Syllabus and Course Information for

Chemistry for Engineers

CHEM 1465-001

Summer 2016

Text Chemistry for Engineering Students 2nd Ed., Brown & Holme

Place Room 125 Science Hall (SH 125)

Time MTWH 10:30 am – 12:30 pm

Instructor Information

Dr. Jennifer Rhinehart
Science Hall 300 E (817) 272-1091
rhineh@uta.edu **(Please include "CHEM 1465" in subject line.)**

Office Hours Monday and Wednesday 4:00 pm – 5:30 pm

Grading

Homework	10%	A ≥ 90%
In class Quiz	5%	B ≥ 80%
4 Exams	10% each	C ≥ 70%
Final Exam	20%	D ≥ 60%
Lab Average	25%	F ≤ 50%

********* You must attend the lab and earn at least a 60% in the lab in order to be eligible to pass the course.

Important Dates

Jun 6	First Day of Classes
Jun 9	Census Date
Jun 27	Last day to drop
Jul 4	No Class
Jul 11	Final exam 10:30 am – 12:30 pm

Course Content

An introduction to important concepts and principles of chemistry with emphasis on areas considered most relevant in an engineering context. Topics include chemical stoichiometry, bonding, chemical thermodynamics, equilibria, electrochemistry and kinetics.

Homework

You will need a composition notebook in which to complete your homework assignments. At the beginning of each chapter I will hand out in class the homework assignment for chapter which will include book problems and additional problems. Note books will periodically be collected and graded on a ten point scale per chapter. 5 points will be awarded on completeness and 5 points award base on randomly graded problems. You will need to show all your work to obtain both completeness and correct answer points.

In class quizzes

At the beginning of every class we will have a 5 minute, 10 point quiz with a question from the previous day's material. We will not have a quiz on the four exam days. There will be a total of 14 quizzes and your two lowest scores will be dropped.

Four midterm exams

1. Your circled letters on the test-sheet MUST be the same as the bubbled-in letters on your scantron card (Type 882-E). Only the scantron is scored and must be bubbled-in during the exam period. **Each student is responsible for furnishing Scantron answer sheets (type 882-E) for the examinations.** You will need to turn in 5 scantrons (4 midterms and 1 final exam) by the beginning of class on Thursday June 9 to earn 10 points for Quiz 1.
2. Academic make-ups will need to be completed before the exam is given. Only exams which are missed due to **documented** emergencies may be made up. Make-up exams will need to be complete within one week of the exam date. If you otherwise miss an exam you will receive 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. All cell phones must be turned off during exams. Books and bags will need to be placed in the front of the room. No hats or headphones are allowed. Only simple calculators are allowed, no graphing calculators (Note that TI-36X Pro is **NOT** allowed). You must bring your Student ID
4. During examinations, students must hand in their exam papers when they leave the room for any reason. After this, the student **cannot** return and resume the examination. A student who arrives late for any examination will be allowed to take the examination **only if no other student has finished the exam and left the room. Students must be in line to turn in their exams at the end of the exam period or it will not be graded.**

Class Schedule

Jun 6 Class Intro/ Ch 1	**Jun 7** Ch 2 Atoms and Molecules	**Jun 8** Ch 3 Molecules and Moles	**Jun 9** Ch 3 and Ch 4 Stoichiometry
Jun 13 Ch 4 Stiochiometry	**Jun 14** **Exam I – (1 hr)** Ch 5 gases	**Jun 15** Ch 5 Gasses	**Jun 16** Ch 6 Atomic Structure
Jun 20 Ch 6 Atomic Structure	**Jun 21** **Exam II – (1 hr)** Ch 7 Molecular Structure	**Jun 22** Ch 7 Molecular Structure	**Jun 23** Ch 8 Materials
Jun 27 Ch 9 Energy and Chemistry	**Jun 28** **Exam III – (1 hr)** Ch 9 Energy and Chemistry	**Jun 29** Ch 10 Entropy	**Jun 30** Ch 12 Chemical Equilibrium
Jul 4 NO CLASS	**Jul 5** Ch 12 Chemical Equilibrium	**Jul 6** **Exam IV – (1 hr)**	**Jul 7** Ch 13 Electrochemistry

***Note:** 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. –Jennifer L. Rhinehart

General Notes:

1. Engineering students may substitute the eight hour sequence CHEM 1441 and CHEM 1442 for this class, but not either CHEM 1441 or 1442 alone.

2. All students who enroll in Chemistry classes should have had high school chemistry and MATH 1323.

3. 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.

4. **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. This service is free for all UT-Arlington students enrolled in Chemistry 1465. 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
   Saturday, 11:00 AM – 4:00 PM

   (Note: The Chemistry Clinic will be closed any day that the University is closed due to inclement weather.)

5. **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://wweb.uta.edu/aao/fao/).

6. **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.

7. **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.

8. **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.

9. **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.

10. **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.

11. **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.

12. **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.

13. **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.

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.