

Syllabus

Chemistry 1400

Fall 2017

Instructor:

Dr. William Cleaver

Office hours: Mon 9:00-10:00 & Wed 2:00 – 3:00 in 217 CPB (and by appointment)

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Course Description: This course provides a background in fundamental chemical mathematics, in writing and understanding chemical formulas and equations, and in the application of scientific laws to the behavior of matter. This course is designed for the student with little or no previous chemical training who intends to take the CHEM 1441, 1451, or 1465 at a later date.

Required Materials:

- 1) The paperback textbook is “*Introduction to Chemical Principles* (11th edition)” by H. Stephen Stoker, Prentice Hall (2013: ISBN-13: 978-0321814630).
- 2) Access to the online homework system: ALEKS (www.aleks.com). Registration information is available in the UTA Blackboard course site (<https://elearn.uta.edu>).
- 3) A non-programmable and non-graphing scientific calculator: **Texas Instruments TI-30Xa** is recommended. This calculator has all the functions you need and relatively in-expensive. You cannot use programmable and/or graphing calculator for exams of this course. **Note that TI-36X Pro is NOT allowed.**

Course Prerequisites: This course is designed for the student with little or no previous chemistry training who intends to take CHEM 1441, 1451, or 1465. All students should have completed MATH 1302 or its equivalent. CHEM 1400 cannot replace CHEM 1441/1442/1451/1465 for major credit toward a degree in chemistry.

Student Learning Outcomes: (More detailed learning objectives are given in separate handout available in Blackboard course sites.) Upon completing the course, the student should

- 1) Understand fundamental chemical concepts, including atomic and molecular structure, chemical bonding, some chemical reactions, the relationship of the electronic structure of elements to the periodic table, and periodic physical and chemical properties of elements and compounds;
- 2) Perform quantitative calculations related to chemical stoichiometry and chemical moles.
- 3) Be prepared to enter Chemistry 1441.

Attendance Policy: Attend **every** lecture. A very strong correlation exists between attendance and success in Chemistry 1400. Because the topics covered in this course build on each other, missing even one class can mean the difference between success and failure in the course. You must sign on the attendance sheet in class when you attend a class.

Expectations for Out-of-Class Study: Spend the necessary amount of time studying chemistry. The rule of thumb for succeeding in Chemistry is three hours of study for every hour of lecture. Since you have 2-3 hours of lecture per week, this means that at a minimum you should plan to study Chemistry 6-9 hours each week independently (not including Chem 1400 recitation time).

Other Requirements:

- 1) A student must familiarize herself/himself with all requirements and policies **in this course of the current semester.**
- 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 could not solve until you could solve them without solutions. This is the one of the most effective strategies that you could do 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.

Tentative Lecture Schedule:

The following represents a *tentative* schedule of lectures and examination material for this semester. Tentative exam dates are specified in **bold** and underlined. The exact dates of the six midterm exams will be announced in class. All due date of homework assignments are available directly on its website. You will be responsible for checking them and completing them by the due dates. **As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. Note that the Final Exam is scheduled for Tuesday, Dec 12 from 2:00 PM to 4:30 PM in CRB 114. Make sure to save this date because no make-up final exam will be given.**

Date		Lecture Material
August	24	Course Orientation and Chap 1
	29, 31	Chap 2
September	5, 7	Chap 3
	12, 14	Finish Chap 3 and Exam 1
	19, 21	Chap 4
October	26, 28	Chap 5
	3, 5	Finish Chap 5 and Exam 2
	10, 12	Chap 6
	17, 19	Chap 7
Oct/Nov	24, 26	Finish Chap 7 and Exam 3
	31, 2	Chap 8
	7, 9	Chap 9
	14, 16	Finish Chap 9 and Exam 4
Dec	21, 23	Chap 10, No Class Thursday. Thanksgiving Break.
	28, 30	Continue Chap 10
	5	Finish Chap 10
	12	Comprehensive Final Examination 2:00-4:30 in CRB 114.

Important Dates

September 4	Labor Day Holiday
September 11	Census Date
November 1	Last Day to Drop Classes (Please review UTA's Drop Policy in Undergraduate Catalog)
November 23-24	Thanksgiving Holiday
December 6	Last Day of Classes
December 12	Comprehensive Final Exam from 2:00-4:30 in CRB 114

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.

Resources

- 1) **The Chemistry Clinic** is located in Room 318 Science Hall and will be staffed with tutors available to answer your questions related to lecture and homework. Hours of the Chemistry Clinic will be announced on the front door of Room 318 SH. This service is free for students enrolled in Chemistry classes.
- 2) **University College** is located in 205 Ransom Hall and offers free academic support for qualifying students and low-cost services for all students, including Cost Share Tutoring.

Grading: The grade in the Chem 1400 course will be determined in the following manner.

Attendance/Participation	10%
ALEKS online assignments and mastery	15%
In class assignments	15%
4 Midterm Exams	40%
Comprehensive Final Exam	20%

- 1) 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 score among Exam 1 – 4 if it is to the student's benefit. For example, if you miss one of mid-term exams (Exam 1 through Exam 4), then the score of the missed exam will be replaced by the final exam score. Final exam score will not be replaced.
- 2) There will be no curving on exams or no extra credit assignments in this course to a specific student.

<u>Total Numerical Grade</u>	<u>Letter Grade</u>
90 and above	A
80-less than 90	B
70-less than 80	C
60-less than 70	D
Below 60	F

Major Assignments and Examinations

Five exams will be given. These exams will cover the textbook reading, lecture material, homework, and assigned problems. Four mid-term exams (Exam1 through Exam 4) will be administered in class period. The final exam will be **comprehensive** and will be given in two and a half hours. Web-based homework problems will be assigned and graded. More information (Registration, Login and Grading Policy) about the online homework system will be given in the Blackboard course site. None of homework assignments will be dropped. All due dates for homework assignments are directly available on the online homework site. You will be responsible for checking them and completing them by the due dates.

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).
- 2) No. 2 pencils with eraser.
- 3) NCS Answer Sheet 4521, 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 digital pagers or cell phones during any exam.

Blackboard

Students are regularly 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.

Other Course Policies

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

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/>).

Americans with Disabilities Act: The University of Texas at 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)*. 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 that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. 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 is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.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.

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.

<p>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.</p>
