

---

# SYLLABUS

**CHMP-341**

**Fall 2231**

## PHYSICAL CHEMISTRY I

---

### PROFESSOR

Dr. Gerald A. Takacs  
Office: 08-2258  
Phone: 475-2047 (RIT)  
E-mail: [gatsch@rit.edu](mailto:gatsch@rit.edu)

OFFICE HOURS: 11 am- 12 noon TUESDAYS and THURSDAYS

---

### TEXTBOOKS

- "Physical Chemistry" by Robert J. Silbey, Robert A. Alberty, George A. Papadantonakis, Mounqi G. Bawandi, John Wiley & Sons, Inc., 5th Ed.
- "Physical Chemistry Students Solution Manual" by Robert J. Silbey, Robert A. Alberty, Mounqi G. Bawandi, George A. Papadantonakis, John Wiley & Sons, Inc. (Ed. 5).

---

### GRADING POLICIES

There will be five exams in the course. You will be notified one week before each exam.

### EXAMS

Exam 1 (25 points): In-class exam covering to the end of the "Third Law of Thermodynamics" in the Course Outline.

Exam 2 (25 points): In-class exam covering from Exam 1 material to the end of "Equilibria in Ideal Solutions" in the Course Outline.

Exam 3 (25 points): In-class exam covering from Exam 2 material to end of "Potentiometric Titrations" in the Course Outline.

Exam 4 (25 points): In-class exam covering from Exam 3 to end of "Application of Collision Theory to Chemical Kinetics" in the Course Outline.

Final Exam (50 points): In-class exam emphasizing material since Exam 4 and an ACS multiple choice exam covering all of Chemical Kinetics.

### PROBLEM SETS

Although no points are assigned for completing the Problem Sets, it is highly recommended that you work on them since they will help you do well on the exams.

The Problem Sets listed in the "Electronic Reserves" section of myCourses for Thermodynamics are from the textbook "Physical Chemistry" by Gilbert W. Castellan, Addison-Wesley Publishing Co. and for Kinetics from "Physical Chemistry" by Robert J. Silbey and Robert A. Alberty, John Wiley & Sons, Inc., 3rd Ed. with my answers to the Problem Sets:

1. Chemical Thermodynamics- Answers to Problems from Castellan textbook.
2. CHMP-441 Problem Set IV
3. Thermodynamics- Problem Set VII Answers for Questions 5-8.
4. Kinetics- Problem Sets and Answers