

**Lecturers:** Mike Meighan from the Department of MCB.

**Lecture:** Lectures are Monday from 5-6:30 PM in 1 Pimentel and simulcast in 10 Evans. They will also be webcast. You should read the assigned readings in Campbell and the lab manual prior to the lab lecture. The first lecture will be held on January 28<sup>th</sup>. Labs begin the second week of classes.

**Contact information/office hours:** Mike Meighan. 642-4110, 2088 VLSB, mailbox outside 2088 VLSB, e-mail is {[mmeighan@berkeley.edu](mailto:mmeighan@berkeley.edu)}. Scheduled Office hours are M 11-12, W 10-11, 2-3 and by appointment\*. I am available for advice on study habits, techniques, and on matters of scheduling, laboratory operations, exams, etc.. \* Office hours and location may be revised.

**Graduate Student Instructors:** The GSI's will instruct the laboratory sections. A GSI will be available in the GSI office; 2084 VLSB on Monday from 10-12 PM and typically one hour before the start of each lab period. Messages may be left in your GSI's mailbox in 2084 VLSB.

**GSI Office Hours:** M 2-4, T 8:<sup>30</sup>-9:<sup>30</sup>, 1-2, 5:<sup>30</sup>-6:<sup>30</sup>, W 1-2, 5:<sup>30</sup>-6:<sup>30</sup>, Th. 8:<sup>30</sup>-9:<sup>30</sup>, 1-2, 5:<sup>30</sup>-6:<sup>30</sup> PM, F 1-2.

### TIME TABLE

The deadlines for adding, dropping, and changing your grading option are shown in the reading list. If you drop after 2/8 you will have low priority for future enrollment.

1. **Lectures begin January 28<sup>th</sup>** and end on May 5<sup>th</sup>. Lectures are held in 1 Pimentel on Monday from 5-6:30 PM and simulcast in 10 Evans. Lectures will be webcast and will be available on the web (<http://webcast.berkeley.edu/courses/>). Handouts will be available for downloading on the Biology 1A website, by 5 PM on the Friday before a given lecture. No note taking service is authorized.
2. **Email address:** We will routinely email students about once a week. We will use the email address you have listed in the CalNet Directory. If it isn't the one you check, then you need to change it in the CalNet directory. If you have not received any emails yet, there is a problem with your listed email address.
3. **ADDING:** Students already on the waitlist have been added to any seats that were open up to **Friday January 18<sup>th</sup>**. The remaining students on the waitlist (and new students wanting to enroll) must fill out an online "Enroll from Waitlist Request" form in addition to being on the waitlist. This form is available from our website and bSpace and must be submitted by 8:00 AM Friday January 25<sup>th</sup>. We will be allowing "alternate" students to attend lab (2 per section) for the first 2 weeks of lab (until Friday February 8<sup>th</sup>). Information about alternates will be sent by email to all waitlisted students and will be posted on the class website.
4. **CHANGING SECTIONS: Permanent Change.** To change sections permanently, complete and submit a "LAB CHANGE" form (<http://mcb.berkeley.edu/courses/bio1a>). The deadline is **8:00 AM on January 25<sup>th</sup>**. Section changes will be made directly online and can be seen on Tele-Bears or BearFacts (updated at 7:00 AM Mon-Fri) by Noon **on January 28<sup>th</sup>**. Very few changes will be made. Earlier requests have slightly higher priority.
5. **TEMPORARY LAB SWITCH:** You are expected to attend your scheduled lab. Avoid scheduled conflicts (exams, trips). If current conflicts exist then request a permanent change. Avoid future conflicts! If some unavoidable and unexpected conflict or illness should occur (that directly interferes with your lab), it **may** be possible to switch to another lab section for that week. Switches will only be approved when absolutely necessary, and the schedule conflict or illness is verifiable and unavoidable, and we have space to make the switch.

No switches May 5<sup>th</sup> to 9<sup>th</sup> due to the second lab exam. To request a switch, you may either check with the staff in 2098 VLSB, or send an email to [bio1alab@berkeley.edu](mailto:bio1alab@berkeley.edu) with your full name, your enrolled lab section, reason for the switch, and a list of other lab times during the same week (see page 3 for times) that you can make. We will usually email you back within one business day, the lab time and room you will attend for your make up lab (in addition you will need to pick up a note from 2098 VLSB to give to the GSI teaching your make up lab).

6. **LABORATORY** begins Tuesday January 29<sup>th</sup> and will cover Safety, Micropipetter, Microscopes and Cells. Read pages 1-10, 15-28 and 57-73 of your Laboratory Manual before the lab lecture. Our website will have a revised pdf file of the first lab exercise.
7. **Lab Exams: Lab exam 1: Wed March 19<sup>th</sup> from 6:30-8:30 PM.** Room(s) to be arranged. Lab Exam 2 will be held on your assigned lab day, within your three-hour period (**May 5<sup>th</sup> – 9<sup>th</sup>**). There are no make-up exams. Exam handouts will be given for each exam. There is NO additional final exam for the lab class.
8. In the case of disruption of an exam (fire alarm, bomb threat, etc.) alternative arrangements have been made. These may include moving the exam to another location, and/or extending the time, and/or arranging an alternative exam date or format.
9. **Attendance:** You are required to attend the lab section in which you are enrolled (not waitlisted). However it may be possible to reschedule lab during the same week (see 5 on p. 1).
10. **Assignments, exams: When papers are returned it is your responsibility to pick them up.**

### LAB MATERIALS

**Required textbook:** Campbell, Biology, 7<sup>th</sup> or 8<sup>th</sup> edition only. The textbook packaged with the lab manual is cheaper than the new textbook by itself. If you are going to buy a new textbook then buy the 8<sup>th</sup> edition (it isn't much more and will have resale value). Try Amazon.com for the 8<sup>th</sup> edition.

**Required Lab Manual:** The required lab manual (2007/2008) is available at ASUC and Ned's. This is a new edition and you cannot use previous editions.

**Required pre-labs and worksheets.** These are available on our website or at Replica Copy, at 2140 Oxford (near Ben and Jerry's). It is actually much cheaper, faster and easier to buy a set at Replica Copy instead of printing them out.

**Exam Reader:** An exam reader with exams from past semesters is available at Replica Copy.

**Required Course Notes:** Handouts and images will be available on our website by 5 PM on the Friday before an upcoming Monday lecture.

**GRADING PROCEDURE:** Grades will be determined numerically as follows:

Lab Exam 1, 3/19 6:30-8:30 PM (covering labs 1-6)	100 points
Bioinformatics lab write-up	16 points
Lab Exam 2, 5/5-9 (covers labs 8-11)	64 points
Lab Quizzes – 5pts each, given at the start of lab (11 X 5 =55, drop the lowest)	50 points
<b>Total</b>	<b>230 points</b>

**Changes affecting the point distribution, the reading schedule, or other aspects of the syllabus may occur during the semester. We will inform you of any changes.**

Grades are based upon EARNED points (not upon needs or wants). The guaranteed grades are:

A (some form)	100-90%	C (some form)	79-70%	F	59-00%
B (some form)	89-80%	D (some form)	69-60%		

However the cut offs for letter grades may be lowered (but only by a few percentage points, and as deemed necessary). Historically around 50% of the class **EARN** A's and B's.

**LAB GRADE ADJUSTMENTS:** Lab exam 2 and quiz scores will be adjusted as necessary for each section. This insures that no section has an advantage (higher quiz scores or higher lab exam 2 scores) nor has a disadvantage (lower quiz scores or lower lab exam 2 scores). They will be adjusted based upon lab exam 1 scores and will be adjusted to the **easiest** of the sections.

**I GRADES:** UC regulations require that a student has completed at least one-half of the material with a passing grade of C or better and the student presents documented medical evidence of their inability to complete the course on schedule. The student assigned an I grade must complete the work before the first day of classes in the Spring Semester of 2009, without including the course for units on the study list, or the I lapses to an F.

**CHEATING:** The rare student found cheating in the course will be reported to the University for review for dismissal. An automatic 0 will be given on that assignment. **Cheating is not tolerated.** This includes ALL work—including pre-labs and worksheets! Students repeating the class must do the work this semester and cannot turn in work from previous semesters.

**RECOMMENDATIONS:** It is probably better for you to obtain letters from upper division classes, in the future, but we are willing to write letters.

## HOW TO DO WELL

1. Come to lecture and take notes. Make sure you review them. Do the reading before lecture.
2. Keep up with the material. Do not fall behind. Seek help if needed. Make sure you do the reading before lecture and lab – that includes the assignments in your lab manual and in Campbell.
3. Clarify topics by coming to office hours, forming a study group, or emailing your questions.
4. Use the exam reader, making sure you understand the reasoning behind the answers.
5. Be prepared for lab and be prepared to think.

## **BIOLOGY 1A/1AL STUDY RESOURCES**

The following is a partial list. Additional opportunities such as reviews (faculty & GSI) may also be given. Further information is available in the lab manual and the Exam Reader.

**Faculty Office Hr's:** See the first page.

**Lab GSI Office Hr's (2084 VLSB):** M 2-4, T 8:<sup>30</sup>-9:<sup>30</sup>, 1-2, 5:<sup>30</sup>-6:<sup>30</sup>, W 1-2, 5:<sup>30</sup>-6:<sup>30</sup>, Th. 8:<sup>30</sup>-9:<sup>30</sup>, 1-2, 5:<sup>30</sup>-6:<sup>30</sup> PM, F 1-2.

**Student Learning Center (SLC, 189 Chavez Student Center):** The SLC may offer student-led study groups and tutoring. See their website for more information ([slc.berkeley.edu](http://slc.berkeley.edu)).

**STUDY GROUPS:** These are usually a great way to learn. I encourage you to form study groups, either within your lab or with students from other sections.

**Tutor Services (fee):** Formal tutoring (variable fees) from individuals may be available as the semester progresses. Contact Mike.

**Biology 1A Web Sites:** Primarily bSpace but also <http://mcb.berkeley.edu/courses/bio1a>

Odd numbered labs are held in 2095 VLSB. Even numbered labs are held in 2097 VLSB.

Lab #	Time	Lab #	Time	Lab #	Time	Lab #	Time
101	T 9:30-12:30	107	W 9:00-12:00	113	Th 9:30-12:30	119	F 9:00-12:00
102	T 9:30-12:30	108	W 9:00-12:00	114	Th 9:30-12:30	120	F 9:00-12:00
103	T 2:00- 5:00	109	W 2:00- 5:00	115	Th 2:00- 5:00	121	F 2:00- 5:00
104	T 2:00- 5:00	110	W 2:00- 5:00	116	Th 2:00- 5:00	122	F 2:00- 5:00
105	T 6:30- 9:30	111	W 6:30- 9:30	117	Th 6:30- 9:30		
106	T 6:30- 9:30	112	W 6:30- 9:30	118	Th 6:30- 9:30		

## Biology 1AL Calendar, Spring, 2008

<i>Date</i>	<i>Lecture Topic</i>	<i>Reading Campbell (7<sup>th</sup> ed.)</i>	<i>Reading Campbell (8<sup>th</sup> ed.)</i>	<i>Reading Lab Manual (2007-08)</i>
Week 1 1/28-2/1	<b>Lab 1: Safety, Micropipetter, Microscope and Cells.</b>	Ch. 1, Ch. 6., Pages 534-536	Ch. 1, Ch. 6. Pages 556-558	Pages 1-10, 15-28, 57-73. (see revision on web)
Week 2 2/4-2/8	<b>Lab 2: Chordate Diversity.</b>	671-700	698-728	Pages 203-219.
Week 3 2/11-15	<b>Lab 3: Transform, Enzymes.</b>	Ch. 5 (except 5.3) & Ch. 8.	Ch. 5 (except 5.3) & Ch. 8.	Pages *30-54, 75-93. (*focus on pages 35-42)
Week 4 2/18-22	<b>NO LAB LECTURE &amp; NO LAB.</b>			
Week 5 2/25- 2/29	<b>Lab 4: Colony Isolation, Complementation I, Photosynthesis.</b>	Ch. 10.	Ch. 10.	Pages 30-54*, 95-102**, 103-117. (*focus on pages 43-44, ** focus on pages 95-97)
Week 6 3/3-7	<b>Lab 5: Plasmid isolation &amp; digestion, Complementation II, Genetics &amp; Mol. Biol. I.</b>	Chs. 12-17, 346-350, Ch. 20.	Chs. 12-17, 561-564 Ch. 20.	Pages 30-54*, 95-102**, 119-128. (*focus on pages 45-50, ** focus on pages 98-100)
Week 7 3/10-14	<b>Lab 6: DNA electrophoresis, Complementation III, GMB. II</b>	Chs. 12-17, 346-350, Ch. 20.	Chs. 12-17, 561-564 Ch. 20.	Pages 30-54*, 95-102**, 129-142. (*focus on pages 51-54, p. 101-102)
Week 8 3/17	Lecture: Review & Q & A <b>NO LAB, LAB EXAM 1 ON 3/19 6:30 - 8:20</b>	See Exam Handout	See Exam Handout	<b>Lab Exam 1. 3/19 (Wed night) 6:30-8:30 PM</b>
Week 9 3/31-4/4	<b>Lab 7: Bioinformatics</b>	Pages 10-11, Ch. 20 See handout.	Pages 8-10, Ch. 20 See handout.	Handout on our website.
Week 10 4/7-11	<b>Lab 8: Anatomy.</b>	820-827, 844-848, 853-864, 867-878, 884-894, 922-936, 967-973.	880-893, 875-876, 899- 905, 915-924, 954-969, 1,000-1,006	Pages 143-148, 181-190.
Week 11 4/14-18	<b>Lab 9: Invertebrates I.</b>	630-655, 831-833, 1011-1012.	654-682, 852-860, 1064-1065	Pages 149-166.
Week 12 4/21-25	<b>Lab 10: Invertebrates II.</b>	656-669.	683-697	Pages 167-179
Week 13 4/28-5/2	<b>Lab 11 Reproduction and Development.</b>	968-973 (+ figs. on p 974,975),987-1001.	1000-1007 (+ figs. on p 1008, 1009), 1024- 1035	Pages 191-202.
Week 14 5/5-9	Lecture: Review & Q & A <b>NO LAB, LAB EXAM 2 During lab time.</b>	See Exam Handout		<b>Lab Exam II during your lab.</b>