

Chemical Principles (260): 3 Credit hours
Intro to Quantum Chemistry (261): 1 Credit hour

Lecturer Information Prof. Eitan Geva, 2000D Chemistry eitan@umich.edu
 Dr. Elena Laricheva, 2000 Chemistry elarich@umich.edu
GSI Information: Peter Eckert zpeckert@umich.edu
 GSI Office Hours are held Ted Wiley tewiley@umich.edu
 in the SLC. Kaitlynn Wilson kaitwil@umich.edu

Lecture Sessions: Section 100 (Geva): 10:00-11:00 am MWF (1230 USB)
 Section 200 (Laricheva): 2:00-3:00 pm MWF (1230 USB)

Discussion sections:

Section	GSI	Time & location
101	Wiley	Tue 9 – 10, 1624 CHEM
102	Eckert	Fri 3 – 4, 1636 CHEM
103	Wilson	Fri 11 – 12, 1628 CHEM
104	Eckert	Fri 9 – 10, 1628 CHEM
105	Wiley	Wed 9 – 10, 1628 CHEM
201	Wiley	Wed 1 – 2, 1628 CHEM
202	Eckert	Fri 11 – 12, A863 CHEM
203	Wilson	Fri 1 – 2, A859 CHEM
204	Wilson	Thu 3 – 4, 1628 CHEM

Office hours:

Time	Day	Location	Instructor
11 – 12	Mon	SLC	Eckert
12 – 1	Mon	SLC	Eckert
10 – 11	Tue	SLC	Wiley
11 – 12	Wed	2000D Chem	Geva
3 – 4	Wed	SLC	Wiley
10 -11	Thu	SLC	Wilson
12 – 1	Fri	SLC	Wilson
3 -4	Fri	2000 Chem	Laricheva

Course Texts & Materials

You will need to possess the first three items listed below. These are the only required items for this course.

Textbook: The course will use *Principles of Modern Chemistry*, 7th edition, by David Oxtoby, H. P. Gillis, and Alan Campion, published by Brooks Cole as the primary text. You may use the 6th edition if you wish. The 7th edition has some useful updates, but differences are not essential for this course. We have a custom version that consists of two volumes, students in 261 need only purchase Volume 1, and students in 260 need both Volume 1 and Volume 2.

i>clicker[®] Remote. You are required to bring your i>clicker remote to each whole class section. These are available from the UM Computer Showcase.

Calculator: A scientific calculator is required. It should have capabilities for square roots, trig functions, logarithms and exponentiation, and exponential (scientific) notation operations. The calculator will be used on homework assignments, in class, and on exams. Programmable calculators are acceptable, but not required.

Slides. Some of the material covered in the lectures is not covered in *Principles of Modern Chemistry*. **The exams and homework assignments will be based on the material covered in the lectures and not just the material covered by the text.**

The CTools Web Site. Lecture slides, homework assignments, practice exams, answer keys, supplementary material and important announcements will be posted on CTools. You automatically have access to the 260/261 materials via CTools if you are enrolled in this course.

Course Grading & Evaluation

Exams

There will be two midterm exams of approximately 2 hours each and a 2-hour final exam. The final exam will cover the material from the entire semester, with emphasis on topics covered after the second midterm exam.

Please note the exam dates given below. Room assignments will be announced at a later date. **If you have an unavoidable conflict, contact your instructor immediately.**

Midterm Exams:	Thursday, October 10	6:00 – 8:00 pm
	Monday, November 18	6:00 – 8:00 pm
Final Exam:	Tuesday, December 17	1:30 – 3:30 pm

You may bring one 8½ by 11-inch *self-generated* hand-written or typewritten sheet (content on both sides and no photocopied material) to the first midterm examination. You may add a second sheet for the second midterm and a third sheet for the final exam. You should also bring a calculator. In addition, for each exam, you will be provided ahead of time with a list of physical constants, potentially useful equations, and a periodic table.

Alternate Midterm Exam Times. Because conflicts are often unavoidable, we will be holding alternate midterm exam times on the same day as the main exam. You must sign up to take the exam at an alternate time at least 48 hours prior to the exam day. An alternate time will be offered for the final *only* in the event that you have two finals scheduled for 1:30-3:30 pm am on December 17th.

Attendance.

Attendance in lecture is required for this course. Attendance will be monitored in two ways.

Reading quizzes. Each whole-class lecture will begin with a brief introduction to the topics of the day followed by a reading quiz administered using the i>clicker[®] Student Response System on pre-assigned

reading material. These quizzes assess your comprehension of the assigned reading for a particular session. Full credit for the reading quizzes requires correct responses.

Class Participation. The i>clicker[®] system adds will be used in throughout the lectures in order to assess understanding of concepts and practice real time problem solving skills.

Please be sure to bring your i>clicker remote to class each day so that you will be able to participate in these activities. If you forget your remote, you will *not* be allowed to hand in or email your responses. Participation with the i>clicker system in class will contribute to your final grade. The participation score does not distinguish correct or incorrect responses.

There are 15 lectures in the first section of the course (all of Chem 261). We will drop the lowest three participation/reading quiz scores from the total. That is, you may miss up to 3 classes without the absence necessarily affecting your grade.

There are 15 lectures in the second section of the course. We will drop the lowest three participation/reading quiz scores from the total. That is, you may miss up to 3 classes without the absence necessarily affecting your grade.

There are 10 lectures in the final section of the course. We will drop the lowest two participation/reading quiz scores from the total. That is, you may miss up to 2 classes without the absence necessarily affecting your grade.

If you must miss additional classes, please contact the instructors.

Problem Sets

A total of 10 problem sets will be used in calculating your final grade (4 for Chemistry 261). Working in groups on these problem sets is encouraged. However, every student must turn in a hand-written copy of each problem set. Group submissions or blatant copies will not be accepted.

Problem sets will be due by 3:00 pm on the specified dates. You may either turn them in at the beginning of one of the day's lectures or to the Chemistry 260 mailbox, located in the mailroom across from 1500 Chemistry. Please note that material in the Chemistry 260 mailbox will be retrieved promptly at 3:00 pm so any problem sets turned in to the mailbox after 3:00 pm are in danger of not being noticed and/or found. **Please identify yourself on each problem set with your name, student ID number, and the name of your GSI.**

Grades

Grades for Chem 260 will be based on a maximum of 700 points divided as follows:

10 Problem sets	160 points
Reading quizzes will comprise 10% of the course grade	70 points
i>clicker activities will comprise 10% of the course grade	70 points
Two midterm exams @ 100 points each	200 points
Final exam	200 points
Total	700 points

Grades for Chem 261 will be based on a maximum of 219 points divided as follows:

4 problem sets	76 points
Reading quizzes will comprise ~10% of the course grade	22 points
i>clicker activities will comprise ~10% of the course grade	22 points
Final exam (Midterm for 260)	100 points
Total	220 points

Letter Grades. Final grades will be based upon the absolute scale shown below. If you score the number of points indicated, then you will receive the letter grade indicated, regardless of how many other students achieve the same grade. **There is no curve.** Therefore it is to your benefit (and to your friends' benefit) that you help other students learn and they help you learn.

		Chem 260	Chem 261
Lowest A	85%	595 point	183 points
Lowest B	70%	490 points	150 points
Lowest C	60%	420 points	129 points
Lowest D	50%	350 points	108 points

The highest grades, A+, A, and A-, require *demonstrated mastery* of the material through examinations, quizzes, and homework.

Academic Integrity

All incidents of academic dishonesty will be reported to appropriate college office. Violations include, but are not limited to, turning in homework copied from a classmate or another person, bringing unallowed material to the exam, looking at a classmate's paper during an exam, submitting answers using an i>clicker registered to a classmate during class or allowing a classmate to submit answers using your i>clicker during class.

Important Administrative Information for Chemistry 260/261

Electronic Mail

You may contact your instructors by email if you have questions about anything to do with the course. We will try to respond with minimal delays.

What to Do If You Are Unexpectedly Sick, Or Otherwise Unable To Attend An Exam

If you are unable to attend an exam because of an unavoidable schedule conflict, for example a simultaneously scheduled class or a religious observance, contact your GSI as soon as possible. **If circumstances arise unexpectedly that preclude your taking an exam, please contact your GSI or instructor before the scheduled exam time.** We recognize that in an emergency situation, you may not be able to contact us in a timely way.

Cell Phone Policy

Cell phone need to be turned off during lectures and discussion sessions.

Health or Disability Concerns

All students at U of M are entitled to an accessible, accommodating, and supportive teaching and learning environment. The provision of reasonable accommodation for students with disabilities is a shared faculty and student responsibility. Students are expected to inform the instructor of their need for accommodation; the instructor and GSI are expected to make the necessary arrangements. If you have special needs, please make an appointment to speak to lecturer and your GSI at your earliest convenience. For more information on university wide services for accommodating students with special needs on campus see <http://www.umich.edu/~sswd/>