

Biology 206L

Cellular & Organismic Biology II Laboratory – Organs & Organisms

Spring 2015 meeting days/times:

Section 1: Tuesday 2:30-5:20 PM, Henry Lab 3

Instructor: Dr Mike Dohm, **Office:** Henry Hall, room 6; **Phone:** 808-739-8543

Office hours: Thursday 9:00 – 11:50AM; Other times may be possible, but by appointment only.

Special Attention: Laboratory safety policies as established by the Environmental Safety Office must be obeyed at all times during lab class: (1) No food or drink; (2) You must wear closed toes shoes; (3) You must wear a lab coat; (4) students are required to know location of MSDS and other lab safety equipment. Additional rules of conduct apply in the lab, which will be provided to you on our first meeting. Failure to comply with these rules will result in loss of points or depending on the infraction, you will be asked to leave the classroom. If you do not wear proper attire on Exam days, you will not be permitted to take the exam and will receive a failing grade for that task. Please respect the rules and do not make this an issue for us all.

Course prerequisites: Concurrent enrollment in BI308. Required courses: BI205/205L and concurrent registration in BI206.

Required textbook & reading: Pearsons Laboratory Manual for BI 206 Labs *Symbiosis*. 2011. The Pearson Custom Library for the Biological Sciences, Pearson Learning Solutions, Boston, MA Your course lab manual will be made available to you via our course website at: <http://www.letgen.org/chaminade> – login details will be provided.

Other required material: Students are required to obtain a laboratory coat, now available at the Division of Natural Sciences & Mathematics office for \$5. Safety goggles will be provided. A notebook (cloth bound) and pen are also required materials students must bring to each lab meeting. A 3-ring binder for course handouts is recommended, but not required.

Course description: BI 206L is a one semester credit introductory biological science laboratory for those students enrolled in BI 206 - Cellular and Organismic Biology II. Organs & Organisms. This laboratory course is for students desiring advanced studies in the sciences, e.g., biology, forensic science, medicine, dentistry, environmental health, and other areas.

Program outcome: This course will introduce students to the foundational concepts of organismal biology. This course is designed to fulfill the following goals:

1. To present principal methods and techniques coupled with appropriate instruments utilized in the study of cells and organisms;
2. To allow investigation and problem solving by manipulative and experimental methodology including preparation of written laboratory reports;
3. To examine applications of principles and concepts in lecture,
4. To work collaboratively in order to accomplish a common goal, i.e., lab experiment; and
5. To learn structure and function of cells, tissues, and organs by microscopic viewing, preserved specimens, and dissection.

Student learning outcomes: Students will be expected to demonstrate an understanding of

1. Apply the Scientific Method to observable phenomenon;
2. Identify specific biological equipment;
3. Distinguish between quantitative and qualitative chemical tests;
4. Identify biological specimens;
5. Identify cellular and tissue types and structures;
6. Identify different techniques;
7. Identify parts of a scientific laboratory report;

8. Understand and set-up an experimental procedure;
9. Develop an appreciation of working collaboratively in groups;

Laboratory preparation, outline, and attendance:

1. Preparation of laboratory assignments listed on the lab outline and presented in lab handouts are essential in successful completion of the laboratory and safety of your fellow students.
2. Handouts in the laboratory outline refer to assignments not in the lab manual. Lab handouts will be given to students prior to the laboratory exercise and include procedures and instructions for the laboratory.
3. Attendance for the laboratory is mandatory. Laboratory absences must be documented by valid excuses, such as a physician's excuse. Grade penalties will be imposed for unexcused absences by the instructor.

Laboratory notebook:

1. All students will be required to maintain a bound laboratory notebook into which **ALL** laboratory information and data is to be entered. Lab notebooks will be checked from time to time and graded.
2. The notebooks must be bound with non-tear out pages. Spiral notebooks are unacceptable, as are three-hole folder paper.
3. The format and grading of lab notebooks are given on a separate handout. Please follow the format including a table of contents with dates, exercise title, and page numbers.
4. Notebooks will be randomly checked at 5 intervals during the semester. Each check will result in a score (maximum 10 points). Maximum total points per the semester lab notebook checks is 50.

Laboratory Reports:

1. The format and grading of laboratory reports are included in a separate handout.
2. The policy for late lab reports include: A lowering of the grade by one letter grade for every day late. Papers beyond two days late will not be accepted by the instructor barring exceptional circumstances.

Grade Determination:

1. Separate grades will be given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory.
2. The instructor does not curve grades or grade scores. Grades will be determined according to the scale: 90% or better = A; 80 – 89% = B; 70 – 79% = C; 60 – 69% = D; <60% = F
3. There will be two lab practical examinations with each consisting of Station questions. Station questions are those questions in which the student has a specified period of time to identify the organism under a microscope, relate a function of a structure, explain a graph, or relate an objective to an exam question, and will include material completed **prior** to the exam; the second exam will include material covered since the midterm exam, it is not cumulative.
4. There will be both announced and unannounced quizzes. Makeup quizzes will **not** be given. Quizzes will not be used to replace low exam grades.
5. Incomplete grades, early exams, and late exams are not given.
6. The laboratory grade will be determined in the following manner:

First Lab Exam	100 points
Second Lab Exam	100 points
Two Lab Reports, 25 pts each	50 points
Check Lab Notebook	50 points
Total =	300 points

Reminders and notices:

1. By enrolling in this class, you agree to abide by and follow all laboratory policies and related safety regulations. The lab safety regulations are established by the office of the Dean of the Division of Natural Science and Mathematics apply to EVERYONE who uses the laboratories. These rules include, but are not limited to, proper use of instrumentation, use of personal protective equipment when directed to do so, use of lab coats during lab class, the requirement that you wear closed toe shoes and refrain from any eating or drinking in the lab. Please respect laboratory policies regarding proper attire; if you do not, you will be asked to leave and will be subject to fine under Division policy.
2. In keeping with the computational demands of modern genetic analysis, access to laptops will be made available to you. This mobile computer facility was designed and is now maintained by the Division of Natural Sciences and Mathematics so that you would have access to a state-of-the art academic computing environment. Money is simply not available to repair damaged, abused, or stolen computers. Therefore, each person has the obligation to use the computers responsibly. By using these facilities, you agree to abide by the Computer Use Policies posted in the classroom. These rules include, but are not limited to
 - No food or drink
 - You agree to adhere to the account setup procedures and use restrictions
 - No alterations of software or hardware configurations
 - No use of the computers for personal or commercial activities, (except where such activities are otherwise permitted or authorized under applicable University policies.
3. Class begins each time exactly at 2:30. Please be on time. Chronic tardiness will be viewed as absence from class. Class ends at 5:20PM. ***Please do not make a habit of asking about the length of a given lab assignment – all efforts have been taken to make sure exercises can be completed in the allotted time provided we come prepared.*** If you miss or are tardy for class, please note that we will proceed without you and you will miss material; it is your responsibility to obtain missed topics from your classmates who were in attendance. Missed laboratory exercises only rarely can be made up after the fact.
4. There are multiple sections of BI206L; **please attend the section you registered for.**
5. **You are expected to attend class and to come prepared:** Read assigned and suggested readings before the material is to be presented in class; Do ask questions if you are unsure of material: I highly recommend that you ask in class or via the course forum.
6. **Lab exams cannot be made up – do not miss Lab Exams.** If unexcused absences occur on quiz days, quizzes may be made up but at reduction of 1 full grade and cannot be taken past one week after the assigned quiz date. Late submission of
7. **Return of graded material will generally be within 5-7 class days after you take the graded assignment.**
8. **Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor.** Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. Please refer any questions to the Dean of Natural Sciences and Mathematics.
9. **You may not record by camera or video or audio recording device any lecture or other class activity without prior permission from the instructor.**
10. **I encourage you to bring and use your laptops and tablets in class.** However, use of these devices is conditional -- nonacademic activity during class hours is disruptive to the class and everyone around. Mute the sound and avoid "low-battery" emergencies -- electrical outlets are generally not available for student use during class hours.
11. Chaminade University recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct will NOT be tolerated at Chaminade. If you have been the victim of

sexual misconduct, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, I must report the matter to the Title IX Coordinator. **Should you want to report to a confidential source you may contact the following:**

- Counseling Center (Dr. June Yasuhara; phone 808-735-4845).
- Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role (Fr. George Cerniglia, Rector; phone 808-739-8399 or Campus Ministry; 808-735-4774).

12. **Chaminade University abides by all aspects of the Family Educational Rights and Privacy Act (FERPA).** FERPA is a Federal law that protects the privacy of student education records. Details of Chaminade's implementation of FERPA are available beginning on page 12 in your 2014 - 2015 Chaminade University Student Handbook and Academic Planner.
13. Chaminade University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential (**Americans with Disabilities Act**). **If you have a disability which may impact your performance, attendance, or grades in this course and require accommodations, you must first must obtain written documentation of the need for accommodations from the Chaminade University Counseling Center** (Dr. June Yasuhara; phone 808-735-4845) as soon as possible in order for the instructor to plan accordingly. Failure to provide written documentation will prevent your instructor from making the necessary accommodations. Please refer any questions to the Dean of Students and review the procedures at http://www.chaminade.edu/student_life/sss/counseling_services.php.
14. **You are also expected to have read and to abide by the “Student Rules of Conduct” (p. 25 - 29) 2014 - 2015 Chaminade University’s Student Handbook and Academic Planner.** The handbook is available from the Bookstore or online at http://www.chaminade.edu/student_life/handbook.php. Please note standards of academic honesty expected of you. If you are unsure what your responsibilities are, please ask and I will be happy to help you or get you contact information if I cannot help.

Quiz and Exam Schedule*, subject to change by instructor

Week 1 – Jan 13	Week 9 – Mar 10 Quiz03
Week 2 – Jan 20	Week 10 – Mar 17
Week 3 – Jan 27 Quiz01	Week 11 – Spring Break
Week 4 – Feb 3	Week 12 – Mar 31
Week 5 – Feb 10 Quiz02	Week 13 – Apr 7 Quiz04
Week 6 – Feb 17	Week 14 – Apr 14
Week 7 – Feb 24 1 st Exam	Week 15 – Apr 21 Quiz05
Week 8 – Mar 3	Week 16 – Apr 28 2 nd Exam

*Lab Report dates will be announced in class, but generally can be expected around week 5 (1st Report) and week 13 (2nd Report).