

Chem 122 Syllabus

TEXTBOOKS

Chemistry: A Molecular Approach by Zumdahl and Zumdahl, 9th Edition (Required)

Topics Covered: Chapters 12-19, and Chapter 22

LECTURE Students are expected to go over the notes in Moodle and read the specified textbook material **before** coming to class. Student presence in the class is recorded by the instructor and points are awarded.

ATTENDANCE/PARTICIPATION POINT POLICY Attendance is required at all course meetings. An I-clicker and calculator are required for all lectures. If your iclicker malfunctions, you are required to inform the instructor, either in person or via e-mail the **same day**. Failure to notify the instructor will result in loss of points for that day. If you are in class, but using a cell phone in any way, using a computer, or listening to music you will not get credit for that day's attendance. If you are cheating (having a second I-clicker) you and the person for whom you are cheating will get 0 for the entire semester. There are ways to check! So, be honest.

ALL HOMEWORK IS IN YOUR MOODLE WEBSITE FOR CHEMISTRY. There are two types of homework: Basic and Regular.

Basic Homework, worth 100 points: Do the basic HW for the chapter before coming to the lecture. This homework is intended as a preparation for your participation in class. Getting > 70% in the basic homework before the lecture, will ensure you have the foundation necessary to understand what is being taught in class.

Regular homework, worth 160 points: This homework is to test your understanding of the material being taught. This homework will build on the classroom content and enhance your understanding of the material. This homework will also be good preparation for the common exams.

All homework is very important. However, it is absolutely important that you aim to get > 90% in the basic and >70% in the regular HW to help you pass this class.

Each homework assignment has its due date. In addition, Moodle has a calendar with due dates. **ALL HOMEWORK MUST BE DONE ON TIME. There is no credit for late homework.** DO NOT WAIT TO THE LAST MINUTE TO DO YOUR HOMEWORK. ONLINE SYSTEMS ARE NOT 100% RELIABLE AND UNEXPECTED EVENTS MAY OCCUR. IN GENERAL, THERE IS NO LATE HOMEWORK AND MOODLE BEING DOWN IS NOT A VALID EXCUSE. PLAN TO FINISH YOUR HOMEWORK AT LEAST ONE DAY BEFORE IT IS DUE.

EXAMINATIONS: There are 3 common exams and 1 final exam administered during the course. The exams are worth 550 points. You are required to maintain an average of 35% which is 193 points in the common exams and finals in order to pass the course.

COMMON EXAMINATIONS: Three common examinations will be administered throughout the semester. Each Common exam is worth 100 points and is 75 minutes in duration.

FINAL EXAM: The final exam is a standardized ACS final. The exam is worth 250 points and is between 110 -125 minutes. Scoring > 50% in the final exam is a good target for a passing score in the course.

EXAM BEHAVIOR:

- Students are reminded that violations of the NJIT student Honor Code are serious and that the Chemistry Division will make an extraordinary effort to prevent *CHEATING* on all examinations and will vigorously prosecute cases of cheating, if any, in accordance with NJIT policy and procedures.
- Use the bathroom before or after test. No work is allowed on the test after leaving to use the bathroom.
- During sign in a NJIT photo ID or valid driver's license needs to be visible. No books, **cell phones**, notes, tables, or scrap paper will be allowed.
- **Scientific Calculators but not hand held computers are permitted.** Calculators with battery operation only are permitted. Students must bring *two #2 pencils* to all exams.
- If you have a medical condition, bring it to the instructor's attention at least one week in advance so special arrangements can be made.

MAKEUP EXAM POLICY:

One make-up examination will be permitted if there is an acceptable and substantial reason. A grade of zero will be given for a second missed examination independent of reason.

TEST GRADING ERROR. Tests are returned in recitations following the test. If you believe there is an error, you have until the Thursday following the test to submit a test for regrading. You must write a very brief description of the problem on the back of the test. (The answer key is provided in Moodle in the TEST INFORMATION book. You should always learn from your mistakes and go over the answer key.)

ALL ERRORS NEED TO BE BROUGHT TO THE INSTRUCTOR'S ATTENTION WHEN THEY OCCUR. DO NOT WAIT UNTIL THE END OF THE SEMESTER.

The second in the two semester Chemistry sequence build on topics introduced in the first part. The course incorporates a mathematical approach to the treatment of the topics listed below and is relevant for students interested in taking upper level chemistry classes and is a prerequisite for certain engineering disciplines.

Key topics covered are Chemical Kinetics, Reaction mechanisms, Chemical Equilibria, Aqueous Equilibria, Thermodynamics, Electrochemistry, Nuclear Chemistry and introduction to Organic Chemistry.

