CHEM1243-102 General Chemistry 2 Syllabus

Spring 2019 | MWF 8:00 - 8:50 am | Bolin 312

Instructor Information

Instructor Email Office Location & Hours

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Hours: MWF 9-11am; MW 12-2pm

General Information

Description

Second semester general chemistry introduces students to solutions, chemical thermodynamics, equilibrium, electrochemistry, and kinetics. This is the foundational course for all upper level chemistry courses and many biology courses. Critical thinking and problem solving will be emphasized.

Purpose of the Syllabus

The purpose of the syllabus is to inform you of course expectations, policies, and content. Ignorance of course policies because you did not read your syllabus will not be an acceptable excuse for not adhering to these policies. Because the syllabus is also available online, you cannot lose it. By accepting this syllabus and remaining enrolled in the course, you affirm that you understand the contents of this syllabus and that you will adhere to its requirements.

Expectations and Goals

It is expected that you will try your best to understand the material; complete all quizzes, exams, and assignments; ask for help when you need it; and seek to understand **why** you are in this class (what purpose does it serve to you, your major, and your future?). Chemistry tutors will be available throughout the semester to help you. Additionally, Khan Academy videos can be useful. It is further expected that you remember your first semester general chemistry because you will apply it in this class.

Course Materials

Required Materials

- Chemistry: The Central Science, 14th edition. Print (Pearson), Brown, LeMay, Bursten, Murphy, Woodward, and Stoltzfus
- Scientific Calculator: bring your calculator every day.
- Access to D2L: you will need to access homework and answer keys.

Strongly Recommended Materials

A molecular modeling kit.

An official ACS Study Guide for General Chemistry (full year; available from the ACS website)

Course Schedule

Week	Dates	Chapter/Topic	Quizzes/Exams
Week 1	Jan 14	Course Introduction	January 18: Quiz #1
	Jan 16	Chapter 11: Liquids and Intermolecular Forces	
	Jan 18		
Week 2	Jan 21	HOLIDAY SEPTEMBER 3	January 25: Quiz #2
	Jan 23	Chapter 11 continued	
	Jan 25		
Week 3	Jan 28	Chapter 12: Solids and Modern Materials	February 1: Quiz #3
	Jan 30		
	Feb 1		
Week 4	Feb 4	Chapter 13: Properties of Solutions	February 8: Quiz #4
	Feb 6		
	Feb 8	C7	
Week 5	Feb 11	Chapter 13 continued	February 15: EXAM 1
	Feb 13	TEN 4 " EW 1 1 4 4	
W 1.6	Feb 15	FEB 15 EXAM 1	F.1. 22. Q. * #F
Week 6	Feb 18	Chapter 14: Chemical Kinetics	February 22: Quiz #5
	Feb 20 Feb 22		
Week 7	Feb 25	Charter 14 cartinus i	Manal 1. On: #6
Week 7	Feb 25 Feb 27	Chapter 14 continued	March 1: Quiz #6
	Mar 1	Chapter 15: Chemical Equilibrium	
Week 8	Mar 4	Chapter 15. Chemical Equinorium Chapter 15 continued	March 8: Quiz #7
week o	Mar 6	Chapter 13 Continued	Watch 8. Quiz #1
	Mar 8		
Week 9	Mar 11	Chapter 15 continued	March 15: Quiz #8
WCCK 2	Mar 13	Chapter 16: Acid-Base Equilibrium	Water 13. Quiz 110
	Mar 15	-	
Week 9	Mar 18	SPRING BREAK	
	Mar 20		
	Mar 22		
Week 11	Mar 25	Chapter 16 continued	March 29: EXAM 2
	Mar 27	-	
	Mar 29	MARCH 29 EXAM 2	
Week 12	Apr 1	Chapter 17: Additional Aspects of Aqueous Equilibria	April 5: Quiz #9
	Apr 3		
	Apr 5		
Week 13	Apr 8	Chapter 17 continued	April 12: Quiz #10
	Apr 10		
	Apr 12		
Week 14	Apr 15	Chapter 19: Chemical Thermodynamics	APRIL 19 HOLIDAY BREAK NO
	Apr 17		CLASS
	Apr 19	NO CLASS	
Week 15	Apr 22	Chapter 19 continued	April 26: Quiz #11
	Apr 24		
***	Apr 26	Chapter 20: Electrochemistry)
Week 16	Apr 29	Chapter 20 continued	May 3: Quiz #12
	May 1		
XX71 15	May 3	ETALAT EWAM and add for 0.00 10.00	THE TATE TOWN A RIE (A CICLETETE E WITH A TOWN
Week 17	May 8	FINAL EXAM scheduled for 8:00-10:00am	FINAL EXAM (ACS FULL YEAR)

Exam Schedule

Date	Subject	
February 15	Exam #1: Chapters 11, 12, and 13	
March 29	March 29 Exam #2: Chapters 14, 15, and 16	
May 8	ACS FULL YEAR GENERAL CHEMISTRY EXIT EXAM	

Additional Information and Resources

Lecture Attendance Policies

- Lecture attendance is <u>required</u>. Students with excessive absences may be instructor dropped from the course with an "F".
- Students are expected to always be ON TIME.
- Students are expected to have read all required materials before walking into class.
- No make-ups will be given for missed quizzes, assignments, or exams due to lack of attendance, regardless of the reason you did not attend.
- No one is allowed to miss the final. Missing the final exam will result in an "F" for the course.
- If you need to leave class early, it must be for a good reason and you must tell me <u>before</u> class begins or you will be marked absent.
- For further information on Class Attendance policies, see the MSU <u>Student Handbook</u>, available online through the Student Conduct section of the MSU website.

Homework Assignments

- Occasional homework assignments will be handed out during class throughout the semester.
- Homework assignments will be due as specified when the assignment is handed out.
- Homework assignments are worth 5% of your grade and will help you to do better on quizzes and exams. Failure to do homework will hurt your grade.
- If you are struggling to do the homework, it is your responsibility to seek help from the instructor or the chemistry tutors.
- Looking up the answers through Google searches is called CHEATING. The 5% of points you earn by cheating will not save your grade in the class as you <u>will</u> fail the quizzes and exams.
- You are also strongly encouraged to do the problems at the end of the chapters. You will not learn the material if you do NOT do problems. If you are not motivated to do problems on your own because you truly want to know how to do things, you are likely in the wrong major.

Late Assignment Policy

No late assignments will be accepted from any student for any reason. This policy is not negotiable. All class assignments are due IN LECTURE on the dates specified. Assignments are due no later than the beginning of class.

Quiz Policies

- Quizzes will be given every Friday throughout the semester except for exam days. There will be no makeups for missed quizzes, regardless of the reason the quiz was missed.
- Each quiz will be worth 15 points and there will be a total of 12 quizzes. In total, quizzes carry the same weight in your grade as the ACS final—do you seriously want to fail 20% of the class by NOT preparing for the quizzes by studying and doing problems?
- Quizzes will be physically handed out at the very beginning of the class period. If you come late, you will NOT be allowed to take the quiz.

- Quizzes may include problems from the book (practice problems and related questions) or new questions/problems not from the book and may involve memorization or problem-solving.
- Problems will be representative of what you may expect on the exams and as such, you should treat them as exams and study for them.
- Disability students must take their quizzes under the same conditions as all other students.
- The **lowest quiz grade will be dropped** to allow for one Friday absence or one "bad day". If you miss more than one quiz, the resulting zeros will be incorporated into your quiz score.

Exam Policies

- There will be **2** (two) midterms and **1** (one) comprehensive final consisting of the ACS FULL YEAR General Chemistry Exit Exam.
- Midterms will be written (not multiple-choice) and will not be cumulative. Midterms are designed to test
 problem-solving skills. These types of exams cannot be crammed for; you must study every day to do
 well and to finish the exams in the allotted time-frame.
- Exam dates are listed on the Lecture Schedule and will not be moved. **No make-up midterms will be offered**. Students are not allowed to miss the final exam. Failure to take the final exam will result in an F in the course.
- All graduating seniors are required to take the final exam.
- Students with a <u>legitimate</u>, <u>excusable</u> reason for missing a midterm <u>will be</u> given consideration. A substitute score based on the comprehensive final will be used to replace the zero received.
 - Excusable reasons for missing an exam include: a) extreme and verifiable illness (you must provide doctor/hospital verification); b) accident or injury (must present verification); c) MSU sanctioned event (active participant and you must have provided documentation BEFORE the exam); and d) extreme family emergency (e.g., funeral the day of the exam; must show proof; immediate family only)
 - o Inexcusable reasons for missing an exam include: a) scheduling doctor/dentist, therapy or other appointments for the day/time of the exam (possible exception: court dates); b) failure to show up (this includes sleeping through the exam); c) weather (if MSU is open, then you must be here); d) congested exam schedule or overlapping classes; e) failure to obtain babysitter or caregiver; and f) work schedule conflict
- Students MUST notify me PRIOR to the **start** of the exam to receive consideration for an excused absence. **Notifying me after the fact will result in an unexcused absence.**
- Absolutely no electronic devices of any kind may be used during exams. All exams are closed book and will be monitored for cheating. If you are caught doing anything suspicious, your exam will be taken away from you and you will receive an automatic zero for the exam.
- NOTE: using old notes and exams from other students to prepare for this class is considered cheating and is not allowed. Copying your notes or exams to give to others either in or out of this class is considered cheating and is not allowed. Working in small groups for the purposes of skewing exam scores is considered collusion and is not allowed.

ACS Exit Exam

The Final Exam given during Finals Week will consist of the ACS Exit Exam for General Chemistry, which consists of **FIRST and SECOND semester general chemistry**. Students are advised to begin preparing for the ACS exam on the first day of the semester by setting up a review schedule that covers both first semester material and new material. The ACS exam is not a trivial exam and will comprise 20% of your final grade.

Course Policies Regarding Disruptive Behavior

- Do not walk through the classroom or leave once class has begun (exception: sudden illness) and NEVER
 WALK IN FRONT OF ME ONCE I HAVE BEGUN TO LECTURE
- **Do not** talk during lecture except to ask questions of the instructor
- **Do not** engage in disruptive or disrespectful behavior
- Do not play games on your electronic devices or play with your social media sites, do homework for other classes, read books or newspapers, sleep, listen to music, etc. during the lecture; pay attention to the lecture!
- **Do not** eat or drink in class unless you can do so quietly; no one needs to listen to crinkling food wrappers or worse, listen to you chew or slurp
- Disruptive students will be given one (1) verbal warning to improve their behavior. Second offenders will be asked to leave the classroom and will be referred to the Dean of Students. Abusive students will be dismissed from the class permanently.

Policy on Electronic Devices [READ THIS TWICE]

- Turn off or silence (note: vibrate is not the same as silent) all cell phones, pagers, music players/headphones, and other electronic devices that make noise or have the potential to disrupt the class *before* you walk into the room.
- NO cell phones are permitted to be out and/or in my (or your) sight in this class. If your phone is out and/or in sight and/or you are caught using it and/or it goes off during lecture, you will be asked to put it away and you will lose 1% from your final lecture grade in the course for each violation. If you want to use your phone to record the lecture, it must be placed at the front of the room and out of your reach.
- No laptops/tablets are allowed PERIOD. You need to physically take notes to learn the material.
- ALL ear buds, blue-tooth buds, and headphones to phones and music devices must be turned OFF during class AND REMOVED FROM YOUR HEAD and put in your backpacks.

University-Sponsored Teams and Organizations

All members of in-season sports teams or other campus organizations who will be missing class because of university sanctioned events **MUST** present to me a written statement on university letterhead and signed by a university official indicating those dates that will be missed because of travel or participation in the university-sponsored event. Athletics documentation must be presented to me within the **first 2 weeks** of the beginning of the semester. Other documentation (such as for theater, etc.) must be presented to me **at least one week prior** to the time that will be missed.

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities.

Students with disabilities are required to register with Disability Support Services (DSS) before classroom accommodations can be provided. The instructor then needs to be notified by the student of the nature of these accommodations. This notification will take the form of an official letter obtained from DSS by the student and given to the instructor. Every effort should be made to provide me with this documentation within the first 2 weeks of the semester to avoid losing accommodations because you failed to provide proper notification in a timely manner. It is **always** the responsibility of the student to arrange accommodations with DSS. Students with disabilities must still take their exams on the same day as the rest of the class.

University Code of Conduct

For university **standards of conduct** please refer to the MSU Student Handbook. In general, students are to attend all meetings of all classes; instructors may drop students for excessive absences, indifference, disruptive behavior, or failure to complete class assignments; students are prohibited from cheating, plagiarizing, or colluding. Students are expected to have read the Student Handbook.

Academic Dishonesty

Cheating, plagiarism, and collusion (as well as several other forms of conduct) are all strictly prohibited at MSU. Please read the MSU Student Handbook definitions of cheating, plagiarism, and collusion and MAKE SURE that you do not engage in any of these behaviors. If you are unclear on what may count as cheating, plagiarism, or collusion after reading the material below, please see the instructor or the Dean of Students.

- The term "cheating" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the university faculty or staff or another student.
- The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Plagiarism also includes the use of someone else's thoughts, words, ideas, or lines of argument in your own work without appropriate documentation (a parenthetical citation at the end and a listing in "Works Cited") whether you use that material in a quote, paraphrase, or summary. It is a theft of intellectual property and will not be tolerated, whether intentional or not.
- The term "collusion" means collaboration with another person in preparing <u>any</u> work offered for credit if that collaboration is not authorized by the faculty member in charge.

Student Honor Creed

"As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so."

"As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception. Thus, We, the Students of Midwestern State University, resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all university matters. We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original work.

We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests within each individual student. We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed."

Written and adopted by the 2002-2003 MSU Student Senate.

Safe Zones Statement

The professor considers this classroom to be a place where you will be treated with respect as a human being regardless of gender, race, ethnicity, national origin, religious affiliation, sexual orientation, political beliefs, age, or ability. Additionally, diversity of thought is appreciated and encouraged, provided you can agree to disagree. It is the professor's expectation that ALL students consider the classroom a safe environment.

Instructor Drops

According to the 2012-2013 MSU Student Handbook, p. 47, "An instructor may drop a student any time during the semester for excessive absences, for consistently failing to meet class assignments, for an indifferent attitude, or for disruptive conduct." For the purposes of this course, "consistently failing to meet class assignments" includes consistently not turning in assigned work or turning in work that consistently receives a failing grade.

Intellectual Property

By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work product to verify originality and authenticity, and for educational purposes.

Campus Carry

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's Campus Carry homepage. If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins at patrick.coggins@mwsu.edu.

Study Tips

- 1. It is **STRONGLY** recommended that you buy AND USE the ACS General Chemistry Study Guide. The study guide is for the full year, provides instruction on how to solve problems, and gives you sample ACS problems. You will see some of these problems on your quizzes.
- 2. Every day you should go home and go through your **notes**. Annotate them, expand them, mark what is difficult. Then, go to the book and review only the problem sections and add to your notes.
- 3. **DISSECT** the green box problems in the text to make sure you understand where the numbers come from and what they mean. Then, do the problems in the green boxes. Then, go to the end of the chapter and do some of those problems too. You CANNOT learn chemistry without doing a lot of problems.
- 4. **Study and review** EVERY DAY. You cannot be an A student without a lot of work.
- 5. Do your **OWN work**. You can form study groups, etc., but do your own problems. Missing points tells you what you don't know; googling answers just shows you can cheat.

Final Grade Assessment

Final grades will be calculated using the following distributions:

Midterm Exams (2 @ 100pts each) 55%
Quizzes (13 @ 15pts each; lowest dropped) 20%
Homework (Occasional; various points) 5%
ACS Exam (FULL YEAR Gen Chem) 20%

Final course grades will be based on the following scale: A (90% or higher); B (80-89.9%); C (70-79.9%); D (60-69.9%); F (59.9% or less). If you do not get 90% or better on every assignment, you should not expect to get an A in the course.