

**Lecturers:** Dr. James Baxter and Dr. Carol Gilson. There may be additional guest lecturers. Dr. Baxter's contact information is [myxa2@comcast.net](mailto:myxa2@comcast.net) and phone is 510-642-4110. Dr. Gilson's contact information is [cgilson@samuelmerritt.edu](mailto:cgilson@samuelmerritt.edu) and phone is 510-642-4110. Erol Kepkep will handle administrative issues (enrollment/switches) at [bio1a-enrollment@berkeley.edu](mailto:bio1a-enrollment@berkeley.edu).

**Lecture:** Lectures are Monday and Wednesday from 10:30-12 PM in **100 Lewis**. Please read the assigned readings in Campbell and the lab manual **prior** to the lecture.

**Graduate Student Instructors:** GSI's will instruct the laboratory and discussion sections. Messages may be left in your GSI's mailbox in 2084 VLSB. Their office hours have yet to be arranged. You will be provided a list of GSI office hours on Monday 6/29.

### TIME TABLE

1. Lectures begin Monday 6/22 and end on Monday 8/10. Lectures are held in **100 Lewis** on Monday and Wednesday from 10:30-12 PM. Lecture handouts will be available for downloading on the Biology 1A website (Friday noon for the Monday lecture, Tuesday noon for the Wednesday lecture). Black lightning note taking service is authorized although they may not offer the service. See their website. <http://blln.securesites.com/> for details. Webcasts of previous semesters are available at <http://webcast.berkeley.edu/courses/>.
2. **Adding:** All students wanting to add must submit the Enrollment Request Form available from our Summer 2008 website, and must be on the official TeleBears enrollment waiting list by **3 PM on Monday June 22<sup>nd</sup>**. You will be contacted via email or phone. If you do not hear from us, you can assume you are not enrolled.
3. **Changing sections:** You can submit a Section Change Request Form available from our Summer 2009 website. Directions are on our website. On the form, you can indicate the section times you can attend in order of your preference. Students enrolled in both 1A and 1AL must switch BOTH lab and discussion sections, not just one. You may submit the form any time, but any requests received after 3PM on Monday June 22<sup>nd</sup> may not be considered.
4. **LABORATORY** begins Wednesday June 24<sup>th</sup> and will cover Safety and Equipment Use. See pages 1-28 of your Laboratory Manual that you must read before your lab. If you cannot attend, email [bio1alab@berkeley.edu](mailto:bio1alab@berkeley.edu) or talk to the staff in 2098 VLSB **beforehand**. required (i.e. medical documentation for illness). **Pre-labs are due at the START of lab.**
5. Lab exams are scheduled as follows: First lab exam, **July 20<sup>th</sup> (10:30-12 PM)**. Room(s) to be arranged. Your second lab exam will be held on your assigned lab day, within your three-hour period (**August 10<sup>th</sup> or 11<sup>th</sup>**). There are no make-up lab exams, nor may you switch from your assigned section. Exam handouts will be given for each exam.
6. 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.
7. **Attendance:** You must attend your assigned lab. If you do not attend the first two weeks your spot will be given away. It may be possible to reschedule lab, but only when absolutely necessary (sleeping in and missing your lab does not count). You cannot reschedule your second lab exam. To reschedule you must e-mail [bio1alab@berkeley.edu](mailto:bio1alab@berkeley.edu). **NOTE: When papers, etc. are returned it is your responsibility to pick them up. If you do not attend, then you must contact your GSI and get the papers from them, at their convenience.**
8. **bSpace:** Announcements and some handouts will be available on bSpace along with your scores on individual assignments. For difficulties accessing bSpace or for access (non-UCB students) email Erol at [bio1a-enrollment@berkeley.edu](mailto:bio1a-enrollment@berkeley.edu) for access.

9. Changes to this syllabus and grading criteria may occur. You will be informed of any such changes.

**LAB MATERIALS**

**Required textbook:** Campbell, Biology, 7<sup>th</sup> edition or the 8<sup>th</sup> edition.

**Required Lab Manual:** The required lab manual (2008/2009) 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. It is actually much cheaper and faster to buy a set instead of printing them.

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

**Required Course Reader:** Handouts and images will be available on our website. The Monday lecture should be posted by the previous Friday by 12 P.M. and the Wednesday lecture by 12 P.M. on Tuesday.

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

Laboratory & Discussion as follows:		
Lab Exam 1, 7/20 in the 10:30 lecture (covering labs 1 - 7)		100 pts
Lab Exam 2, 8/10 or 11 (covering labs 8 - 12)		84 pts
Lab Quizzes - 5 points given at the start of each lab (12 labs x 5 pts). The lowest score will be dropped, hence 11 X 5.		55 pts

Total: 239 points

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 the points that you **EARN** (not needs or wants). Guaranteed grades are:

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

However, in the event that some examinations have been unusually difficult, 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 GRADES:** Lab exam 2 and quiz scores will be adjusted as necessary so that no section has an advantage (higher quiz/lab exam 2 scores) nor has a disadvantage (lower quiz/lab exam 2 scores). They will be adjusted based upon lab exam 1 scores and will be adjusted to the easiest of the sections. More information about this is available on our website. After making the adjustments the total points is then determined for each student. We look at 90% of the total points and see what % of the students have earned a guaranteed A+/A/A-. If there are fewer than 22% we then typically lower the number of points required for some form of an A (since it is the lower end it would be an A-). We continue to do that for each guaranteed grade range, B, C and D. If need be, we lower the total number of points necessary for a particular grade. We usually give out about 20% A’s, 30% B’s, 20% C’s, 10% D’s and 10% F’s. We then go back and make the exact cut-offs for each form of a grade (eg. C+, C, C-). We then look to at each student's score to determine if they are within a few points of the next grade. If so, we then determine if they should be “bumped” to the next grade. The most important criteria for this “bump” in the summer are attendance and participation in lecture/lab/discussion and pre-lab & worksheet averages. On average about 50% of the students get bumped, 50% do not. Note that the class is curved, if necessary. But we would rather that you strive to earn the guaranteed percentages, instead of us having to lower the percentage cutoffs for given grades.

**I GRADES:** In keeping with University regulations, the grade of "incomplete" is assigned to a student only if the 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 in Biology 1A must complete the work before the first day of classes in the Spring Semester of 2010, without including the course for units on the study list, or the I lapses to an F.

**CHEATING:** The rare student found cheating 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! Students repeating the class must do the work this semester and cannot turn in work from previous semesters. **DON'T CHEAT, it isn't worth it because we will take the time to submit the case to the student conduct office.**

**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. Review them. Read the assigned reading before lecture. Attending lecture does not replace reading the lab manual and the textbook.
2. Keep up with the material. Seek help if needed.
3. Clarify topics you do not understand by
  - a. Coming to office hours and asking questions.
  - b. Forming a study group.
  - c. Doing the reading.
  - d. Emailing questions. This is probably the least effective method.
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 STUDY RESOURCES**

Please take advantage of these resources. Additional opportunities such as reviews may also be held. Further information is available in the lab manual and the Exam Reader.

**Office Hours—attend them. They typically are very helpful.**

**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.

**Reading:** It helps to read before the lab lecture. The lab lecture does not replace reading.

**Tutors (fee):** Formal tutoring (variable fees) from individuals may be available. Contact Mike.

**URLs:** <http://mcb.berkeley.edu/courses/bio1a>, <http://webcast.berkeley.edu/courses/>

## **Lab Times and Room Locations (in VLSB)**

Lab #	Time		email	Room	UGSI
101	M/W 2:00– 5:00 PM	Lew, Helen	<a href="mailto:h_lew@yahoo.com">h_lew@yahoo.com</a>	2095	
102	M/W 2:00– 5:00 PM	Xu, Tom	<a href="mailto:tomxu07@gmail.com">tomxu07@gmail.com</a>	2097	
103	M/W 6:30– 9:30 PM	Takata, Steve	<a href="mailto:steve_takata@yahoo.com">steve_takata@yahoo.com</a>	2095	
104	M/W 6:30– 9:30 PM	An, Dahlia	<a href="mailto:a.dahlia@gmail.com">a.dahlia@gmail.com</a>	2097	
105	T/Th 9:00–12:00 PM	Lew, Helen	<a href="mailto:h_lew@yahoo.com">h_lew@yahoo.com</a>	2095	
106	T/Th 9:00–12:00 PM	Manahan, Genevieve	<a href="mailto:gmanahan@berkeley.edu">gmanahan@berkeley.edu</a>	2097	
107	T/Th 2:00– 5:00 PM	Takata, Steve	<a href="mailto:s_takata@yahoo.com">s_takata@yahoo.com</a>	2095	
108	T/Th 2:00– 5:00 PM	An, Dahlia	<a href="mailto:a.dahlia@gmail.com">a.dahlia@gmail.com</a>	2097	

**Note: You must read the assigned reading in the lab manual and also the assigned reading in Campbell. Lab lecture does not replace reading the lab manual. You can use either the 7<sup>th</sup> or 8<sup>th</sup> edition of Campbell but you can only use the 2008/2009 edition of the lab manual.**

<i>Date</i>	<i>Lect #</i>	<i>Lecture Topic</i>	<i>Campbell 7<sup>th</sup> ed.</i>	<i>Campbell 8<sup>th</sup> ed.</i>	<i>Reading Lab Manual</i>
6/22	1	First Lecture introduction.	No Reading.		No lab.
6/24	2	<b>Lab 1: Safety, &amp; Equipment, Use.</b>	Ch. 1, 534-536, 86-89, 296-298	Ch. 1, 556-570, 86-89, 308-310.	<b>Pages 1-28.</b>
6/29	3	<b>Lab 2: Ligation &amp; Cells</b>	Ch. 6., 384-386, 392-394, 396-398, 348	Ch. 6., 396-400, 405-409, 561-562	Pages 29-42, 60-86. (*focus on pages 60-64)
7/1	4	<b>Lab 3: Transform, Enzymes.</b>	Ch. 5 (except 5.3) & Ch. 8.	Ch. 5 (except 5.3) & Ch. 8.	Pages *60-86, 87-106. (*focus on pages 65-72)
7/6	5	<b>Lab 4: Colony Isolation, Complementation I, Photosynthesis.</b>	Ch. 10.	Ch. 10.	Pages 60-86*, 107-114**, 115-129. (*focus on pages 73-74, ** focus on pages 107-109)
7/8	6	<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 60-86*, 107-114**, 131-140. (*focus on pages 75-80, ** focus on pages 110-112)
7/13	7	<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 *60-86, 107-114**, 141-153. (*focus on pages 81-84, p. 112-114)
7/15	8	<b>Lab 7: Bioinformatics.</b>	Pages 10-11, Ch. 20 See handout.	Pages 8-10, Ch. 20 See handout.	<b>Handout</b>
7/20		<b>Lab Exam 1 = 7/20. 10:30-12.</b>	See handout.	See handout.	
7/22	9	<b>Lab 8: Intro to dissections/Anatomy.</b>	820-827, 844-848, 853-864, 867-878, 884-894, 922-936, 964-973.	852-862, 875-876, 880-893, 898-905, 915-924, 954-969, 997-1,006	Pages 155-160, 193-202.
7/27	10	<b>Lab 9: Invertebrates I.</b>	626-627, 820-827, 630-655, 1011-1012.	654-656, 852-862, 658-682, 1064-1065	Pages 161-178.
7/29	11	<b>Lab 10: Invertebrates II.</b>	656-669.	683-697	Pages 179-191
8/3	12	<b>Lab 11: Chordate Diversity.</b>	Ch. 34	Ch. 34	Pages 43-59.
8/5	13	<b>Lab 12: Reproduction and Development.</b>	Ch. 46, 987-1001.	Ch. 46, 1021-1035	Pages 203-214.
8/10	14	<i>Q &amp; A (if you want)</i>			<b>Lab Exam II –during your lab. During your 3 hour lab on Monday or Tuesday.</b>