CHM2045 GENERAL CHEMISTRY I

FALL 2025 – GENERAL EDUCATION (P) – 3 CREDIT HOURS
P7: 1:55PM-2:45PM (IN-PERSON, IN CLB 130)
SECTIONS: 10610, 10611, 10612, 16030, 10631, 10632
P8: 3:00PM-3:50PM (IN-PERSON, IN CLB 130)
SECTIONS: 10633, 10634, 10635, 10636, 10637, 10657

INSTRUCTOR INFORMATION

Dr. Steven Harris

E-mail (for administrative purposes): steven.harris@chem.ufl.edu

Phone: 352-273-3717

Office: Scott Family Hall, 302A

Student Hours

All student hours will meet in **Leigh Hall 308**.

Mondays/Tuesdays: *12:50-1:40pm*

Wednesdays/Thursdays: *11:45 -12:35pm*

TEACHING ASSISTANTS

TBA

All TA hours: Held in the Chemistry Learning Center (CLC), SFH 105. These student hours will be listed on the Canvas home page. TAs should be contacted via Canvas mail, not through their UF email addresses.

Academic Resources offers free tutoring assistance. See their website for details.

COURSE INFORMATION

COURSE DESCRIPTION

CHM 2045 is the first semester of the CHM2045/CHM2045L and CHM2046/CHM2046L sequence. Stoichiometry, atomic and molecular structure, the states of matter, reaction rates and equilibria. A minimum grade of C is required to progress to CHM2046. (P)

This course is designed for students pursuing careers in the sciences or who need a more rigorous presentation of chemical concepts than is offered in an introductory course. Students

will engage in problem solving and critical thinking while applying chemical concepts. Topics will include the principles of chemistry including atomic theory, electronic structure, measurement, stoichiometry, bonding, periodicity, thermochemistry, nomenclature, solutions, and the properties of gases.

PREREQUISITES/CREDITS

3 Credits. Prerequisites: CHM 1025 with a minimum grade of C, or a passing score on Chem placement plus no attempt of CHM 1025 with grade <C or W, and MAC1147, or MAC1140 plus MAC1114, or higher MAC course with a minimum grade of C.

Corequisite: CHM2045L

Please refer to the Undergraduate Catalog for placement and prerequisite information.

COURSE FEES

Additional course fees: $1.14. Course fees are used for exam processing, printing.

COURSE DELIVERY/MEETING TIMES

- Face-to-face in CLB130 MWF
- Discussion section (Tuesday class) in-person
- Exams are at night (8:20 to 10:20 PM) during E2-3 periods (During Term Exams)

FIRST DAYS

- Log into canvas and access the course.
- Check daily for announcements and emails
- Helpful tips on study habits and study skills
- How to succeed in the course

REQUIRED & RECOMMENDED COURSE MATERIALS

TEXTBOOK

We will be using the Pearson Learning – Mastering Chemistry online homework system for regular homework this semester.

The Pearson Learning software comes with the ebook, Chemistry: A Molecular Approach, 6e by Nivaldo Tro.

There are two options for purchasing access to the Recommended Text (information below): **Option 1**: consent to have the purchase price charged to your student account following the directions posted on the course homepage in Canvas; this is a time-limited option after which

only Option 2 is available. **Option 2**: purchase an access code for the materials at the UF Bookstore (at a slightly higher price).

To opt in, navigate to: https://bsd.ufl.edu/allaccess . Click the "Opt In" tab or view the "View Eligible UF All Access Classes" button. You will be prompted to log in using Gatorlink credentials. Follow the prompt to authorize charges to your student account. The access code will then be provided. Copy the access code to your clipboard. In the Canvas course, click on the Mastering module, and provide the access code when prompted to do so. If you have any questions about the authorization process or refunds contact Included@bsd.ufl.edu.

Recommended: **(eBook only)** M. Silberberg, "Chemistry: The Molecular nature of

Matter and Change with Advanced Topics," 10th ed., McGraw-Hill, New York 2024.

Optional: Students can also acquire an older version of Silberberg (6^{th}, 7^{th}, 8^{th}, 9^{th}).

Note: OpenStax Chemistry 2e is available in pdf form on the canvas page.

All other assigned material will be available through Canvas.

CALCULATOR (REQUIRED, MUST PURCHASE)

- Required: a non-programmable/non-graphing scientific calculator capable of logarithmic functions, such as TI-36

COURSE COMMUNICATIONS

GENERAL QUESTIONS

General course questions should be posed to your instructor during student hours, or to TAs during their student hours or during discussion sessions.

PRIVATE OR GRADE-RELATED QUESTIONS

Direct these to your instructor via the mail function in Canvas. Do not email outside of Canvas to your instructor's external email. You will be asked to resend the query through Canvas. Instructor response time to email queries is <48 h during the workweek, or the first business day for emails received Friday or over the weekend.

GRADING

GRADE POLICY

- Grades are not rounded at the end of the semester.
- No extra credit available.

- A minimum grade of C is required for general education credit. Courses intended to satisfy the general education requirement cannot be taken S/U.
- Current UF grading policies for assigning grade points can be found in the catalog.

Assignments weights are as follows:

Assignment Group	Weight %
Progress Exams	60%
Final Cumulative Exam	20%
Quizzes	5%
Homework	4%
IClicker	1%
Pre-Lecture Video (videos-playposit)	6%
Discussion/Worksheets	4%
TOTAL	100%

Grade scale (note: there is no rounding to your score in Canvas):

Letter	A	A-	B+	B	B-	C+	C	D+	D	D-	E
Cutoff	90.0	86.0	83.0	80.0	77.0	73.0	69.0	66.0	63.0	60.0	< 60.0

GENERAL EDUCATION OBJECTIVES AND LEARNING OUTCOMES

Primary General Education Designation: Physical Sciences (P) (area objectives available here)

General Education Designation: Physical Sciences (P)
Natural Science courses afford students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena. **Physical Science (P)** is a sub-designation of Natural Science courses at the University of Florida. These courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically testable hypotheses derived from the study of physical

processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

Some of the specific skills we hope you will obtain in this course are listed below:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline*. Students will acquire a basic knowledge of a variety of chemistry concepts including the scientific method, stoichiometry, reaction types, thermodynamics, solutions, solids, gases, and chemical bonding. Achievement of this learning outcome will be assessed largely through assigned homework problems, and quizzes and exams.

Communication: *Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline*. Students participate in class discussions throughout the semester to reflect on pertinent topics. Achievement of this learning outcome is realized through discussion sessions and/or office hours during which students formulate questions, construct arguments, and use logical reasoning to draw reasonable conclusions.

Critical Thinking: *Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.* Students apply mathematical knowledge and reasoning to solve chemical problems. This may entail use of algebra, basic geometry, and graphical analysis. Achievement of this learning outcome is largely assessed via worksheets, assigned homework problems, and quizzes and exams.

STUDENT LEARNING OUTCOMES

Students will apply the law of conservation of matter and energy.

Students will implement rules of significant numbers to all measurements.

Students will explain the fundamental properties of matter including but not limited to atomic and electronic structure, and periodicity.

Students will apply IUPAC rules of nomenclature.

Students will predict molecular geometry and properties from bonding theories.

Students will predict and explain the products of chemical reactions (e.g. acid-base, oxidation-reduction, precipitation, dissociation).

COURSE POLICIES

ASSIGNMENT DUE DATES

All due dates for assignments are clearly posted in the course assignments of the Canvas page and reflect the most up-to-date information. Unfortunately, life happens, and you may

need extra time to complete an assignment. Let me know so we can come up with a solution. To get the most out of these assignments they need to be completed on time to keep your learning material on track.

EXAMS

- Exams are at night (8:20 to 10:20 PM) during E2-3 periods (During Term Exams)
- See the class schedule (and the registrar's website) for exam dates
- Scantron, formula sheet, and blank scratch paper are provided
- Bring pencils and eraser
- Use a non-graphing, non-programmable scientific calculator
- Turn your cell phones and other electronic devices off and keep in your bag.

PROGRESS EXAM "AVERAGE/REPLACE" POLICY

- Applies to all students.
- No dropped progress exam.
- Average/replace policy: lowest of the 3 progress exams replaced by the average of the 3 progress exams.

For example, if a student scores the following on their three progress exams: 0%, 65%, 80%, the 0% would be replaced with the average of 0, 65 and 80, which is 48%. That is a much better score than a 0.

- 30 points deducted if you bubble in the incorrect or no form code
- 5 points deducted if you are in the incorrect room or your name is on the no-match list from the scanning center

PRE-LECTURE VIDEO (PLV)

- PLVs prepare you for that day's class (may be helpful to read the appropriate pages in a chemistry book first 10-30 pages per lecture depending on material – see daily schedule)
- Time to completion: 1 to 2 hours
- 3 attempts, highest one will count
- Due before class so you are ready for class.
- 3 of the PLVs will be dropped before calculating your overall grade

DISCUSSION SESSIONS & WORKSHEETS

- Tuesday discussion class
- Paper version available under Modules, *Suggestion: do before attending discussion*
- Time to completion: 0.5 to 2 hours (does not include attendance at Wednesday class)

- Attendance and participation will earn you 5 points
- Thursday worksheet quiz on canvas will earn you 5 points (3 attempts)
- Grade discrepancies: address to your grad TA within one week
- 1 assignment will be dropped from this category

Worksheets problems are similar to exam problems and prepare you for the actual exam.

PEARSON

- HW assignments are due once per chapter
- Time to completion: 0.5 to 1 hour
- Multiple attempts
- 1 assignment dropped in this category

ICLICKER

- Keeps you engaged and active in the classroom
- Time to completion: none (in class participation)
- 3 days (about 9 points) are dropped before calculating your final iclicker grade

CANVAS QUIZZES

- Most difficult of the assignments
- Time to completion: 1 hour
- Prepares you for actual exam in a low stake, yet similar, environment as an Exam (timed and 1 attempt)
- Weekly quiz (available for 48 hours), due Friday, available Thursday
- One timed attempt

OPTIONAL CANVAS HOMEWORK

- Several optional homework assignments are available for each chapter to help you understand the material. The homework is posted in Canvas. You have multiple attempts to successfully answer the questions. These are not worth any points.
- You should also work on numerous End-of-Chapter questions (EOCs) from the text.

POSTED GRADE DISPUTES

- In writing via email to instructor
- Before the last day of classes

ATTENDANCE, EXTENSION REQUESTS

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Exam absences will be handled in accordance with official UF academic regulations. For more information, see https://catalog.ufl.edu/UGRD/academic-regulations/. See below for further clarification for two different types of situations.

(1) Conflicts with other events: acceptable reasons may include religious holidays, military obligations, special curricular requirements (e.g., attending professional conferences), or participation in official UF-sanctioned activities such as athletic competitions, etc. For more information on such absences see the official UF Policy at https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext). If you must be absent for an exam due to a documented and approved conflict known in advance, you must e-mail your instructor (within Canvas) the documentation at least one week prior to the scheduled exam and an early conflict exam will be scheduled for you.

(2) Missing an exam due to an emergency or sudden illness: If you are absent for an exam due to an unpredicted documented medical reason or family emergency, you must contact the instructor as soon as possible, and you may be asked to have your excuse verified by the Dean of Students Office (DSO). Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received from you or from the DSO on your behalf. Once your instructor is satisfied with the validity of your exam absence a make-up exam will be scheduled after a reasonable amount of time, i.e., before the end of the semester. If your documentation is deemed insufficient to excuse your absence you will receive a zero on the missed exam.

UNIVERSITY POLICIES

STUDENTS REQUIRING ACCOMMODATIONS

Students who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY HONOR POLICY

University of Florida students are bound by the Honor Pledge. On all work submitted for credit by a student, the following pledge is required or implied: "On my honor, I have neither

given nor received unauthorized aid in doing this assignment." The Student Honor Code and Conduct Code (Regulation 4.040) specifies a number of behaviors that are in violation of this code, as well as the process for reported allegations and sanctions that may be implemented. All potential violations of the code will be reported to Student Conduct and Conflict Resolution. If a student is found responsible for an Honor Code violation in this course, the instructor will enter a Grade Adjustment sanction which may be up to or including failure of the course. For additional information, see https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

IN-CLASS RECORDING

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

CAMPUS RESOURCES

1. U MATTER, WE CARE: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
2. COUNSELING AND WELLNESS CENTER: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

3. STUDENT HEALTH CARE CENTER: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
4. UNIVERSITY POLICE DEPARTMENT: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
5. UF HEALTH SHANDS EMERGENCY ROOM / TRAUMA CENTER: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.
6. GATORWELL HEALTH PROMOTION SERVICES: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

ACADEMIC RESOURCES

1. E-LEARNING TECHNICAL SUPPORT: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
2. CAREER CONNECTIONS CENTER: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
3. LIBRARY SUPPORT: Various ways to receive assistance with respect to using the libraries or finding resources.
4. TEACHING CENTER: 1317 Turlington Hall, Call 352-392-2010, or to make a private appointment: 352- 392-6420. Email contact: teaching-center@ufl.edu. General study skills and tutoring.
5. WRITING STUDIO: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
6. ACADEMIC COMPLAINTS: Office of the Ombuds; Visit the Complaint Portal webpage for more information.
7. ENROLLMENT MANAGEMENT COMPLAINTS: View the Student Complaint Procedure webpage for more information.

COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways:

- The email they receive from GatorEvals
- Their Canvas course menu under GatorEvals
- The central portal at https://my-ufl.bluera.com

Guidance on how to provide constructive feedback is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period

opens. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

GETTING HELP

For issues with or technical difficulties with Canvas, contact the UF Help Desk: https://it.ufl.edu/helpdesk/; (352)-392-HELP.

CONFLICT RESOLUTION PROCEDURE

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact Mrs. Melanie Veige, Director of General Chemistry, Director of the General Chemistry Laboratories (genchem@chemufl.edu). Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (http://www.ombuds.ufl.edu; 352-392-1308) or the Dean of Students Office (http://www.dso.ufl.edu; 352-392-1261).

DAILY COURSE SCHEDULE

No classes on these days:

Monday, Sept. 1 (Labor Day); Friday, October 17 (Homecoming); Tuesday, Nov. 11 (Veterans Day); Monday through Friday, Nov. 24-28 (Thanksgiving); Thursday and Friday, Dec. 4-5 (Reading days).

COURSE SCHEDULE:

(exam dates will not change)

Date	Topic	Before Class	Silberberg 10th Chapters*	Reading (Pgs) and Video length
Aug. 22	Chapter 1 Review https://www.jove.com/science-education/corechem	Read syllabus, familiarize yourself with canvas	Ch. 1	Pgs. 3-30 None
Aug. 25	Chapter 2 Review		Ch. 2	
Aug. 27	Ch. 3.1/2 The mole, Empirical formula		Ch. 3.1-2	Pgs. 93-102 ~30 mins
Aug. 29	Ch. 3.2/3 Empirical formula, Balancing equations	PLA Ch. 3.1-3	Ch. 3.2-3	Pgs. 103-112, ~35 mins

COURSE SCHEDULE:				
(exam dates will not change)				
Date	**Topic**	**Before Class**	**Silberberg 10th Chapters***	**Reading (Pgs) and Video length**
Sept. 1	**Labor Day Holiday**			
Sept. 3	Ch. 3.4 stoichiometry	PLA Ch. 3.4	Ch. 3.4	Pgs. 113-124, ~30 mins
Sept. 5	Ch. 4.1 solution concentrations		Ch. 4.1	Pgs. 141-151, ~30 mins
Sept. 8	Ch. 4.2/3 writing net ionic eq. and precipitation reactions	PLA Ch. 4.1-3	Ch. 4.2-3	Pgs. 152-168, ~30 mins
Sept. 10	Ch. 4.4 acid-base reactions	PLA Ch. 4.4	Ch. 4.4	Pgs. 169-174, ~30 mins
Sept. 12	Ch. 4.5/6 redox reactions	PLA Ch. 4.5/6	Ch. 4.5-6	Pgs. 176-185, ~40 mins
Sept. 15	Ch 5.1/2/3 overview of gases, P, gas laws	PLA Ch. 5.1/2/3	Ch. 5.1/2/3	Pgs. 201-217, ~35 mins
Sept. 17	Ch. 5.4 Rearrangement of ideal gas law	PLA Ch. 5.4	Ch. 5.4	Pgs. 218-226, ~30 mins
Sept. 17	**Progress Exam 1 (8:20 pm-10:20 pm)**	**Cumulative**	**Ch. 1-4**	
Sept. 19	Ch. 5.5/6 KMT and real gases	PLA Ch. 5.5/6	Ch. 5.5/6	Pgs. 227-239, ~30 mins
Sept. 22	Ch. 6.1/2 Forms of energy; enthalpy (not on exam 1)	PLA Ch.6.1/2		Pgs. 253-263, ~40 mins
Sept. 24	Ch. 6.3 Calorimetry: Constant V and const. P	PLA Ch. 6.3	Ch. 6.3	Pgs. 264-269, ~40 mins

COURSE SCHEDULE:				
(exam dates will not change)				
Date	**Topic**	**Before Class**	**Silberberg 10th Chapters***	**Reading (Pgs) and Video length**
Sept. 26	Ch. 6.4/5/6 Hess's Law, ΔH of formation	PLA Ch. 6.4/5/6	Ch. 6.5/6	Pgs. 270-279, ~45 mins
Sept. 29	Ch. 7.1 Nature of light	PLA Ch. 7.1	Ch. 7.1	Pgs. 291-303, ~25 mins
Oct. 1	Ch. 7.4 Quantum mechanical model of atom	PLA Ch. 7.4	Ch. 7.4	Pgs. 310-317, ~25 mins
Oct. 3	Ch. 8.1/2 Many electron atoms, Trends in atomic properties (atomic size, ionic size)	PLA Ch. 8.1-2	Ch. 8.1-2	Pgs. 328-339, ~25 mins
Oct. 6	Ch. 8.3/4 Other trends in atomic properties	PLA Ch. 8.3/4	Ch. 8.3-4	Pgs. 340-354, ~25 mins
Oct.8	Ch. 9.1/2/ Ionic bonding model	PLA Ch. 9.1/2	Ch. 9.1/2	Pgs. 363-372, ~30 mins
Oct.10	Ch. 9.3/4 Covalent bonding model and bond energy	PLA Ch. 9.3/4	Ch. 9.3/4	Pgs. 373-383, ~30 mins
Oct. 13	Ch. 9.5/6 Electronegativity and bond polarity	PLA Ch. 9.5/6	Ch. 9.5/6	Pgs. 384-390, ~35 mins
Oct. 15	**Progress Exam 2 (8:20 pm-10:20 pm)**	**Cumulative**	**Ch. 5-9**	**Oct. 15**
Oct. 15	Ch. 10.1 Lewis structures, resonance, formal charge	PLA Ch. 10.1	Ch. 10.1	Pgs. 399-411, ~35 mins
Oct. 17	**Homecoming**			
Oct. 20	Ch. 10.2 VSEPR	PLA Ch. 10.2	Ch. 10.2	Pgs. 412-422, ~30 mins

COURSE SCHEDULE:				
(exam dates will not change)				
Date	**Topic**	**Before Class**	**Silberberg 10th Chapters***	**Reading (Pgs) and Video length**
Oct. 22	Ch. 10.3 Molecular shape and polarity	PLA Ch. 10.3	Ch. 10.3	Pgs. 423-426, ~35 mins
Oct. 24	Ch. 11.1 Valence bond (VB) theory		Ch. 11.1	Pgs. 437-445, ~40 mins
Oct. 27	Ch. 11.2 Modes of orbital overlap	PLA Ch. 11.1/2	Ch. 11.2	Pgs. 446-448, ~30 mins
Oct. 29	Ch. 11.3 Molecular orbital theory (MO)	PLA Ch. 11.3	Ch. 11.3	Pgs. 449-460, ~40 mins
Oct. 31	Ch. 12.1/2 Physical states; phase changes, heating curve calculations	PLA Ch. 12.1/2	Ch. 12.1/2	Pgs. 467-477, ~45 mins
Nov. 3	Ch. 12.3 Intermolecular forces		Ch. 12.3	Pgs. 478-485, ~35 mins
Nov. 5	Ch. 12.3/4/5 Intermolecular forces, liquid state, and uniqueness of water	PLA Ch. 12.3/4/5	Ch. 12.3/4/5	Pgs. 486-491, ~30 mins
Nov. 7	Ch. 12.6/7 The solid state: structure, properties, and bonding	PLA Ch. 12.6	Ch. 12.6/7	Pgs. 492-506, ~30 mins
Nov. 10	Ch. 13.1/2/3 Types of solutions; why substances dissolve	PLA Ch. 13.1/2/3	Ch. 13.1/2/3	Pgs. 531-546, ~30 mins
Nov. 11	**Veteran's Day**			
Nov. 12	Ch. 13.4/5 Solubility as an equilibrium process;	PLA Ch. 13.4/5	Ch. 13.4/5	Pgs. 547-562, ~25 mins
Nov. 13	**Progress Exam 3 (8:20 pm-10:20 pm)**	**Cumulative**	**Ch. 10-12**	

COURSE SCHEDULE:				
(exam dates will not change)				
Date	**Topic**	**Before Class**	**Silberberg 10th Chapters***	**Reading (Pgs) and Video length**
Nov. 14	Ch. 13.6 Colligative Properties	PLA 13.6	Ch. 13.6	Pgs. 563-566, ~30 mins
Nov. 17	Ch. 16.1/2/3 Chemical kinetics: expressing reaction rate; rate law and its components	PLA Ch. 16.1/2/3	Ch. 16.1/2/3	Pgs. 687-702, ~45 mins
Nov. 19	Ch. 16.4 Integrated rate laws	PLA Ch. 16.4	Ch. 16.4	Pgs. 703-710, ~45 mins
Nov. 21	Ch. 16.6 Reaction mechanisms	PLA Ch. 16.6	Ch. 16.6	Pgs. 718-723 & ~30 mins &
Nov. 24	**Thanksgiving Break**			
Nov. 26	**Thanksgiving Break**			
Nov. 28	**Thanksgiving Break**			
Dec. 1	Ch. 16.5/7 Theories of chemical kinetics and catalysis	PLA Ch. 16.5/7	Ch. 16.5/7	Pgs. 711-717, 724-730, ~40 mins
Dec. 3	Final Exam Review			Dec. 3
Dec. 5	Reading Day 2			Dec. 5
Dec. 6	**Final Exam (3:00 pm-5:00 pm)**	**Cumulative**		**Dec. 6**

DISCLAIMER

Unforeseen circumstances including university closure (weather related, etc.) may necessitate a schedule adjustment. Any changes are communicated promptly to students.