

Lecturer: Dr. Gian Garriga from the Department of MCB. Dr. Garriga's office hours are 9-10 AM on Mondays and Tuesdays in 174 Koshland Hall. Office hours and location may be revised. Office hours and location may be revised.

Lecture: Lectures are Monday from 5-6:30 PM in 1 Pimentel. In addition they will be simulcast in 10 Evans and 60 Evans (if needed) and **webcast**. Neither Webcast quality, nor their availability can be guaranteed. Read the assigned readings, both in Campbell and the lab manual, prior to the lab lecture. Lecture begins Monday August 31 and labs begin Tuesday September 1. The first lab will cover Safety and Equipment. The various files will be available via bCourses (or purchase from Replica Copy). A completed pre-lab will be due at the start of each lab, including the first lab. A 3 point quiz will be given at the start of each lab, including the first lab. COME PREPARED.

Course Coordinator: Mike Meighan. 642-4110, 2088 VLSB, e-mail is {mmeighan@berkeley.edu}. For scheduled office hours please see bCourses. I am also available 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 instruct the laboratory sections. A GSI will be available in the GSI office; 2084 VLSB on Monday from 2-4 PM and typically one hour before the start of each lab. Messages may be left in your GSI's mailbox in 2084 VLSB.

GSI Office Hours: M 2-4, T 8:³⁰-9:³⁰, 1-2, 5:³⁰-6:³⁰, W 1-2, 4-6:³⁰, Th. 8:³⁰-9:³⁰, 1-2, 5:³⁰-6:³⁰ PM, F 1-2. (may change, see bCourses).

TIME TABLE

Drop deadline is September 4. The deadline to change grading option is October 30.

1. **LABORATORY:** Lecture begins Monday August 31 and labs begin Tuesday September 1. The first lab will cover Safety and Equipment. The various files will be available via bCourses (or purchase from Replica Copy). No note taking service is authorized. The course is webcast. Neither the quality, nor their availability is guaranteed.
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. bCourses will be used frequently, check it!
3. **ADDING: Some lab sections have space. See and use TeleBears.** For more information click under enrollment information on our URL: <http://mcb.berkeley.edu/courses/bio1a/>.
4. **Attendance:** You must attend your scheduled lab. However it may be possible to reschedule, a particular lab during the same week (but only if absolutely necessary, see "Reschedule lab" #6).
5. **SWITCHING LAB (Permanent Switch):** On bCourses click on "Click Here to Switch Lab Sections" for a link to a page with instructions on how to switch lab or submit a lab switch request form. You need to switch sections via TeleBears (Sunday 8/30 midnight deadline).

6. **Emergency Reschedule of a lab:** You must attend your assigned lab. As such avoid conflicts (exams, trips). If current conflicts exist, then request a permanent switch.

If an unavoidable or unexpected conflict or illness should occur (that directly interferes with your lab), it **may** be possible to reschedule your lab for that week. Rescheduling will only be approved **when absolutely necessary**, the scheduled conflict or illness is verifiable and unavoidable, and we have space to make the switch.

To reschedule you may either check with the staff in 2083B VLSB, or send an email to bio1alab@berkeley.edu with your full name, your enrolled lab section, reason for the rescheduling, 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 2083B VLSB to give to the GSI teaching your rescheduled lab.

7. **LABORATORY** begins Tuesday September 1 and will cover Safety and Equipment. See the syllabus for assigned reading.
8. Lab Exams: **Lab exam 1: Thursday October 8 from 7:30-9:00 PM (evening).** The exam format will be multiple-choice format (no short answer). Room(s) to be arranged. **Lab Exam 2 will be held Wednesday October 28 from 8-10 PM. Lab exam 3 will be held on December 3 from 8:30-10 PM.** There are no make-up lab exams. Exam handouts will be given for each exam. 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. **Assignments, exams: When papers are returned it is your responsibility to pick them up.**

LAB MATERIALS

Course Material Fee: There is a \$50 course materials fee that will be billed via CARS.

Required textbook: Campbell Biology, 10th edition. The textbook store has a substantial discount on the book. You need Mastering Biology for Biology 1A for Fall 2015.

Required Lab Manual: Download from bCourses or purchase from Replica Copy, at 2138 Oxford. You must use the Lab Manual from Fall 2015. Some exercises will only be available on-line (Bioinformatics and the Physiology lab).

Required pre-labs and worksheets. Available on our website or at Replica Copy, at 2138 Oxford. The cost is about \$4.00.

Exam Reader: An exam reader with exams from past semesters is available at Replica Copy. The cost is about \$3.00.

Required Course Notes: Handouts and images will be available on bCourses by 5 PM on the Friday preceding an upcoming Monday lecture. They are also available from purchase at Replica Copy.

GRADING PROCEDURE: Grades will be determined numerically as follows:

Laboratory

| | |
|---|----------------|
| Lab Exam 1, Th. 10/8 7:30-9:00 PM (covering labs 1 - 4) | 50 pts |
| Lab Exam 2, W 10/28 8:30- 10 PM- (covering labs 5 - 7) | 50 pts |
| Lab Exam 3, Th 12/3 8:30- 10 PM- (covering labs 8 - 10) | 50 pts |
| Lab Quizzes – start of each lab, 10 X 3 = 30, drop lowest | 27 pts |
| Total | 177 pts |

Changes to the syllabus may occur. You will be informed 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, 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 over 60% of the class **EARN** A's and B's.

LAB GRADE ADJUSTMENTS: The quiz scores will be adjusted as necessary for each section. This will insure that no section has an advantage (higher quiz scores) nor has a disadvantage (lower quiz scores). They will be adjusted based upon how the entire lab section does on lab exam 1 and lab exam 2. Points will be adjusted to lab sections such that all sections 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 Fall Semester of 2016, without including the course for units on the study list, or the I lapses to an F.

CHEATING: UC Berkeley has adopted the following Honor Code: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others". As a UCB student you pledge to adhere to this code. The rare student found cheating in the course will be reported to the University. The student will be given an F course grade. Cheating is not tolerated. This includes **ALL** work—iClicker, homework assignments, pre-labs, worksheets, quizzes, and exams! Students repeating the class must do the work this semester and cannot turn in work from previous semesters.

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. Do the reading before lecture and lab – that includes the lab manual and Campbell.
3. Clarify topics you do not understand 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 STUDY RESOURCES

The following is a partial list. Please take advantage of these resources. Additional opportunities such as faculty & graduate student reviews may also occur during the semester. Further information is available in the lab manual and the Exam Reader.

Office Hr's: Office hours are typically held in 2084 or 2088 VLSB. See bCourses for specific times. Typically additional office hours will be held prior to exams as announced.

Graduate Student Instructors Office Hr's (2084 VLSB): Usually M 2-4, Tuesday 8:30-9:30, 1-2, 5:30-6:30, Wed 1-2, 5:30-6:30, Th. 8:30-9:30, Th. 1-2 PM, F 1-2 PM. **Refer to bCourses for up to date hours.**

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).

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.

Lab Times and location:

| | Tues . | VLSB | | Wed . | VLSB | | Th . | VLSB | | Fr . | VLSB | |
|-----|-----------------------------------|------|--|-------|------|------|------|-----------------------------------|------|------|------|------|
| 213 | 9 ³⁰ -12 ³⁰ | 2113 | | 313 | 9-12 | 2113 | 413 | 9 ³⁰ -12 ³⁰ | 2113 | 513 | 9-12 | 2113 |
| 215 | 9 ³⁰ -12 ³⁰ | 2095 | | 315 | 9-12 | 2095 | 415 | 9 ³⁰ -12 ³⁰ | 2095 | 515 | 9-12 | 2095 |
| | | | | 317 | 9-12 | 2097 | 417 | 9 ³⁰ -12 ³⁰ | 2097 | 517 | 9-12 | 2097 |
| | | | | | | | | | | | | |
| 223 | 2 - 5 | 2113 | | 323 | 2-5 | 2113 | 423 | 2-5 | 2113 | 523 | 2-5 | 2113 |
| 225 | 2 - 5 | 2095 | | 325 | 2-5 | 2095 | 425 | 2-5 | 2095 | 525 | 2-5 | 2095 |
| 227 | 2 - 5 | 2097 | | 327 | 2-5 | 2097 | 427 | 2-5 | 2097 | | | |
| | | | | | | | | | | | | |
| 235 | 6 ³⁰ - 9 ³⁰ | 2095 | | | | | | | | | | |
| 237 | 6 ³⁰ - 9 ³⁰ | 2097 | | | | | | | | | | |

Faculty evaluations. Your input is important and valuable. Ten minutes of the last lecture on November 16th will be set aside for you to complete the evaluations.

Reading Assignments are on Page 5

| Date | Lecture Topic | Campbell, 10th ed. | Lab Manual (Fall 2015) |
|---------------------|--|---|--|
| Week 1 8/31-9/4 | Lab 1 Lecture: Safety, Equipment. Watch webcast from Spring 2014. | | Pages 1-28. |
| 9/4 | Drop Deadline. | | |
| Week 2 9/7 | HOLIDAY | | No Lab Lecture, No lab. |
| Week 3 9/14-18 | Lab 2: Cells, <i>Vibrio</i> isolation. | Ch. 6, 26.3-4, 27.1, 28.1-2. Ciliates 600-01, Green alga & Amoebozoans 603-605. | Pages 29-42, 43-56* (focus on 43-46). |
| Week 4 9/21-25 | Lab 3: Enzymes, Microbiology-<i>Vibrio</i> streaking. | Ch. 5.2 ; Ch. 8.4 | Pages 57-76, 43-56* (focus on 46). |
| 9/26 | Deadline to change NP/P to grade. | | |
| Week 5 9/28-10/2 | Lab 4: Photosynthesis and <i>Vibrio</i> streaking, | Ch. 10 | Pages 77-92, 43-56* (focus on 46). |
| | Oct. 4 review request 6-9 PM, | | |
| Week 6 10/5-9 | Lab 5: Genetics & Mol. Biol. I, Complementation I, and PCR. | Ch 12.1 & 2, & Ch. 13 and Ch. 20.1. | Pages 101-110, 43-56*, 93-100**, (*focus on page 47-48, focus on pages 93-95) |
| Th 10/8 | Lab Exam 1: labs 1-4 = 50 pts. | Thursday 7:30-9 PM | |
| Week 7 10/12-16 | Lab 6: GMB. II, Complementation II, PCR analysis and DNA electrophoresis. | TBA | Pages 111-124, 43-56*, 93-100**. (*focus on pages 48-51, ** p. 96-98) |
| Week 8 10/19-23 | Lab 7: Bioinformatics and Complementation III. | TBA | Pages 125-128 + update on bCourses, 43-56 51-56, 93-100*, (*focus pages 51-56, 99-100) |
| Week 9 10/26 | Lab 8: Anatomy. | TBA | Pages 129-148 |
| Wed 10/28 | Lab Exam 2: labs 5-7 = 50 pts. (plus all of <i>Vibrio</i>) | Wednesday 8-10 PM | |
| 10/30 | Deadline to change to P/NP. | | |
| Week 10 11/2-6 | Lab 9: Human Genetics and Sensory Systems. | Figure 20.14 , 50.1 , 50.3-4 | Download from bCourses. |
| Week 11 11/9-13 | HOLIDAY | | No Lab Lecture, No lab. |
| Week 12 11/16-20 | Lab 10 Reproduction and Development plus 10 minutes for evaluations. | TBA | Pages 169-180 |
| Week 12 11/23-27 | HOLIDAY | | No Lab Lecture, No lab. |
| Week 13 11/30 | Review | | Pages 149-160 |
| Thurs. 12/3 | Lab Exam 3: labs 8-10 = 50 pts. | Thursday 8:30-10 PM | |