

CHEM-361 Physical Biochemistry (Spring 2020)

Instructor: Rui Sun
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Teaching Assistant: Kazuumi Fujioka
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Lectures: Tuesday/Thursday 9:00 - 10:15 AM at Bilger 335

Study Session: Wednesday 5:30 – 7:20 PM at Bilger 335

Office Hours: Tuesday 2:00 – 4:00 PM at Bilger 245B or by appointment

TA Office Hours: Wednesday 2:00 - 4:00 PM at Bilger 216 or by appointment

Textbook: *Physical Chemistry: Principles and Applications in Biological Sciences (5th Edition)* (Available at the University Bookstore)

Calculator: You must have a calculator capable of natural logarithms and exponentials. Cell phones or any devices with transmitting or receiving functions are not permitted. Graphing calculator is not necessary but permitted.

Description: This 3-credit-hour course is to cover three fundamental topics in physical chemistry: Thermodynamics, Chemical Kinetics, and Quantum Chemistry.

Grading Scheme: The learning outcomes will be assessed through homework and exams, with some bonus points from homework and attendance.

Method of Assessment	Points	Tentative Date
Homework	25	Almost Weekly
Midterm Exam 1	20	Feb 26 th
Midterm Exam 2	20	Apr 8 th
Final Exam	35	TBA
Attendance	8	Random
Other Bonuses	4	TBA

1. Homework (25 pts)

Homework will usually be assigned almost weekly before Tuesday, and **due by the end of the class on next Thursday**. You can either use a pen and paper to write down your homework or type them out on a computer, but please make sure to submit a hard copy before the deadline. Each homework is worth 2.5 points.

You will lose 1/3 of the points if you submit the homework within 24 hours past the deadline. You will lose 2/3 of the points if you submit the homework between 24 to 48 hours past the deadline. You will score a zero if the homework has not been turned in within 48 hours after the deadline.

There won't be homework assignment on the first week of the semester or the two midterm-weeks. You can discuss the homework with other students; however, homework needs to be finished and submitted independently. You are responsible for understanding everything that you write down on the homework and it plays an essential role in understanding the material.

2. Exams (75 pts)

There will be two midterm exams (20 points each) and one final exam (35 points). Exam questions will be based on the textbook reading assignment, the lecture content, and the homework. Exam questions will be easier than the questions on the homework. Both midterms and final will be closed-book exams and the scratch paper will be provided.

The midterms will be **two-hour long exams** that take place during the recitation time (Bilger 335, Wednesday from 5:30 to 7:30 PM). The dates of the midterms will be Feb 26th and April 8th. Please note that the dates are tentative and depend on the progress that we make throughout the semester. You will get a notice of the midterm date at least one week ahead of time.

The final exam will be a **two-hour long exam**, time TBA. The final exam will be comprehensive, while focusing on the materials that are not covered in the two midterms.

3. Attendance (bonus 8 points)

Attendance is **highly recommended**, but not mandatory. To encourage the attendance, I will randomly choose eight dates throughout the semester to

take attendance, and each attendant will be granted 1 point as a bonus. Those dates are chosen before the semester starts.

Letter Grade:

The sum of the grades, including bonus, will be your final grade, for which a letter grade will be given according to the following scale. Please note, scores are not likely to be curved at the end of the semester at the discretion of the instructor.

Total Points	Letter Grade
100	A+
93	A
88	A-
84	B+
80	B
76	B-
72	C+
65	C
60	D+
55	D
50	D-
Less than 50	F

Study Session:

Taught by our teaching assistant, Kazuumi Fujioka, the first hour of the study session will focus on reviewing the mathematics and physics that you would need for the success in this course (if you have already forgot). The second hour of the study session will focus on practicing the problem solving.

Similar to the lecture, attendance to the recitation is **highly recommended**, but not mandatory.

Policies:

1. No cheating. You cheat, you get caught, you get an F. Plain and simple. Any attempt of cheating and/or plagiarism is regarded as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

2. Makeup exams. Any absence of an examination will result in a grade of a zero. I cannot make accommodations for conflicting work schedules, vacation plans, or other non-emergency situations. Any medical emergency must be documented by a hand-written doctor's note by a local doctor with a physical address and phone number on the heading of the note. Unless absolutely impossible, make sure to let me know your absence ahead of time.

3. Keep track of your points. Students are responsible for keeping track of their own points. It is essential that students retain all returned assignments and course information. Any materials not collected will be destroyed by the end of the following semester.

4. Partial Credit. You will get partial credit for a reasonable attempt at each problem in both homework and exams, even if some details or the final answer are wrong or missing.

5. “C” or better. If you want to get a **BS** of Biochemistry, you need to score C or better in this class. If you want to get a **BA** of Biochemistry, you still cannot fail this class.

Special Conditions: Any student who feels s/he may need an accommodation based on the impact of a disability is invited to contact me privately. I would be happy to work with you, and the KOKUA Program (Office for Students with Disabilities) to ensure reasonable accommodations in my course. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 (voice/text) in room 013 of the Queen Lili'uokalani Center for Student Services.

Academic Honesty: It is the aim of the University to foster a spirit of complete honesty and high standard of integrity. Any attempt of cheating and plagiarism is regarded by the faculty and administration as a **most serious offense** and renders the offenders liable to serious consequences, possibly suspension.
<http://www.catalog.hawaii.edu/about-uh/campus-policies1.htm>