

CHEM 165: Introduction to Physical Chemistry, Credit Hours 3.0

Meeting Time: TR 11:40-12:55 pm, **Classroom:** Innovation Hall E430

Instructor: James Zahardis, PhD

Email: James.Zahardis@uvm.edu

Office: Innovation E329

Office Hours: MWF 12:00-2:00 pm

Textbook: *Physical Chemistry for the Chemical Sciences* by Chang and Thoman

ISBN: 1891389696

Pre-requisites

CHEM 032 or CHEM 036 or CHEM 052

MATH 020 or MATH 022 or MATH 023

PHYS 011 or PHYS 031 or PHYS 051

Course Description

This course serves as an introduction to physical chemistry, providing an overview of quantum mechanics, spectroscopy, kinetic theory of gases and thermodynamics. You will learn about the fundamental laws that dictate the properties of atoms and molecules that you have been introduced to in prior courses. Broadly speaking, the learning objectives of this course are twos

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discuss mitigation

Grading

The following grading scheme is approximate and may be modified by the instructor during the semester:

40% Homework

60% Exams: 2 Midterms and Final (approximately 20% each)

Grading Criteria/Policies

Grade components: I will grade exams and homework assignments based on your application of principles and methods of physical chemistry to solving problems, so showing all work is essential. Specific restrictions on assignments or exams will be provided at the time this material is distributed.

Late policy: Graded assignments that are turned in late are subject to a loss of points, which will be detailed when the assignment is distributed.

Grading scheme: I will apply the standard grading scale but reserve the right to rescale the grades at the end of the course.

Attendance Policy and Classroom Environment Expectations

General Attendance, Participation Policies, and Expectations

Attendance and participation in this course are expected and necessary for developing a good understanding of the material. In this class, we will work together to develop a learning community that is inclusive and respectful. As a learning community we will seek to encourage and appreciate expressions of different ideas, opinions, and beliefs in the spirit of Our Common Ground. Meaningful and constructive dialogue is encouraged in this class. This requires mutual respect, willingness to listen, and open-mindedness to opposing points of view. Respect for individual differences and alternative viewpoints will be maintained at all times in this class. Conduct that substantially or repeatedly disrupts the ability of faculty and instructors to teach and the ability of students to engage may result in my asking a student to temporarily leave the classroom. See Undergraduate Catalogue - Classroom Code of Conduct (p. 443-444).

Excused Absence Policies

If you intend on missing class to observe a religious holiday or to participate in inter-collegiate athletics, please submit the dates of your absence to me in writing by the end of the second week of classes. If you miss due to medical reason or because of an emergency, please inform me as soon as possible. In all the above cases, we will work together to develop a plan to make up work that you missed.

Course Evaluation

There will be an evaluation of the course at the end of the semester, which is anonymous and confidential. I appreciate all feedback and will use it to improve the course.

Intellectual Property Statement

Students are prohibited from publicly sharing or selling academic materials that they did not author. Violations will be handled under UVM's Intellectual Property policy and Code of Academic Integrity.

Other Resources

Diversity, Equity, and Inclusion Resources

The Division of Diversity, Equity, and Inclusion believes excellence should be inclusive of the entire University of Vermont (UVM) community and is steadfastly committed to this belief. Every day, our Division strives to make our work accessible, affirming, and action-oriented to help ensure excellence is inclusive of everyone.

<https://www.uvm.edu/diversity>

UVM Prism Center

Academic Integrity

Offenses against the Code of Academic Integrity are deemed serious and insult the integrity of the entire academic community. Any suspected violations of the code are taken very seriously and will be forwarded to the Center for Student Ethics and Standards for further investigation. Violations of the Code of Academic Integrity—including any inappropriate collaboration, collusion, cheating, corroboration, plagiarism, or any other related offense—will be fully investigated according to the rules set by the UVM Academic Integrity Office and may

General statement regarding potential changes during the semester:

<http://catalogue.uvm.edu/>

The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

Intellectual Property Statement/Prohibition on Sharing Academic Materials

Students are prohibited from publicly sharing or selling academic materials that they did not author (for example: class syllabus, outlines or class presentations authored by the professor, practice questions, text from the textbook or other copyrighted class materials, etc.); and students are prohibited from sharing assessments (for example homework or a take-home examination). Violations will be

Important UVM Policies

Academic Integrity:

The Academic Integrity policy addresses plagiarism, fabrication, collusion, and cheating.