

BIMM 121- Laboratory in Microbiology - *Pandemic edition*

Course Syllabus*

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Please include BIMM121 your full name, ID, and IA name in all emails to Dr. Pirino

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Course Time as in the Schedule of Classes

Lecture: Tuesdays & Thursdays, 9:30 AM-10:50 AM via Zoom

Lab: Tuesdays & Thursdays, 3:00 PM-5:50 PM

Course Description

This course is designed to illustrate processes central to microbiology and familiarize students with skills required for handling, working with, and characterizing different microorganisms. Emphasis will be on microbial ecology, microbial genetics, microbial physiology, and microbial evolution. Through inquiry-based experiments, students will be able to appreciate microbes' involvement in health, industry, the environment, and everyday life. Throughout the course, students will receive training in working with live microbes at the bench as well as scientific reasoning, scientific writing, and analyzing their genomes via bioinformatics.

Textbook

There is no textbook/lab manual for the course. Readings will be provided when necessary.

Course Website/Canvas

This course is on Canvas (<https://coursefinder.ucsd.edu>) and should automatically appear on your Canvas account as soon as you register for the class. We will use Canvas to post information on experiments, homework, quizzes, schedules, readings and practice material, experimental data, report guidelines, etc. This website will also be used to post any announcements that pertain to the entire class. Please check the site regularly and update yourself on the information provided.

Lectures & Lab in this online emergency course

1. Because of the current pandemic and the fact that many of you may be in different time zone, all the lectures, which will be provided *synchronously*, will be recorded, and will also be available asynchronously on Canvas.
2. The majority of the labs will be provided *asynchronously*, and will be available on Canvas. During the first hour of these asynchronous labs, instructors will be available via Chat to troubleshoot any issue students may have to access the material.
3. Some labs, such as the ones that require students to work at the command line (see lab schedule) or work on the lab proposal, will be provided synchronously to help students troubleshoot in real time through the software, and an asynchronous recording will be available on Canvas.
4. Even though students may watch lectures and lab asynchronously, they are still required to submit assignments by the deadline. No exceptions!

Course Point Breakdown	Points	%
Class Participation (<i>Discussion Forum on Canvas</i>)	20	10
Homework/Worksheet & Quizzes	80	40
Lab Proposal & Microbiology Paper	100	50
Total Points for the course	200	100

Grading Scale

Letter Grade	%	Letter Grade	%
A	(93.0-100%)		
A-	(90.0 - 92.99%)	B+	(88.5 - 89.99%)
B	(83.0 - 88.4%)	B-	(80.0 - 82.99%)
C+	(78.5 - 79.99%)	C	(73.0 - 78.4%)
C-	(70.0 - 72.99%)	D	(60.0 - 69.99%)
F	(X < 60%)		

Final grades are calculated on a straight scale and they are not curved. IAs will alternate grading of homework/quizzes among the lab sections. This grading system allows fairness among the lab sections and usually excludes the need of normalizing final grades among lab sections.

Regrade Requests:

All regrade requests should be submitted in writing *within 5 days* of receiving the graded material.

Reading for the lab*Reading ahead of the course:*

I will assume that you all have a basic understanding of, and reasonably good memory of the following from lower division biology or from high school. If you don't remember, you may wish to read ahead:

- Scientific Method: brush up on this concept – there are several online sites, including Wikipedia, that do a good job of explaining dependent, independent, and controlled variables as well as the difference between a control experiment and a regular experiment.
- Definition of microbes and an understanding of the different groups of microbes (e.g. bacteria, fungi, viruses). You are not required to memorize all the names – you should, however, have at least a basic idea as to the types of organisms included in each category
- Eukaryotic vs. prokaryotic cells differences
- Metabolic pathways
- Metric system

Reading during the course:

If readings are assigned, please read before lecture and/or lab.

As often as possible, I will give you questions/problems to think about that should apply the concepts you learned in class. Thinking about and attempting to answer these questions and participating in any classroom/lab discussion is the best practice you can have for lab reports and practicing science in general.

Exams

There will NOT be exams throughout the course. Instead, students will complete a Lab Proposal and a final Microbiology paper (see Lab Schedule)

Homework / Quizzes/ Lab report Deadlines and Submission:

1. All homework/quizzes (see Lab Schedule) will be submitted as electronic copies to Canvas, which will automatically submit them to Turnitin.com. **All homework assignments submitted after the deadline will receive a penalty. Any submission within the first hour past the deadline is automatically late and loses 20% of the points. Any homework submitted after the first hour past the deadline and within 24 hours from the deadline will lose 50% of the points. No homework will be accepted after the second calendar day.** This policy apply to any assignment in the course

2. It is your responsibility to verify that the submission has been successful. Do not procrastinate, since unforeseen circumstances may occur (computer problems, illness, etc.). Check the deadline of the homework submission and make sure you adhere to it. *Students agree that by taking this course all required papers would be subject to review for textual similarity by Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers; student names will never be stored in the Turnitin database. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.*

Class Participation in this online emergency course

This quarter BIMM 121 is an emergency course, created online to stop the spread of COVID- 19 in our community. Thus, this course will not be able to reproduce what you would have experienced in the lab. We will use a combination of videos as well as simulations to mimic and show you what you would have experienced in the ‘in person’ lab. To create community, we will use the Discussion forum and Chat on Canvas so everybody can share her/his opinions, pertinent information regarding subjects covered in class, questions on lecture, labs, lab reports, etc. If you a question about a topic, please post it on the Discussion Forum on Canvas. Other students may wonder the same and the answers will provide an instant clarification to the entire class without misunderstandings. This discussion forum should be a tool for everyone to participate: the IAs and myself will post, answer and ask questions, and students will do the same. Students who participate **actively** to the class’ discussion page receive points that will count toward the final grade. More details will be provided.

Regrade Requests:

All regrade requests should be submitted in writing within 5 days of receiving the graded material. Please check the regrade policy on Canvas for more information.

Statement on Academic Integrity: Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. The consequences of being caught cheating can be severe. Information can be found here: <http://www.ucsd.edu/current-students/academics/academic-integrity/index.html>

Students are expected to do their own work, as outlined in the UCSD Policy on Integrity of Scholarship: <http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2>

Academic misconduct will NOT be tolerated. Students suspected of Academic Integrity (AI) violations on exams and/or homework will be invited to Zoom follow-up meetings where they will be asked to (in real time, on video) justify their answers (before the graded exams or solutions are released). If the instructor isn't convinced during the meeting, or the student refuses to participate, they're submitted for AI violations. Cheaters will receive a failing grade on the

exam or assignment, and/or in the course. They may also be suspended from UCSD pursuant to University guidelines.

All class material, such as syllabus, readings, homework, scientific articles, lecture slides, etc. are copyrighted and cannot be posted to websites and/or distributed without instructor's approval for any reason. Students that sell and distribute course materials not only violates the student code of conduct, but also violates UC's 2005 policy on the Use of Recordings of Course Presentations: <http://copyright.universityofcalifornia.edu/resources/recorded-presentations.html> .

Academic misconduct includes but is not limited to:

1. **Cheating**, such as using "crib notes", copying answers from another student during the assignments, or forge assignments.
2. **Plagiarism**, such as using the writings or ideas of another person, either in whole or in part, without proper attribution to the author or the source. Copying anything from any source is plagiarism if the source is not clearly cited. Plagiarism is stealing someone else's ideas and presenting them as your own.
3. **Collusion**, such as engaging in unauthorized collaboration on exams or assignments, completing for another student any part or the whole of an exam or assignment, or procuring, providing or accepting materials that contain questions or answers to an exam or assignment to be given at a subsequent time.

Electronic Devices: Textbooks, notes, cell phones, pagers, laptop computers, smartwatches, and all other electronic devices must be off and stored out of sight during exams. The use of these devices during an exam is considered an act of academic dishonesty and will be dealt with accordingly. Also, during class and lab students cannot surf the web, use their cell phones, or do anything not related to the class, unless otherwise instructed.

Student Responsibility:

Students are expected to complete the course in compliance with the instructor's standards. No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort; for example:

- No student shall knowingly procure, provide, or accept any unauthorized material that contains questions or answers to any examination or assignment to be given at a subsequent time.
- No student shall complete, in part or in total, any examination, or assignment for another person.
- No student shall knowingly allow any examination or assignment to be completed, in part or in total, for himself or herself by another person.
- No student shall plagiarize or copy the work of another person or internet sources and submit it as his or her own work.

- **If any work is plagiarized from that of another student, both students will be reported to the Office of Academic Integrity, even if one of the students has graduated already. Remember that most graduate schools check the undergraduate records for any indications of dishonesty before awarding a degree.**
- No student shall alter/forge graded class assignments or examinations and then resubmit them for regrading.
- No student shall submit substantially the same material in more than one course without prior authorization.

Please sign the online pledge to UCSD academic integrity through the following link by Monday of week 1: <https://academicintegrity.ucsd.edu/forms/form-pledge.html>

The link is also available through Canvas, under the academic integrity on the Canvas menu (on the left of your screen). Click on “Academic integrity”, open the URL, from the menu on the home page (across the top) click on “Form”, scroll down, then click on “Take the Pledge”. After completing the pledge, you will receive a confirmation email. Please forward it to your IA.

Statement on Office for Students with Disabilities (OSD): To receive accommodation, students must present or email their “Authorization for Accommodation” (AFA) form provided by the Office for Students with Disabilities (OSD) to the instructor. Considering that students will complete assignments from home, no extra time will be given.

* tentative.