* Photographic Arts for the Biology Lab, 5th ed., by Van de Graff & Crawley.
- **Highly Recommended:** A Dictionary of Word Roots and Combining Forms by Donald J. Borror (\$11.49), ISBN 0-87484-053-8.

Office Hours (tentative) in Room NS-324:

Tuesday 3:30-4:30 PM

Thursday 3:30-4:30 PM

Teaching Schedule:

Classes Taught	Days	Times	Room
Biology 201	Tuesdays and Thursdays	5 PM - 9:20 PM	NS-324

Important Dates

- Drop deadline (without notation in record): 23 September 2009
- Withdraw deadline ("W" grade on record): 17 October 2009
- After 17 October (the end of the 8th week of classes) an evaluative grade (A through F) will be recorded.

Desired Objectives for Biology 201

After completing Biology 201 at Palomar College, students should understand the scientific process (method), including formulation of a hypothesis; designing an experiment to test that hypothesis; analysis of the results (data) produced by the experiment; and the importance of peer review.

A Word From the College Administration

Because of the loss of funding that occurs when students fail to add a class by the add deadline, the Life Sciences Department (under direction from the Dean of Mathematics and Natural and Health Sciences) is adhering to the following policy:

“Only students who are officially registered may participate in this class. If a student is given a permission code to add this class, he/she must officially add the class prior to the next class meeting. If the student has difficulty using the PAR enrollment system to add, the student should notify the instructor immediately. The deadline for adding any class or using a permission code to add is the end of the second week of classes. **Under no circumstance will students be allowed to add this class after the add deadline.**”

The deadline for adding any class (even with a permission number) is the end of the second week of classes *or* within 20% of class meetings. **Under no circumstances will students be allowed to add this class after the add deadline.**

The end of the 8th week of classes is the last date one may withdraw from a course without the course appearing on your transcripts. No instructor signature is required although a “W” will appear on your transcripts. After the end of the 8th week of classes an evaluative grade (A through F) will be given.

One of the easiest ways not to succeed in Biology 201 is to not show up for class (lecture and/or lab). If you're not committed to spending your time and effort on this class, try again some other time. **Students with excessive absences (>3) may be dropped from the roster, without notice, at any time during the semester.**

My Philosophy and Expectations

I want you to think of yourselves not as biology students, but as *biologists-in-training*. As such, I will have the following expectations:

- Make learning the highest priority.
- Be professional in your work, *i.e.*, any work you turn in should be neat, complete, accurate, and on time.
- Be cognizant of the practice of science; adhere to the Scientific Method.
- Try to get involved in professional activities such as attending a scientific seminar or meeting; interning, working or volunteering in a scientific setting; and/or subscribing to a scientific journal.
- Finally, strive for excellence, not mediocrity.

This course is content-heavy and will require advanced study skills and self-discipline. **As committed professionals who enjoy their work, I will expect you to keep up in your studies and not get behind.** If you will commit to it, I think you will find this course not only a highly rewarding experience, but fun as well. The feeling of accomplishment is a great one, especially when you do something well. It is my desire to expose you to information and experiences that will help you excel and make wise decisions in your chosen profession. **If you do well in this class you can be confident that you will do well at any institution to which you transfer.**

Due Dates

Due dates for all assignments are tentative, but are likely to be as shown in the Lecture and Laboratory Schedule table above. Dates will be announced in class, but you are responsible for knowing the dates of exams and other assignments. Unless otherwise specified by me, **assignments are due at the beginning of the class period**. Late assignments will be accepted (unless otherwise specified), but *25% of the point total for the assignment will be deducted for each class meeting or part thereof that it is late (i.e., after two full weeks, the assignment is worth 0 points)*.

Retake/Make up Exam

You may retake Lecture Exam 1, 2 or 3 (or a similar exam) at the last class meeting during final exam week. Due to the nature of setting up Laboratory Exams (Practicals), no lab exams can be made up. If you miss lab exams or more than one lecture exam, you will receive a score of “zero” on those exams. On exam days, be sure to get adequate rest, have back-up plans in place for getting to class on time, and arrange for reliable transportation to class. *You must take exams with your scheduled class. Test questions, or the contents of any exam are not to be discussed with students in other class sections who have not yet taken an exam.*

Honor Code/Academic Honesty

By remaining enrolled in this class you are pledging, on your honor, that you will not engage in any acts of dishonesty. *Cheating, plagiarism (copying anything or using data without citing the source), or any act of obtaining or attempting to obtain credit for work that is not your own is unacceptable*. The Palomar College catalog (pages 32-33) has further information. There is to be absolutely no communication of any kind (between students) once an exam begins. Nothing is allowed at the test area except for a writing instrument(s) and eraser. All questions should be directed to me – the instructor – and you may not leave the room during an exam and resume it when you return. If you leave the room I will collect the exam, and I will grade what you have completed.

My policy is that students caught cheating or plagiarizing will receive a zero grade on that assignment (1st offense), or an "F" in the class (2nd offense). In the event of a 2nd offense, a letter describing the incident will be sent to the Life Sciences Department Chair and to Student Affairs. ***Important: allowing another student to copy from your material makes you complicit in the act of cheating.*** If you are aware of cheating of any kind, I would appreciate what information you have as it is essential to maintain the integrity of the course – this includes communication between individuals in different class sections, copying assignments to be collected, plagiarizing papers, etc.

Courtesy

Your education, as you know, is an extremely valuable commodity. It is therefore important to extend as much courtesy as possible to your fellow classmates, so that everyone gets as much as possible out of the course. These courtesies include the following: If you are late to class, please enter quietly (it helps to take your materials out of your backpacks before entering the room). If you have to leave early, put your personal materials away after leaving the room. Please do not talk, exchange notes, or otherwise disrupt the class during instruction. **Please turn off pagers, alarms, and cellular phone ringers.** When I ask for your attention, please give it to me quickly. If your behavior **in any way** impinges on my performance as an instructor, or distracts other students, you may be temporarily **or permanently** dismissed from the class.

Grading

Points will be earned for activities in both lecture and laboratory, in the following ways:

Lecture Exams	3 x 100 points each
Laboratory Exams (Practicals)	3 x 100 points each
Laboratory Exercises	2 x 20 points each
Autobiography	30 points
Journal Subscription	50 points
Artifact of Learning Project	80 points total

Your percent score in the class will be determined as follows:

$$\text{Course \%} = \frac{\text{Sum of points earned by you}}{\text{Total of points possible on all assignments}} \times 100$$

Grades in the course are assigned according to the following scale:

A = 90% and above; B = 80 - 89.99%; C = 70 - 79.99%; D = 60 - 69.99%.

Laboratory

The laboratory component is a crucial part of the course. The Department of Life Sciences requires that you participate fully in laboratory exercises, *i.e.*, the laboratory must be experienced. **If you miss the equivalent of more than three laboratory periods, your participation will be considered unsatisfactory and you will receive an “F” in the course.** Use laboratory time wisely, as you can reduce outside study time if you do. The attitude of “I’ll learn it later” is the attitude of a mediocre to poor student, not the attitude of a committed professional.

We will be using some preserved specimens in class. Be sure to review the Materials Safety Data Sheets provided to you. If you have any suspected or known allergies to materials we will be using, or if you are pregnant or trying to become pregnant, please notify me of the condition, and consult with a physician as soon as possible. We will be doing some dissections, and you will need to provide your own dissection kit and eye protection (disposable gloves will be made available to you in lab).

Eye protection is required in the laboratory. You will not be allowed to participate without proper eye protection.

Autobiography Assignment (30 pts)

At least 500 words in length, well-written, and typed – I want a hardcopy version; do not email your papers. Follow the outline below (underlined topics are the most important):

- Be sure the paper has a title and heading (your name and class). Include the number of words (total word count) as a sub-heading.
- Tell me a little about your life, such as where you grew up, your family, significant events, and anything else you would like me to know.
- What you do in a typical week (job schedule, other classes you’re taking, etc.).
- What are your interests and hobbies?
- Tell me about your science background; why are you a Biology major?
- What is your career goal, and what is your plan to achieve that goal?
- What letter grade do you expect to earn in the class and why?
- How many hours per week you plan to spend studying for this class, and when you plan to do that studying? Do not tell me you will study when necessary. Specify the number of hours

(preferably a minimum of ten per week for this class alone) and days and times when you will commit to studying biology – *be specific*.

Common mistakes and points deducted are as follows:

- No heading or title, -5pts.
- Word count not listed in heading, -5pts.
- Stream-of-consciousness style without paragraphs or organization, at least -5pts.
- **Not EXPLICITLY stating how many hours you plan to study for this class per week, -5pts** (*i.e.*, “**I plan to study eight hours a week according to the following schedule: ...**”).
- **Not EXPLICITLY stating the days AND TIMES you plan to study for this class each week, -5pts** (*i.e.*, “**... Monday and Wednesday 6-8PM, Tuesday and Thursday 5-7PM, ...**”).
- Not stating career goal, -5pts.
- Not stating the grade you expect to earn, -5pts.
- Not typed, -10pts.
- Not at least 500 words, -5pts.

I consider this a very important assignment as it helps me connect to each one of you. Please take it seriously, as I do not consider it “busy work,” but as an initial opportunity to get to know you *and the quality of your work*.

Journal Subscription (50 pts)

In keeping with the departmental philosophy that biology majors are “biologists-in-training,” each of you will be expected to meet a “professional experience” requirement. That experience is to subscribe to the peer-reviewed scientific journal, *Science*. I will pay you for this service in the currency of your academic life, points – fifty points to be exact. This requirement adds another expense to your semester, but I consider it essential to your development. *Take care of this requirement immediately* as it takes six weeks to get the first issue of some journals, and you must bring in the journal to get the points. To subscribe, go to <http://promo.aaas.org/darwin> and complete as follows:

Part A: Click on the Student option (you’ll pay just \$50, not the usual \$99).

Part B: Gift Recipient – fill in the boxes with *your* information.

Part C: Donor Information – fill in the donor info boxes with *your* information (same as in Part B).

Part D: Payment Method – enter your credit card information.

Part E: Gift – click on the appropriate size shirt.

If you bring in your journal after the required date, listed above, you will lose points (25% for each week or part thereof). **The Journal Subscription assignment is *not* optional.** If you already subscribe to a peer-reviewed scientific journal, you may substitute that subscription for *Science*; just bring in a copy of that journal for approval and credit.

Artifact of Learning Project (80 pts total)

There are three separate “deliverables” for the Artifact of Learning Project (see the separate handout for details on content):

- Project Proposal paper: 20 points
- The Electronic Artifact (presentation *plus* CD-ROM copy): 40 points
- Project Summary paper: 20 points

BEING A SUCCESSFUL STUDENT REQUIRES A COMBINATION OF ATTITUDE AND DISCIPLINE

SUCCESSFUL STUDENTS...	STRUGGLING STUDENTS...
Accept personal responsibility for the quality of their lives.	See themselves as victims, unable to control what happens to them.
Find and focus on personally motivating goals or a purpose in their lives.	Have difficulty finding meaningful goals or life purpose.
Plan and take actions in pursuit of their goals or purpose.	Seldom identify specific actions needed to accomplish goals, and even when they do, tend to procrastinate.
Seek out and use support networks to assist them in pursuit of their life goals or purpose.	Usually work alone, neither requesting nor accepting offers of assistance from useful sources.
Enjoy the process of learning, and understand its importance to their goals or purpose.	View learning as drudgery, see no fun in learning, nor are they motivated by its importance to their goals.
Actively view life's experiences in a positive light.	View life negatively, focusing on the disappointing or painful.
Unconditionally believe in themselves, and their worth as human beings.	Feel inadequate, unworthy, and doubt their personal value.

Success is not incidental for most people. It is the result of planning, focus, confidence, resilience, self-discipline, and hard work.

There are two steps to being successful. Believing you can be successful is step one (requiring confidence and resilience). Actually doing what is necessary to be successful is step two (requiring planning, focus, self-discipline, and hard work).

TIME MANAGEMENT SHEET--MAKE COPIES AS NECESSARY

Dates: From _____ to _____

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5AM							
6AM							
7AM							
8AM							
9AM							
10AM							
11AM							
12AM							
1PM							
2PM							
3PM							
4PM							
5PM							
6PM							
7PM							
8PM							
9PM							
10PM							

To do lists: