

Texas A&M International University
Chemistry 1111 301
General Chemistry I
Summer 2020

Contact Information

Instructor: Dr. Carolyn Hutchinson
Office: LBVSC 325
Phone: (956) 326-2597
E-mail: carolyn.hutchinson@tamiu.edu
Office Hours: MTWR 10:30 am – 12:00 pm; F by appointment
 Sign up for office hours via calendly.com/chemhutchinson
 Appointments for Friday office hours must be made via email
Class Schedule: MTWR 12:30 pm - 2:30 pm
Classroom: Blackboard Collaborate

Tentative Lecture Schedule*

Week	Day	Date	Chapter	Subject
1	M	June 1	1	Essential Ideas
	T	June 2	1/2	Essential Ideas/Atoms, Molecules, and Ions
	W	June 3	2	Atoms, Molecules, and Ions
	R	June 4	3	Electronic Structure and Periodic Properties
2	M	June 8	3	Electronic Structure and Periodic Properties
	T	June 9	4	Chemical Bonding & Molecular Geometry
	W	June 10	4	Chemical Bonding & Molecular Geometry
	R	June 11	5	Advanced Theories of Bonding
3	M	June 15	5	Advanced Theories of Bonding
	T	June 16	6	Composition of Substances and Solutions
	W	June 17	6	Composition of Substances and Solutions
	R	June 18	7	Stoichiometry of Chemical Reactions
4	M	June 22	7	Stoichiometry of Chemical Reactions
	T	June 23	7	Stoichiometry of Chemical Reactions
	W	June 24	8	Gases
	R	June 25	8	Gases
5	M	June 29	8/9	Gases/Thermochemistry
	T	June 30	9	Thermochemistry
	W	July 1	9	Thermochemistry
	R	July 2	--	Final Exam

* Up-to-date schedule and due dates are available on blackboard.

Course Description

General Chemistry I is a study of the fundamental theories and principles of chemistry. General Chemistry is the introductory university level course for students pursuing further study in science. A solid foundation in chemical principles is needed for continuing your studies in chemistry, biology, engineering, geology, physics, health sciences and environmental studies. This course will work to emphasize the integration of concepts and applications with factual information and to stress approaches to both conceptual and numerical problem solving. Throughout the course chemistry will be used to understand everyday phenomena, to evaluate the risks and benefits environmental issues, and be related to other disciplines.

Course co-requisite

Per the Course Catalog, you must be enrolled in CHEM 1111 to be enrolled in CHEM 1311. If you drop CHEM 1311 or CHEM 1111, you must drop the other as well.

Course pre-requisite

Successful completion of high school chemistry. Placement into Algebra or above.

Textbook/Materials

- Textbook: Chemistry: Atoms First from OpenStax, ISBN 1938168151, <https://openstax.org/details/books/chemistry-atoms-first>
- Scientific Calculator.
- Course Blackboard Website Access – <https://tamiu.blackboard.com>
- Socrative – <https://socrative.com/higher-ed> (FREE)
 - Room Code: TBA
 - Student ID: use your TAMIU net id (e.g., adamgarcia)
 - For help visit <https://help.socrative.com/en/>

Course Objectives

- Students will understand the general principles of chemistry. They will compare, contrast and predict physical & chemical properties based on atomic and molecular structure
- Student will demonstrate the ability to solve quantitative problems.
- Students will recognize the role of chemistry in real world issues.
- Students will demonstrate knowledge of common reactions and reaction mechanisms of the elements & compounds.
- Students will be prepared for subsequent high level chemistry courses.

Learning Outcomes

Upon completion of the course students will be able to:

- Discuss how scientific methods are applied in the study of science in general and chemistry in particular.
- Classify states of matter, substances and mixture, elements and compounds, chemical symbols.
- Apply knowledge of periodic table and compounds to predict shapes, trends, intermolecular bonding and nature of compounds.
- Apply chemical concepts and deduce its importance to the study of chemistry.
- Contrast the similarities and differences in chemical concepts that will be discussed.
- Solve chemical problems based on formulas, concepts introduced in class and also using fundamental principles like unit conversion.
- Communicate scientific findings, thoughts accurately and also being involved in discussions on how science and technology affects our lives daily.

Class Notes

It has been demonstrated through experience that the students who do the following, in the indicated sequence, generally obtain higher grades in the class.

1. Read the relevant chapter once lightly before attending the class (even though it may not be well understood at that point).
2. Regularly attend (and participate in) the lectures to obtain a verbal presentation of the material in a somewhat different fashion with important points emphasized.
3. Read the chapter a second time (more carefully), while simultaneously reviewing the lecture notes, and doing the assigned problems within the chapter.

The lecture notes along with the added notes you mark on them while simultaneously reading the chapter make an excellent study summary to focus on in preparing for the exams.

<http://old.chem.byu.edu/faculty/jdl/ChemTutorIII/>

<https://www.khanacademy.org/science/chemistry>

Contacting Your Instructor

The best way to reach your instructor outside of office hours is via the email on the top of this syllabus. You can expect a response within 24 hours. Outside of emergencies, emails will only be answered between 7am and 9pm M-F. Emails sent through Blackboard may take up to 1 week to respond. Students are strongly encouraged to attend office hours and tutoring sessions if they have any questions.

Grade Distribution

Grades on all assignments will be given in points. Points in all categories will be approximately equivalent.

Each category will be weighted as stated below:

Mini-Tests:	600 points (40%)
Final Exam:	200 points (20%)
Reading Quizzes:	200 points (20%)
In-Class Participation and Attendance (Socratic):	50 points (5%)
Total:	1000 points

Letter grade assignment:

A	900 – 1000 points
B	800 – 899 points
C	700 – 799 points
D	600 – 699 points
F	0 – 600 points

To be graded on the grading scale defined above, you must pass the final exam (> 130 points). Failing to meet this requirement will result in a student not to be graded by the grading scale described in the previous section. Grades in these cases are determined on an individual basis and are at the instructor's discretion. Thus, failing the final, skipping an excessive number of homework assignments or class assignments may result in a grade lower than the number of points you have accumulated would otherwise indicate.

If you feel that an error was made in the grading of homework or exams, you may request a re-grade by notifying the instructor within one week of receiving it.

Exams

There will be **no exams except for the final** in this course. There will be a **3 hour comprehensive Final Exam**. The Final exam will be composed of 80% multiple choice questions and 20% written problems, as required by COAS. In place of hourly exams, this course will have **mini-tests** at the end of each chapter. These will be 30 minutes long and will be available for **12 hours** on the Friday following the completion of the chapter. This does mean you will often have two mini-tests in the same week.

All exams and mini-tests must be taken during the scheduled window. Exams cannot be taken outside the scheduled time. There will be **NO makeup exams**. A missed exam will count as a ZERO (excluding a well-documented serious illness, requiring hospitalization). If classes are cancelled by the University on the day of a scheduled exam, then the test is automatically scheduled for the next class lecture period. For university excused absences it is the students' responsibility to notify the instructor and make arrangements in a timely fashion.

Grades will not be available until all exams or mini-tests have been graded.

Assignments

Reading Quizzes (RQ)

Reading quizzes will be given through Blackboard. They will be due by 11:59pm the Sunday following the start of the chapter. It is strongly recommended to complete these **before** we begin the chapter in class. See Blackboard for due dates and up-to-date schedule.

Mini-Tests (MT)

Mini-tests will be given rather than exams through Blackboard. They are 30 minute tests that will be available for 6 hours starting at 5:00 pm the day that a chapter is completed. See Blackboard for due dates and up-to-date schedule.

Class Questions and Attendance

This grade will be based on class participation which will be tracked through the use of Socrative and Blackboard Collaborate. Questions will be given throughout the lecture and credit will be given for answering.

Attendance

Attendance credit will be based on attendance in lecture. Due to the situation with COVID-19, attendance during the regular class time is **not required**. However, it is strongly encouraged and attending and participating in the lecture earns you **extra credit**. All unexcused assignments and examinations will be given a grade of ZERO.

Class courtesy is also an important aspect of the course. The use of the chat function for unrelated discussions and interruption of the questions of fellow students is discouraged. Inappropriate If you are disruptive to the class, you will be removed from the VMS in order to maintain a productive learning environment.

Policies of the College of Arts and Sciences

(Required on all COAS Syllabi / Last Revised: December 13, 2019)

Classroom Behavior

The College of Arts and Sciences encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The College will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

Student Absences

Students are expected to attend class and to complete all assignments. It is the student's responsibility to communicate absences with his/her professor.

According to University policy, acceptable reasons for an absence, which cannot affect a student's grade, include:

- Participation in an authorized University activity.
- Death or major illness in a student's immediate family.
- Illness of a dependent family member.
- Participation in legal proceedings or administrative procedures that require a student's presence.
- Religious holy day.
- Illness that is too severe or contagious for the student to attend class.
- Required participation in military duties.
- Mandatory admission interviews for professional or graduate school which cannot be rescheduled.

The student is responsible for providing satisfactory evidence (i.e., physician note, medical release, etc.) to the faculty member within seven calendar days of his/her absence and return to class. He/she must substantiate the reason for absence. If the absence is excused, the faculty member must either provide the student with the opportunity to make up the exam or other work missed or provide a satisfactory alternative to complete the exam or other work missed within 30 calendar days from the date of absence.

Students who miss class due to a University-sponsored activity are responsible for identifying their absences to their faculty member(s) with as much advance notice as possible. If an off-campus licensed physician provides evidence of a student's illness, the written excuse, orders or documentation must contain the date and time of the doctor's appointment, the prognosis of illness, doctor's opinion and recommendations for the individual student. In addition, the notice should outline whether or not the student is able to attend class. If a physician determines that the

student is not ill, he or she will not receive an excused absence. If absence is not an excused absence, the faculty member will decide whether makeup work will be allowed. In some courses, attendance and in-class participation are ongoing requirements and an integral part of the work of the course. In other courses, occasional in-class assessments may occur, sometimes without advance notice. It is the responsibility of the faculty member to inform each class at the beginning of the semester of the in-class participation expected and the effect that absences will have on the student's evaluation of work in the course.

Plagiarism and Cheating

Plagiarism is the presentation of someone else's work as your own. It occurs when you:

- 1) **Borrow** someone else's facts, ideas, or opinions and put them entirely in your own words, you must acknowledge that these thoughts are not your own by immediately citing the source in your paper. Failure to do this is plagiarism.
- 2) **Borrow** someone else's words (short phrases, clauses, or sentences), you must enclose the copied words in quotation marks as well as citing the source. Failure to do this is plagiarism.
- 3) **Present** someone else's paper or exam (stolen, borrowed, or bought) as your own, you have committed a clearly intentional form of intellectual theft and have put your academic future in jeopardy. This is the worst form of plagiarism.

Here is another explanation from the 2010, sixth edition of the *Manual of The American Psychological Association* (APA):

Plagiarism: Researchers do not claim the words and ideas of another as their own; they give credit where credit is due. Quotations marks should be used to indicate the exact words of another. *Each* time you paraphrase another author (i.e., summarize a passage or rearrange the order of a sentence and change some of the words), you need to credit the source in the text.

The key element of this principle is that authors do not present the work of another as if it were their own words. This can extend to ideas as well as written words. If authors model a study after one done by someone else, the originating author should be given credit. If the rationale for a study was suggested in the Discussion section of someone else's article, the person should be given credit. Given the free exchange of ideas, which is very important for the health of intellectual discourse, authors may not know where an idea for a study originated. If authors do know, however, they should acknowledge the source; this includes personal communications. (pp. 15-16)

Consult the Writing Center or a recommended guide to documentation and research such as the *Manual of the APA* or the *MLA Handbook for Writers of Research Papers* for guidance on proper documentation. If you still have doubts concerning proper documentation, seek advice from your instructor prior to submitting a final draft.

- **Penalties for Plagiarism:** Should a faculty member discover that a student has committed plagiarism, the student should receive a grade of 'F' in that course and the matter will be referred to the Honor Council for possible disciplinary action. The faculty member, however, may elect to give freshmen and sophomore students a "zero" for the

assignment and to allow them to revise the assignment up to a grade of “F” (50%) if they believe that the student plagiarized out of ignorance or carelessness and not out of an attempt to deceive in order to earn an unmerited grade. This option should not be available to juniors, seniors, or graduate students, who cannot reasonably claim ignorance of documentation rules as an excuse.

- **Caution:** Be very careful what you upload to Turnitin or send to your professor for evaluation. Whatever you upload for evaluation will be considered your final, approved draft. If it is plagiarized, you will be held responsible. The excuse that “it was only a draft” will not be accepted.
- **Caution:** Also, do not share your electronic files with others. If you do, you are responsible for the possible consequences. If another student takes your file of a paper and changes the name to his or her name and submits it and you also submit the paper, we will hold both of you responsible for plagiarism. It is impossible for us to know with certainty who wrote the paper and who stole it. And, of course, we cannot know if there was collusion between you and the other student in the matter.
- **Penalties for Cheating:** Should a faculty member discover a student cheating on an exam or quiz or other class project, the student should receive a “zero” for the assignment and not be allowed to make the assignment up. The incident should be reported to the chair of the department and to the Honor Council. If the cheating is extensive, however, or if the assignment constitutes a major grade for the course (e.g., a final exam), or if the student has cheated in the past, the student should receive an “F” in the course, and the matter should be referred to the Honor Council. Under no circumstances should a student who deserves an “F” in the course be allowed to withdraw from the course with a “W.”
- **Student Right of Appeal:** Faculty will notify students immediately via the student’s TAMIU e-mail account that they have submitted plagiarized work. Students have the right to appeal a faculty member’s charge of academic dishonesty by notifying the TAMIU Honor Council of their intent to appeal as long as the notification of appeal comes within 10 business days of the faculty member’s e-mail message to the student. The *Student Handbook* provides more details.

Use of Work in Two or More Courses

You may not submit work completed in one course for a grade in a second course unless you receive explicit permission to do so by the instructor of the second course.

UConnect, TAMIU E-Mail, and Dusty Alert

Personal Announcements sent to students through TAMIU’s UConnect Portal and TAMIU E-mail are the official means of communicating course and university business with students and faculty – not the U.S. Mail and no other e-mail addresses. Students and faculty must check UConnect and their TAMIU e-mail accounts regularly, if not daily. Not having seen an important TAMIU e-mail or UConnect message from a faculty member, chair, or dean is not accepted as an excuse for failure to take important action. Students, faculty, and staff are encouraged to sign-up for *Dusty Alert* (see www.tamtu.edu). *Dusty Alert* is an instant cell phone text-messaging system allowing the university to communicate immediately with you if there is an on-campus emergency, something of immediate danger to you, or a campus closing.

Copyright Restrictions

The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment.

Copyright laws do not allow students and professors to make photocopies of copyrighted materials, but you may copy a limited portion of a work, such as an article from a journal or a chapter from a book for your own personal academic use or, in the case of a professor, for personal, limited classroom use. In general, the extent of your copying should not suggest that the purpose or the effect of your copying is to avoid paying for the materials. And, of course, you may not sell these copies for a profit. Thus, students who copy textbooks to avoid buying them or professors who provide photocopies of textbooks to enable students to save money are violating the law.

Students with Disabilities

Texas A&M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Director of Student Counseling and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

Student Attendance and Leave of Absence (LOA) Policy

As part of our efforts to assist and encourage all students towards graduation, TAMIU provides LOA's for students, including pregnant/parenting students, in accordance with the Attendance Rule (Section 3.24) and the Student LOA Rule (Section 3.25), which includes the "Leave of Absence Request" form. Both rules can be found in the TAMIU Student Handbook ([URL: http://www.tamtu.edu/studentaffairs/StudentHandbook1.shtml](http://www.tamtu.edu/studentaffairs/StudentHandbook1.shtml)).

Pregnant and Parenting Students

Under Title IX of the Education Amendments of 1972, harassment based on sex, including harassment because of pregnancy or related conditions, is prohibited. A pregnant/parenting student must be granted an absence for as long as the student's physician deems the absence medically necessary. It is a violation of Title IX to ask for documentation relative to the pregnant/parenting student's status beyond what would be required for other medical conditions. If a student would like to file a complaint for discrimination due to his or her pregnant/parenting status, please contact the TAMIU Title IX Coordinator (Lorissa M. Cortez, 5201 University Boulevard, KLM 159B, Laredo, TX 78041, TitleIX@tamtu.edu, 956.326.2857) and/or the Office of Civil Rights (Dallas Office, U.S. Department of Education, 1999 Bryan Street, Suite 1620, Dallas, TX 75201-6810, 214.661.9600). You can also report it on TAMIU's anonymous electronic reporting site: www.tamtu.edu/reportit.

TAMIU advises a pregnant/parenting student to notify their professor once the student is aware that accommodations for such will be necessary. It is recommended that the student and

professor develop a reasonable plan for the student's completion of missed coursework or assignments. The Office of Equal Opportunity and Diversity (Lorissa M. Cortez, lorissam.cortez@tamiu.edu) can assist the student and professor in working out the reasonable accommodations. For other questions or concerns regarding Title IX compliance related to pregnant/parenting students at the University, contact the Title IX Coordinator. In the event that a student will need a leave of absence for a substantial period of time, TAMIU University urges the student to consider a Leave of Absence (LOA) as outlined in the *TAMIU Student Handbook*. As part of our efforts to assist and encourage all students towards graduation, TAMIU provides LOA's for students, including pregnant/parenting students, in accordance with the Attendance Rule and the Student LOA Rule. Both rules can be found in the TAMIU Student Handbook (<https://www.tamiu.edu/scce/studenthandbook.shtml>).

Anti-Discrimination/Title IX

TAMIU does not discriminate or permit harassment against any individual on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity in admissions, educational programs, or employment. If you would like to file a complaint relative to Title IX or any civil rights violation, please contact the TAMIU Director of Equal Opportunity and Diversity/Title IX Coordinator, Lorissa M. Cortez, 5201 University Boulevard, Killam Library 159B, Laredo, TX 78041, TitleIX@tamiu.edu, 956.326.2857, via the anonymous electronic reporting website, ReportIt, at www.tamiu.edu/reportit, and/or the Office of Civil Rights (Dallas Office), U.S. Department of Education, 1999 Bryan Street, Suite 1620, Dallas, TX 75201-6810, 214.661.9600.

Incompletes

Students who are unable to complete a course should withdraw from the course before the final date for withdrawal and receive a "W." To qualify for an "incomplete" and thus have the opportunity to complete the course at a later date, a student must meet the following criteria:

- 1) The student **must have completed 90% of the course work assigned before the final date for withdrawing from a course** with a "W", and the student **must be passing the course**;
- 2) The student cannot complete the course because an accident, an illness, or a traumatic personal or family event occurred after the final date for withdrawal from a course;
- 3) The student must sign an "Incomplete Grade Contract" and secure signatures of approval from the professor and the college dean.
- 4) The student must agree to complete the missing course work before the end of the next long semester; failure to meet this deadline will cause the "I" to automatically be converted to an "F"; extensions to this deadline may be granted by the dean of the college.

This is the general policy regarding the circumstances under which an "incomplete" may be granted, but under exceptional circumstances, a student may receive an incomplete who does not meet all of the criteria above if the faculty member, department chair, and dean recommend it.

WIN Contracts

WIN Contracts are offered only under exceptional circumstances and are **limited to seniors**. Only courses offered by full-time TAMIU faculty or TAMIU instructors are eligible to be contracted for

the WIN requirement. However, a WIN contract for a course taught by an adjunct may be approved, with special permission from the department chair and dean. Students must seek approval before beginning any work for the WIN Contract. No student will contract more than one course per semester. Summer WIN Contracts must continue through both summer sessions.

Student Responsibility for Dropping a Course

It is the responsibility of the STUDENT to drop the course before the final date for withdrawal from a course. Faculty members, in fact, may not drop a student from a course without getting the approval of their department chair and dean.

Independent Study Course

Independent Study (IS) courses are offered only under exceptional circumstances. Required courses intended to build academic skills may not be taken as IS (e.g., clinical supervision and internships). No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS course must continue through both summer sessions.

Grade Changes & Appeals

Faculty are authorized to change final grades only when they have committed a computational error or an error in recording a grade, and they must receive the approval of their department chairs and the dean to change the grade. As part of that approval, they must attach a detailed explanation of the reason for the mistake. Only in rare cases would another reason be entertained as legitimate for a grade change. A student who is unhappy with his or her grade on an assignment must discuss the situation with the faculty member teaching the course. If students believe that they have been graded unfairly, they have the right to appeal the grade using a grade appeal process in the *Student Handbook* and the *Faculty Handbook*.

Final Examination

Final Examination must be comprehensive and must contain a written component. The written component should comprise at least 20% of the final exam grade. Exceptions to this policy must receive the approval of the department chair and the dean at the beginning of the semester.