



CHM4411: Physical Chemistry Thermodynamics and Kinetics

Summer 2024 (May 13 – August 9)
(4 Credit Hours)

[Course Website](#)

Communication Policies:

Office Hours: Office hours for both the instructor and the TAs are posted online

Email: communication with all instructors and TAs should be sent through Canvas and should include your section number and group designation. Please ensure that your Canvas account is configured to send notifications to your preferred email address. We will make a consistent effort to respond to emails within 24 hours if sent Monday through Friday. Do not wait until the last minute to email regarding questions for an assignment, as you may not receive a response until after the deadline.

Meeting Times:

Lecture – Arch 120

Monday, Tuesday, Wednesday, Friday
3rd period (11:00 AM – 12:15 PM)

Course Materials: All course materials will be available through our course Canvas site linked above. There are no printed textbooks required for the course. That said, the material covered in this course is covered in most physical chemistry textbooks with a few listed below.

Atkins, Peter; De Paula, Julio. *Physical Chemistry* W.H. Freeman and Company
Metiu, Horia. *Physical Chemistry: Thermodynamics* Taylor and Francis
Ball, David W. *Physical Chemistry* Thomson Books

Learning Objectives

This course focuses on fundamental thermodynamic theory from a molecular standpoint and the kinetics of chemical reactions. The goal is for students to develop an understanding of these topics and communication of that knowledge.

Illness & Make-up Policies

1. If you are experiencing COVID-19 symptoms, have tested positive for COVID-19, or are otherwise sick, do not attend in-person lecture and inform your instructor that you will not be able to attend. If you arrive to class with visible signs of an active illness you will be asked to leave.
2. If you are forced to miss a lecture, you are responsible for obtaining the missed material.
3. If you are forced to miss multiple weeks, you should contact the UF Disability Resource Center (DRC)

Ethics

Students are expected to conduct themselves professionally in this course. This includes following the UF Honor Code (see below) and a complete understanding of academic integrity. Plagiarism and data fabrication will not be tolerated.

Absences and Tardiness

Excused absences are allowed in accordance with UF policy. If you are feeling ill or have received a positive test result for COVID-19, do not show up to in-person lecture and consult with your instructor on an appropriate course of actions.

Late Submission Policy

Assignments received past posted due dates will receive a late penalty of 10% per day unless the late submission is approved through prior communication with course instructors. If something arises that prevents you from completing the assignment on time, contact the course instructors right away to request an extension.

Regrade policy

If you believe a mistake has been made on the grading, please notify the professor and your TA through Canvas within 1 week of receiving the grade. We will look at it and evaluate on a case-by-case basis.

University Policy on Accommodating Students with Disabilities

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

Course Grade Computation

Your letter grade will be derived from weighting the following components of your performance in the class:

	Percentage Points
ID Sigs	20%
Activities	60%
Quizzes	20%
Total	100%

Your course grade will be determined from your total course performance percentage as follows:

100% -	94.0%	A
93.9% -	90.0%	A-
89.9% -	87.0%	B+
86.9% -	84.0%	B
83.9% -	80.0%	B-
79.9% -	77.0%	C+
76.9% -	74.0%	C
73.9% -	70.0%	C-
69.9% -	60.0%	D
59.9% -	0%	E

All grades will be posted in the Canvas GradeBook, as available. There is no “curving” grades for the class.

UF's

Grading

Policy:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

University Policy on Academic Misconduct

This class will operate under the policies of the student honor code which can be found at: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>. The students, instructor, and TAs are honor-bound to comply with the Honors Pledge: **We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.** You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to

collaborate on course tasks. Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>.

Semester Schedule

Week	Dates	Special Dates	Topic
1	12-May - 18-May		Kinetic Molecular Theory
2	19-May - 25-May		Equations of State
3	26-May - 1-Jun	Holiday Mon 5/27	Laws of Thermodynamics
4	2-Jun - 8-Jun		State Functions
5	9-Jun - 15-Jun		Equilibria
6	16-Jun - 22-Jun	Holiday Wed 6/19	Phenomenological Kinetics
7	23-Jun - 29-Jun	Summer Break	None
8	30-Jun - 6-Jul	Holiday Thurs 7/4	Mechanisms
9	7-Jul - 13-Jul		Reaction Dynamics
10	14-Jul - 20-Jul		Statistical Mechanics
11	21-Jul - 27-Jul		TBD
12	28-Jul - 3-Aug		TBD
13	4-Aug - 10-Aug		TBD
14	11-Aug - 17-Aug	No Classes	

Disclaimer for this document

Note: All aspects of course operations, including grading, course policy and policy execution, are subject to change at the discretion of the course instructor.

If you have further questions, please contact me. Have a great semester!

**Sincerely,
Adam Mansell**

