# BIMM 120 - Microbiology- *Pandemic edition*

# Course Syllabus*

Spring 2020 – Lectures, Tuesdays & Thursdays, 12:30PM-1:50 PM via Zoom.

**Instructor:** Giorgia Pirino, Ph.D. Email: gpirino@ucsd.edu
*Please include BIMM120, your full name, ID, and IA name in all emails to Dr. Pirino.*

**Instructional Assistants:**
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**Discussion Sections/Office Hours - Time & IA - as in the Schedule of Classes**
Discussion A01: Wednesday, 12:00 PM-12:30 PM
Discussion A02: Wednesday, 1:00 PM-1:50 PM
Discussion A03: Wednesday, 4:00 PM-4:50 PM
Discussion A04: Wednesdays, 5:00 PM-5:50 PM
Discussion A05: Wednesdays, 6:00 PM-6:50 PM
Discussion A06: Wednesdays, 7:00 PM-7:50 PM
*Discussion Sections will start in week 2.*

**COURSE DESCRIPTION:** This is an introductory course in general microbiology designed for Biology majors. The overall themes of this course are: 1) microbial biology, biochemistry and genetics 2) microbial evolution and diversity, 3) interactions of microorganisms with humans and their environment. **Prerequisites:** BLD1, BILD 3, BIBC 100 or BIBC 102, and BIMM 100. Due to the current pandemic, all lectures and discussion sections will be available via Zoom *synchronously,* recorded, and recordings can be found on Canvas > My Media asynchronously.

**Learning goals:** At the end of the course students will be able to appreciate microbial diversity, understand microbial genetics, microbial metabolism. microbial evolution, how microbes regulate genes, and how microbes interact with the environment.

**Preparation and expectations:** To do well in BIMM 120, students should have a strong background in general biology and organic chemistry. It is assumed that students know basic biochemistry (the major types of molecules found in cells, cell metabolism), as well as basic (introductory) cell biology, molecular biology, genetics, and the importance of scientific method.

Although this is not a lab course, and no lab skills are required, it is expected that students know how a general biology research lab functions and how the scientific method is applied to research, based on information acquired in previous courses and scientific publications. Students should review this material before the start of the quarter or during the first week. We will not specifically cover these principles in class because students should already know this material from their prerequisites. Students are responsible for any remedial learning required to understand the material presented in this course. Due to the current pandemic, the assignments of the course will focus more on data analysis.

**Discussion Sections**: You are encouraged to take advantage of discussion sections; they represent a great opportunity to ask for clarification and discuss course content. IAs will review class material, answer questions, review for homework and exam, and provide quizzes/problem sets.

**Textbook:** "Microbiology, an evolving science, 4th edition" Foster & Slonczewski is highly recommended. If you have the 3rd edition, it is **ok**. Just make sure that the readings correspond, since I will refer to the 4th edition during lectures. If you are using a different textbook, it is perfectly fine, but make sure that the course topics are covered. Scientific articles to complement the textbook readings will be provided before the lectures.
You may choose one of the following options:
- Purchase access to the eBook for $75 at http://books.wwnorton.com/books/webad-detail-editions.aspx?id=4294992872
- Purchase/rent the textbook via Amazon or other websites/bookstores.

**Final grade**: Your final grade will be determined by the following assignments:

- Participation: 15 % of final grade (30 points) divided as followed:
    - Quizzes/problem sets assigned at discussion 5% (10 points).
    - Discussion via Piazza 10% (20 points; 2 points per week).
- Homework: 35% of final grade (70 points)
- Take - Home Exam: 50 % of final grade (100 points):

Total points available: 200 points (100%)

**Grading scale**: Please assume this class is NOT curved and use the raw score (rounded up to nearest 0.01%) that you receive to calculate your grades.
For example, <60/100 is a F; <70/100 is a D; 70/100 is a 70 or C-; 73/100 is a 73 or C; 78.5/100 is a 78.5 or a C+; 80/100 is an 80 or B-; 83/100 is an 83 or a B; 88.5/100 is an 88.5 or B+; 90/100 is a 90 or A-; 93/100 is a 93 or A.

UCSD Academic Senate and the Division have made some adjustments to deadlines and grading options for Spring 2020 only (guidelines may changed).
- The add deadline (when students can add without your permission) is extended to the end of Week 3
- The drop deadline, without a W, is extended to the end of Week 5.
- The undergraduate drop deadline, with a W, is extended to the end of Week 7.

*Students will be able to take the course P/NP and still count it towards Biology major and minor requirements. They will be able to change their grading option through the end of week 10. A letter grade of C- or better translates to a P for a student who elects the P/NP option. This option has been granted to provide maximum flexibility, and give students as much time as possible to make this choice. Students may contact their college advising team and/or our SIS staff advisors via the Virtual Advising Center for advice (vac.ucsd.edu)*

**Exam:** We will have 1 take - home exam administered in final week. The take - home exam, which will be accessible to students on June 8th, 2020, at 11:30AM, will consist in questions related to a scientific article (provided with the exam) and questions on course material. Students will have 24 hours to complete and submit the exam through Canvas > Assignments for credit. More details will be provided during the course. Students will practice for it during lecture and discussion.
*Review Section for Final Exam: Thursday, June 4, from 12:30PM to 1:50PM via Zoom.*

**Make-up Exam:** *There is no make-up exam*. No exceptions! *The final take - home exam cannot be rescheduled or its grade substituted with a different assignment for any reason. In case of a dare emergency, please contact the instructor within 24 hours. After review by the instructor, the student may take a different exam as a substitution; most likely it will consist in an oral exam administered via Zoom.*

**Class Participation in an Inclusive Learning Environment during an emergency online course:** This quarter BIMM 120 is an emergency course, created online to stop the spread of COVID- 19 in our community. Thus, it will not be able to reproduce the experience that you would have had in person. To create community, we will use a discussion forum like Piazza so everybody can share her/his opinions, pertinent information regarding subjects covered in class, from things that students have read, and examples from their experience as well as incorporate responses of their peers.

*Piazza page:* Our Piazza page should work as a message board: students may post/ask/answer questions on that page. Students who have a specific question about the course/course material are encourage to post it on the Piazza page. 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. *I suggest you to*

 

*download the Piazza app on your phone so you can be more engaged and receive participation points easily. To enroll into Piazza: piazza.com/ucsd/spring2020/bimm120*

For instance, these are the dates to post and receive credit per each week:
Week 1: a student must post between 12:30PM of Tuesday, March 31 and 11:59PM of Saturday, April 4 to receive credit for week 1.
Week 2: a student must post between 0:00AM of Sunday, April 5, and 11:59PM of Saturday, April 11 to receive credit for week 2.
Week 3: a student must post between 0:00AM of Sunday, April 12, and 11:59PM of Saturday, April 18 to receive credit for week 3.
Week 4: a student must post between 0:00AM of Sunday, April 19, and 11:59PM of Saturday, April 25 to receive credit for week 4.
Week 5: a student must post between 0:00AM of Sunday, April 26, and 11:59PM of Saturday, May 2 to receive credit for week 5.
Week 6: a student must post between 0:00AM of Sunday, May 3, and 11:59PM of Saturday, May 9 to receive credit for week 6.
Week 7: a student must post between 0:00AM of Sunday, May 10, and 11:59PM of Saturday, May 16 to receive credit for week 7.
Week 8: a student must post between 0:00AM of Sunday, May 17, and 11:59PM of Saturday, May 23 to receive credit for week 8.
Week 9: a student must post between 0:00AM of Sunday, May 24, and 11:59PM of Saturday, May 30 to receive credit for week 9.
Week 10: a student must post between 0:00AM of Sunday, May 31, and 11:59PM of Saturday, June 6 to receive credit for week 10.
If you don't participate for one week, you can still receive participation points for all the other weeks.

**Quizzes/problem sets**: during discussion sections, whether the students attend them synchronously or asynchronously, IAs will review the course material, review scientific articles, and provide questions/problem sets that students will complete on their own and turn into Canvas > Assignments by the day before of the following discussion. Since all discussion sections fall on Wednesdays, students will turn the assignments by 11:59PM of the Tuesday before the following discussion (for instance, if IAs assign a quiz/problem set on Wednesday of week 5, students must complete and submit the assignment by 11:59PM Tuesday of week 6 to receive credit). **All quizzes/problem sets 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 submission submitted after the first hour past the deadline and by 9:00AM of the next day will lose 50% of the points. No homework will be accepted after 9:00AM of the next day past the deadline.**

**Homework/survey**: Students enrolled in BIMM120 will complete homework/surveys assigned one week in advance by the instructor. Homework will be completed via the course website on Canvas (more information will be provided later). The answers will be used for class discussion

 

and are an excellent practice for the exam. **All quizzes/problem sets 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 submission submitted after the first hour past the deadline and by 9:00AM of the next day will lose 50% of the points. No homework will be accepted after 9:00AM of the next day past the deadline.**

**Regrade Requests:** All regrade requests should be submitted in writing (by email to Dr. Pirino or IAs) *within 5 days* of receiving the graded material (aka, the day that scores are posted on Canvas). More details will be provided.

**Scientific articles:** We will read several articles throughout the course and they are fair game for the exam and homework, unless otherwise instructed . As you read the scientific papers, focus on the big picture and look for the following points:

1. What were the main goals this paper? What was/were the hypothesis/es?
2. What experiments were performed to test the hypothesis/es?
3. Did the results confirm or refute the hypothesis/es?
4. What do the figures/table communicate?
5. What were the main conclusions of the paper?

If there is something that you do not understand, skip it temporarily, you can return to it later.

**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 have 24 hours to complete the final take-home exam, no extra time will be given to students .

**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, 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.

*tentative.