

Syllabus
Chemistry 1342 – General Chemistry 2
Summer 2016 – Second Five-Week Session

Instructors:

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Required Materials: 1) General Chemistry Textbook. The textbook you used for General Chemistry 1 will be fine. If you do not have a General Chemistry Textbook, you can use the OpenStax textbook, which is available at no charge at the OpenStax website: (<https://openstax.org/details/chemistry>) (Note: the chapter numbers listed below pertain to the Silberberg textbook.)
2) A scientific calculator)

Course Prerequisites: The prerequisite for CHEM 1342 is successful completion of CHEM 1341 or CHEM 1441 or equivalent with a grade of C or better.

Tentative Schedule: The following represents a tentative schedule of examination material for this semester. *The exact dates of the four major exams will be announced in class.* Note that the Comprehensive Departmental Final Exam is scheduled for **Monday, August 15, 10:30 AM – 12:30 PM.**

Exam 1 (Chapters 12 and 13)	Tuesday, July 19
Exam 2 (Chapters 16 and 17)	Tuesday, July 26
Exam 3 (Chapters 18 and 19)	Tuesday, August 2
Exam 4 (Chapters 20 and 21, plus section 4.5)	Wednesday, August 10
Final Exam (comprehensive)	Monday, August 15

Other Important Dates:

First Day of Class	Tuesday, July 12
Census Date	Monday, July 18
Last Day to Drop	Tuesday, August 2 (submit requests to advisor by 4:00 PM)
Last Day of Class	Thursday, August 11
Final Exam	Monday, August 15

Course Description and Student Learning Outcomes: Upon completing the course, the student should be able to 1) understand how intermolecular forces are related to physical properties of matter, 2) predict the properties of solutions, 3) understand chemical kinetics and their relationship to reaction mechanisms, and be able to perform calculations related to the rates of chemical reactions, 4) understand chemical equilibrium and its application to gas phase equilibria, heterogeneous equilibria, acid-base equilibria, and solubility and complex ion equilibria, 5) use the concepts of thermodynamics to predict the spontaneity of processes, as well as the changes in free energy, entropy, and enthalpy, 6) understand the basic concepts of electrochemistry and be able to use standard reduction potentials to calculate quantities involved in an electrochemical reaction, and 7) understand nuclear chemistry, including calculations involving the rates of radioactive decay and binding energies of nucleons.

Attendance: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. *As the instructor of this section, I have elected to take attendance because most students in General Chemistry find that faithful attendance is necessary for succeeding in this course.* However, attendance alone is not sufficient. In order to succeed in the course, you must master the material, and this requires active participation. Participation includes advance preparation of reading assignments, working online homework problems as well as end-of-chapter problems in the textbook, and involvement with classroom discussions. You are responsible for all of the material covered in the lectures, the assigned text, and the problems.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional sixteen to twenty hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, and preparing for lab.

Other Requirements:

- 1) Read this syllabus carefully. You are responsible for knowing all of the course policies listed in this syllabus.
- 2) Prior to class, read the chapter which will be covered in lecture.
- 3) Review your lecture notes after each class. Correct obvious errors and note topics which require further study or clarification.
- 4) Work **all** of the homework problems. Do **not** look in the solutions manual until you have given your **best** effort to solve the problem on your own. **Practice the problems that you find difficult until you are able to solve them without consulting the solutions manual. This is the one of the most effective strategies that you can use to prepare for exams.**
- 5) Don't procrastinate. These concepts take time to sink in, and you may have to practice these exercises over a period of many days in order master the necessary skills.

Grading: The grade in this course will be determined in the following manner:

4 mid-term exams	70%	
Comprehensive Final Exam	30%	Monday, August 15, 10:30 AM

- 1) Four mid-term exams will be given. These exams will cover the reading, lecture material, and assigned problems. The final exam will be comprehensive and will be given on **Monday, August 15**.
- 2) **Make-up Exam Policy.** No make-up exams will be given, and any missed exams will result in a grade of zero. However, the final exam score will replace the lowest mid-term exam score if it is to the student's benefit. The final exam score will not be replaced.
- 3) Exams will not be curved, and individual extra-credit assignments will not be given.

<u>Total Numerical Grade</u>	<u>Letter Grade</u>
85-100	A
73-84	B
62-72	C
50-61	D
Below 50	F

Major Assignments and Examinations

Five exams will be given. These exams will cover the reading, lecture material, homework, and assigned problems. Four mid-term exams (Exam 1 through Exam 4) will be administered during the semester in class period. The final exam is a comprehensive exam, and you will have the entire two-hour period for it.

Examination Needs

You must bring the following to each examination.

- 1) Scientific Calculator (You may not use a graphing calculator or a calculator capable of storing alpha-numeric/textual material).
 - Note that TI-36X Pro is **NOT** allowed.
- 2) No. 2 pencils with eraser.
- 3) Scantron 882 E answer form, available at the UTA Bookstore (or, an answer form specified by your instructor).
- 4) UTA Student ID Card.
- 5) Students are NOT allowed to have access to cell phones during any exam.

Blackboard

Students are responsible for checking the blackboard course website (<https://elearn.uta.edu/>) as well as their UTA email (the one ending in "mavs.uta.edu") for correspondence and announcements related to the course. Instructional materials (videos, activity sheets, study guides, etc.) will be posted on the course website.

Cell Phones and Pagers (or any unnecessary electronic gadgets) : Please silence all cell phones and pagers prior to class.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally

funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

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Chemistry Clinic: The Chemistry Clinic, located in Room 318 Science Hall, will be staffed with tutors available to answer your questions related to lecture and homework. This service is free for all UT-Arlington students enrolled in Chemistry 1441 and 1442. Unless otherwise posted, the Chemistry Clinic will be open the following hours:

Monday – Thursday, 9:00 AM – 7:00 PM

Friday, 9:00 AM – 5:00 PM

(Closed Saturdays and Sundays during the summer)

(Note: The Chemistry Clinic will be closed during official university holidays, as well as any day that the University is closed due to inclement weather.)

Science Education and Career Center: The Science Education and Career Center, located in Room 105 of the Life Science Building, provides a variety of materials for assisting Chemistry students, including old Chemistry 1442 exams.

UTSI: The University Tutorial and Supplemental Instruction office provides tutoring services for this class. Supplemental Instruction, or SI, is a free service that helps students from this class work in groups to understand class concepts. Tutoring helps students develop and grow strong study habits by working one-on-one with a tutor. To find out when and where your class's SI sessions are, check the SI schedule at www.uta.edu/utsi. To register for tutoring services, visit the UTSI Office in Ransom Hall Room 205. For more information, visit www.uta.edu/utsi or call 817-272-2617.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. *After the late registration period, students must see their academic advisor to drop a class or withdraw.* Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** www.uta.edu/disability or calling 817-272-3364. **Counseling and Psychological Services, (CAPS)** www.uta.edu/caps/ or calling 817-272-3671.

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit uta.edu/titleix.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Violations to the academic integrity policy may result in the grade "F" in the course.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned. Instructions for completing lab safety training are given separately in the lab syllabus of this course.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located **at the front/back of the room**. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.