

Summer 2024 Biol121L Syllabus

Environmental Phage Laboratory Biol 121L

Summer 2024

COURSE SYLLABUS

Instructor

Jimmy Shanks, Ph.D.

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Office hours: by appointment

Teaching Assistant

Ginger Holmer

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Prep Lab Staff

Alison Willis and Quin Rizal

Office: 230 Thimann Labs

Course Format:

Class meeting time: Monday, Wednesday, and Friday 10am – 1pm; 215 Thimann Labs

Important: In addition to the regular class meeting time, students are required to come into lab outside of class time to set up and maintain experiments; this might include some evening & weekends.

Attendance

Each unexcused absence from lab will result in a deduction of 5% of the total points for the course. Absences must be approved by Prof. Shanks to be excused and to incur no deduction. To have an absence considered for approval as an excused absence, you must

do the following: 1) contact Prof. Shanks within 24 hours of absence AND 2) provide valid written documentation to Prof. Shanks as soon as possible (e.g. copy of family death certificate, police report, etc.) NO EXCEPTIONS. Tardiness to lab will result in a loss of 1% of the grade per time late; habitual tardiness will also result in significant deductions in the participation score for the class.

Course Grading

97.0 -- 100% = A+

93.0 -- 96.9% = A

90.0 -- 92.9% = A-

87.0 -- 89.9% = B+

83.0 -- 86.9% = B

80.0 -- 82.9% = B-

77.0 -- 79.9% = C+

70.0 -- 76.9% = C

60.0 -- 69.9% = D

< 60.0% = F

Bacteriophage reports (two, 10% each): 20%

Regeimbal et al report: 10%

Written research proposal: 25%

Peer reviews: 5%

Proposal presentation: 10%

Notebook (graded twice): 20%

Solutions quiz: 10%

Late Submission of Papers

Any assignment submitted late will have points deducted according to the following:
Paper submitted late same day as due (until midnight): **5%** deduction of total points

Paper submitted the day after due: **10%** deduction of total points per day late (including weekends). After assignments are late five days the assignment has zero value and will not be accepted or graded. All grades for assignments including quizzes are final 5 days after the grades are posted for that assignment, no exceptions. If you have questions about your graded assignments please consult us before the 5 days have passed.

Exceptions to these deductions will be made only for documented excuses approved by Prof. Shanks.

Academic Integrity

All assignments you submit must be entirely your own work. This means you and other members of the lab are not allowed to submit copies of the same figures or tables even if your data are similar. You are not allowed to collaborate with another student when actually writing your papers, unless explicitly allowed by the instructor. You may not use any other student's paper or any other source as a template for your own. You may not fabricate data under any circumstances, and you may not use anyone else's data. Any sharing of data or papers is allowed only with prior approval of the instructor. Sources of information used in your paper must be cited appropriately. In general, everything you turn in must be stated in your own words; changing just a few words in a sentence from a book, journal article, or internet site is not saying it in your own words -- that constitutes plagiarism. To protect you from plagiarism, and to ensure that plagiarism doesn't occur, you will be submitting your reports to Turnitin.com. If you break any of these rules, you will automatically receive a grade of 0 for the assignment, will fail the course, and will be subject to disciplinary action by your college provost. If you allow another student to copy your work or help another student write his/her paper, you will also be violating the University's academic integrity policy and will be subject to disciplinary action. These penalties apply even if you say you did not understand the rules, *so be sure to ask if you have any questions about this policy.*

Note: you will not receive credit for ideas that are quoted directly from any source, even if you place the passage in quotation marks and cite the source. This is not committing plagiarism; however, long direct quotes are used only when a passage is highly unique or profound, or there is no other possible way to say the same thing. In general, if you are not able to state a concept in your own words, you don't understand it, and therefore cannot receive credit for that passage. However, if the quote is put in quotation marks and cited correctly, no *disciplinary* action will apply.

DRC:

"UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. Student with a disability who require accommodations to achieve equal access in this course, will be expected to submit their Accommodation Authorization Letter from the Disability Resource Center (DRC) to the course instructor,

preferably within the first two weeks of the quarter. The course instructor will discuss ways to ensure full participation in the course. Students who may benefit from learning more about DRC services should contact DRC by phone at [831-459-2089](tel:831-459-2089) or by email at drc@ucsc.edu.”

CARE:

The CARE office is a confidential space available to students where they can discuss issues of dating violence, sexual assault, and stalking. The CARE program provides support, advocacy, resources and violence prevention education to the UC Santa Cruz community. They respond to the needs of students, staff, faculty and non-affiliates impacted by stalking, dating/domestic violence and sexual assault by providing free and confidential services. CARE also works collaboratively with students, faculty and staff to educate the campus community about the vital role that each of us has in preventing violence and creating social justice locally and globally. (<https://care.ucsc.edu/who-we-are/about-care.html>).

Title IX:

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If course participants have experienced sexual harassment or sexual violence, they can receive confidential support and advocacy at the Campus Advocacy Resources & Education (CARE) Office by calling (831) 502-2273. In addition, Counseling & Psychological Services (CAPS) will provide confidential, counseling support, (831) 459-2628. Participants can also report gender discrimination directly to the University’s Title IX Office, (831) 459-2462. Reports to law enforcement can be made to UCPD, (831) 459-2231 ext. 1. For emergencies call 911.

All faculty and Teaching Assistants will under the [UC Policy on Sexual Violence and Sexual Harassment](#)[Links to an external site.](#)[Links to an external site.](#) inform the Title IX Office should they become aware that any student has experienced sexual violence or sexual harassment.

Please note the Drop and Withdraw Deadlines for the quarter:

(<https://registrar.ucsc.edu/calendar/academiccalendar.html>). The assignment of an *Incomplete* grading option requires a student to be in passing standing, and a Medical withdrawal can only be pursued through your College (for more information see <https://registrar.ucsc.edu/navigator/index.html>). Both are reserved for extremely rare circumstances.

Lab Attire:

Long pants and closed toed shoes are ALWAYS required for the lab, no skirts, short dresses, shorts, sandals or slippers will be allowed in the lab. You will be provided a lab coat for the duration of the class. **If you arrive dressed inappropriately you will be asked to acquire the proper clothing before being allowed to participate in lab.**

Lab schedule:

| Week | Day/Date | Instruction/Plan | Due |
|------|------------------|---|---|
| 1 | Mon June 24th | Introduction to the Course Discuss Syllabus Lab Familiarity Regeimbal et al Solutions Quiz Expectations Research Proposal Guidelines Set up biological samples in 7H9 media | |
| | Wed June 26th | Bacteriophage isolation: ID Samples Containing Phage - Spot Test | Proposal Presentations Determined Regeimbal et al provided |
| | Fri June 28th | Bacteriophage Purification | Solutions Quiz in 15 minutes |
| 2 | Mon July 1st | Bacteriophage Purification | Proposal Ideas Due at the End of Lab |
| | Wed | Bacteriophage Purification | Regeimbal et al provided at Midnight on C |

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| | July 3rd | | Isolation Report Provided |
| | Fri July 5th | Bacteriophage Purification | |
| 3 | Mon July 8th | Bacteriophage Purification Draft of Research Proposal Due so I can Review it for Our Meeting Wednesday | Isolation Report By Midnight on |
| | Wed July 10th | Preparation of High Titer Bacteriophage Lysates Proposal Draft Meetings During Lab | Lab Notebook C notebooks with |
| | Fri July 12th | Preparation of High Titer Bacteriophage Lysates | Proposal Drafts and Significance Protocol) Due fo |
| 4 | Mon July 15th | Preparation of High Titer Bacteriophage Lysates | Purification Report Provided |
| | Wed July 17th | Cryo-EM | Peer Reviews and midnight on Car |
| | Fri July 19th | DNA Purification | Purification Report midnight on Car |
| 5 | Mon July 22nd | DNA Digestion | |
| | Wed | Gel Electrophoresis | |

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| | July 24th | | |
| | Fri July 26th | Proposal Presentations in room TBD | Lab Notebook C notebooks with |
| | Sun July 28th | Written Research Proposals Due by Midnight on Canvas | |