Syllabus General Chemistry 1305

Fall 2016

(subject to revision)

Stipulations in this syllabus are subject to modification and correction during the semester. All modifications will be discussed in class and posted on the course Blackboard site.

Instructors:

Dr. James E. Becvar Course: CRN 11517 Location: UGLC 106

Time: MWF 8:30 am - 9:20 am

Top Hat Learning System: https://app.tophat.com/e/546065

Office: Physical Science 409

Phone: 747-7563

Email: jbecvar@utep.edu

Office Hours: TR 9: 30 am - 11: 00 am or by appointment

Dr. Geoffrey Saupe Course: CRN 11518 Location: UGLC 116

Time: TR 9:00 am - 10:20 am

Top Hat Learning System: https://app.tophat.com/e/631941

Office: CCSB 2.0116 Phone: 747 - 7559

Email: gsaupe@utep.edu

Office Hours: Tuesday 10:45 – 11:45 and by appointment

Course Information:

This CHEM 1305 course has **two components** that all students **must register** for **(1) CHEM 1305 Lecture and (2) CHEM 1305 Workshop.** There are no exceptions to this. Every workshop section is two hours in duration and meets one day per week. A different course, Laboratory CHEM 1105, is a separate co-requisite course, in which students in most majors must also be enrolled. Laboratory CHEM 1105 is three hours in duration. Workshop and Laboratory are different courses with different Course Registration Numbers (CRNs).

If you are interested in honors credit, please take the honors section of CHEM 1305.

Required Course Materials:

1. "General Chemistry by Exploration: First Semester General Chemistry, **Fall 2016 Edition**"; ISBN 978-1-943668-03-8. This workbook is available <u>only</u> in the UTEP campus bookstore. The lecture and workshop sequence for fall 2016 will follow the sequence in this text.

- 2. Apperson™ Grading forms must be purchased for Hour Examinations and the Final Examination.
- 3. Top Hat learning system (<u>www.tophat.com</u>). Top Hat will require a paid subscription. The online price for one term of access is \$50, while the price for one year of access is \$80. (The UTEP Bookstore price is higher.)

Recommended Course Materials:

Optional Textbook: *Chemistry,* by Raymond Chang, 10th Edition, McGraw-Hill Science. Any newer or older version of this textbook may also be used for this course. It is the student's complete responsibility to resolve any content differences among the editions.

Top Hat:

We will be using the Top Hat (<u>www.tophat.com</u>) classroom response system with the interactive textbook "Top Hat General Chemistry" for your online homework this term. Note that your subscription and registration number depends on your Lecture Section for fall 2016.

Dr. Saupe's students use https://app.tophat.com/e/631941

Dr Becvar's students use https://app.tophat.com/e/546065

An email invitation will be sent to you by email, but if you don't receive this email, you can register by simply visiting the **specific** website for your Lecture Section.

Top Hat requires a paid subscription. The online price for one term of access is \$50, while the price for one year of access is \$80. (The UTEP Bookstore price is higher.)

Don't worry if you don't see any content in the course right away, I will make it available to you as we progress through the semester. Should you require assistance with Top Hat at any time, due to the fact that they require <u>specific</u> user information to troubleshoot these issues, please contact their Support Team directly by way of email (<u>support@tophat.com</u>), the in app support button, or by calling 1-888-663-5491.

Workshop:

Workshop is a required component of the CHEM 1305 course. Every student enrolled in a 1305 Lecture section must also be co-enrolled in a Workshop section. All workshops meet during the 1st week of school. Attendance is required.

Each of the 51 fall 2016 CHEM 1305 Workshops meets for a two-hour period and is instructed by a Peer Leader. The Workshop format allows the Peer Leaders to use active learning techniques to enhance understanding of the chemical principles discussed in class. It also provides opportunities for hands-on exposure to qualitative and descriptive chemistry activities (Explorations). Full goggles and a lab coat must be worn during <u>ALL</u> chemical Explorations.

Workshop Office Hours: The Peer Leader Team has office hours daily. The actual hour and location of the office hours will be announced in the workshop. Though each PL has specific office hours each week, you may consult with any PL during her or his office hours.

Prerequisites:

In order to be enrolled in Chemistry 1305, you should have:

Passed or be concurrently enrolled in Math 1508 or

Have achieved an SAT Math score of 600 or better.

Student Major:

The CHEM 1305 - 1306 sequence is designed for students who are majoring in a field of science or engineering. Students majoring in other disciplines may prefer to take the CHEM 4107 - 4108 sequence which contains more descriptive and less quantitative material.

Resources:

Blackboard: Announcements, class notes, and grade results will be made available using Blackboard. To access Blackboard:

- Go to your myUTEP web page. You will need your email username and password. If you don't know your email username and password, call the HELP desk to request them.
- Go to My.UTEP.edu and log in.
- Click on Blackboard it's on the menu bar at the top of the page.

Secretarial Services:

The office of Chemistry Department is located in the Chemistry and Computer Science Building CCSB 2.0704. Office hours are from 8:00 am to 12 noon and from 1:00 PM - 5:00 PM; the office is closed for lunch (12 noon - 1:00 PM).

Learning Goals:

This is the first part of General Chemistry for scientists, engineers and pre-medical students. The students in the class will gain fundamental knowledge in atomic and molecular structure, nomenclature, physical and chemical changes of matter, chemical reactivity, chemical bonding, thermochemistry and the properties of gases. Specifically, students will be able to:

- Describe, explain and model chemical and physical processes at the molecular level in order to explain macroscopic properties.
- Classify matter by its state and bonding behavior using the Periodic Table as a reference.
- Solve quantitative chemistry problems and demonstrate reasoning clearly and completely.
- Integrate multiple ideas in the problem solving process.
- Learn how to work successfully in teams to solve challenging chemical problems.
- Learn how to argue persuasively but respectfully about chemical concepts.
- Practice oral report out to the entire Workshop, thus gaining confidence in public speaking.

Instructor Expectations:

- Students should attend all lectures and workshops, and complete all homework assignments. It is the students' responsibility to finish assigned work and turn it in to their Peer Leaders by due dates.
- Students will read the chapters covered in class and consult with the professors or PLs for any questions.

Course Withdrawal Policy

Classes dropped prior to the official census date (September 7, 2016) will be deleted from the student's semester record. After this date, the University permits any student to drop with an automatic "W", but only before the official course drop deadline, October 28, 2016. After October 28, 2016, students who withdraw must receive grades of "F".

The UTEP Fall 2016 drop deadline is October 28, 2016. The College of Science will remain aligned with the University policy and NOT approve any drop requests after that date, October 28, 2016. All grades of Incomplete (semester grade) must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the Dean. The College of Science requires Incomplete Contracts be limited to one month. A grade of Incomplete is only used in extraordinary circumstances. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Lecture Schedule (subject to revision):

Listed below are the tentative dates for the TR class periods this term along with the approximate lecture material for that date. The MWF class will parallel this schedule. For example, Tuesday 23-Aug: 1 means that the course content covered in lecture on Tuesday, August 23, 2016 will be Chapter 1 from "Top Hat General Chemistry". (The following schedule is subject to revision.)

Tuesday	Chapter	Thursday	Chapter
23-Aug	1	25-Aug	1/2
30-Aug	2	1-Sep	3
6-Sep	Exam I	8-Sep	3
13-Sep	3/4	15-Sep	4
20-Sep	4	22-Sep	4
27-Sep	10 (Gases)	29-Sep	10
4-Oct	Exam II	6-Oct	5
11-Oct	5	13-Oct	5
18-Oct	6	20-Oct	6
25-Oct	Exam III	27-Oct	7
1-Nov	7	3-Nov	8
8-Nov	8	10-Nov	9
15-Nov	9	17-Nov	9
22-Nov	Exam IV	24-Nov	Thanksgiving
29-Nov	Review	1-Dec	Review

Laboratories:

CHEM 1105 Laboratory is a separate course. **CHEM 1105 is not Workshop** and Workshop is not CHEM 1105. **Workshop is an integral part of CHEM 1305**. The content for CHEM 1105 laboratory

is designed to coincide with the materials covered in lectures for CHEM 1305. The laboratory (CHEM 1105) is highly recommended for all students regardless of major.

Examinations:

CHEM 1305 examination questions are designed to test the understanding of basic concepts and familiarity with chemical nomenclature and usage. Many examination problems involve calculations; this is the reason for the mathematics prerequisite. Students are strongly encouraged to learn the **process** involved in problem solving rather than to memorize specific facts.

<u>Four one-hour examinations</u> and a <u>Final Exam</u> are scheduled (see Section for exam dates). All exam grades will count towards the final grade.

The American Chemical Society Standardized Exam will be used for the final exam. More details will be announced during the semester.

No makeup of examinations will be provided. When valid absences are expected, and qualified arrangements are made at least 7 days prior to an exam, the instructor may approve taking an exam early. Valid absences are only for University related activities (e.g. out-of-town research presentations, sporting events) and must be arranged with the professor at least 7 days prior to the date of the respective examination.

For every examination:

- Bring an **Apperson** Form, a pencil and a good eraser. No personal scratch paper, personal periodic tables or other materials may be used during the examination.
- NO CELL PHONES OR OTHER ELECTRONIC DEVICES MAY BE USED DURING EXAMINATIONS.
- No caps or hats may be worn during examinations.
- Bring a photo identification card to all examinations. Your ID will be checked during or when turning in the examination papers.
- **Do** bring non-programmable calculators to all examinations.
- **Do not** bring <u>programmable calculators</u> (i.e. a calculator capable of retaining equations or words) to the hour examinations and the final examination. You can purchase a satisfactory **scientific calculator** which can perform logarithmic and exponential operations for less than \$10 at many stores.

Quizzes:

Quizzes will be given in class and may be given at any time. Be Prepared. Be up to date on assignments.

Academic Honesty:

Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating,

plagiarism, and collusion. Violations will be taken seriously and will be referred to the Dean of Students Office for possible disciplinary action.

Students with Disabilities:

Students with a documented disability can contact the Center for Accommodations and Student Services (CASS) to take exams with appropriate accommodations. Any arrangements must be made in the first two weeks of class and appropriate documentation presented to the instructor. The office is located in Room 106 Union East Building and can be contacted at (915) 747-5148 Voice/TTY, (915) 747-8712 Fax or at cass@utep.edu.

Grade Evaluation: (Evaluation is subject to revision.)

Letter grades for the CHEM 1305 course are assigned on the basis of your performance in the course and are determined by your total score earned during the semester. The tentative grading scheme is based on the following calculation (subject to revision): A) Final examination (comprehensive) score (30%), B) Workshop (15%), C) Homework (15%), and E) Hour Examinations (40%). Four Hour Examinations offer possible scores to choose from for the 'best three' scores to use for this 40% portion of your grade. We may offer an alternative option during the semester. The exact cut-off scores for each letter grade in 1305 will be determined at the end of the semester, but often follows a pattern something like 70%, 80%, and 90% for grades of C, B, and A. (This grading scheme is subject to revision during the semester.