Instructor Information
Instructor: Carolyn Schoenbaum

Class Times and Information
Lecture: (Section 001) M, W, F 1:30pm-2:20pm JSCBB A115
       (Section 002) M, W, F 2:30pm-3:20pm JSCBB A115
Course Website: https://learn.colorado.edu/ (D2L)
Communication: Desire2Learn will be used for class problems, reading quizzes, and grades.
                You can also access screencasts from there.

Office Hours
Monday  3:30 – 5 pm     C. Schoenbaum               JSCBB C124
Tuesday  4 – 5:30 pm    A. Viert                    JSCBB B1B90
Wednesday 3:30 – 5 pm  C. Schoenbaum, A. Frederickson JSCBB B1B90
Thursdays 4 – 5:30 pm  D. Marruecos, N. Langdon     JSCBB B1B90, C124

Course Purpose and Goals
The overall goal of this course is to provide a foundation for solving engineering problems with an emphasis on problems related to chemical engineering processes. This course will specifically focus on identifying and defining process variables, understanding flow charts, basic unit operations, non-reactive and reactive mass and energy balances, and single and multi-phase systems. As part of this course, students will use Excel® to compute chemical and thermodynamic properties of materials, solve systems of equations, and analyze process data. An understanding of the basic principles from this course are of fundamental importance in all areas of chemical and biological engineering and, moreover, will be essential for all subsequent courses in the chemical and biological engineering curriculum.
Prerequisites
CHEN 1211 General Chemistry for Engineers and GEEN 1300 Introduction to Engineering Computing

Textbook

Class Format
This class will be taught as a “flipped classroom”. In other words, lecturing will be done outside class through screencasts and reading, while the classroom time will be spent on conceptual questions and problem solving. In order for you to benefit from this approach:

a) Reading assignments and screencasts will be assigned for every class. The class will be conducted with the assumption that you have read/watched them.

b) There will be reading quizzes due on M, W and F and homework problems due once a week on Fridays. These will be due by 8:00 am.

c) Class problems for each class will be posted on-line. Please look through these before class so you are prepared to follow the pace. I will assume that you have done so and have a copy of these problems and will use my class time accordingly.

d) Bring your book to class every day. You will need the conversions as well as tables. Also, bring your calculator.

Course Requirements and Grading Scheme
The breakdown of course grades is as follows:

- Homework 15%
- Clickers 10%
- Quizzes 10%
- Exam #1 15%
- Exam #2 20%
- Final Exam 30%

* Homework will not count unless your exam average is 50% or better*

Course Policies

Homework
Homework will be assigned and completed on-line through the Sapling Learning site (http://www2.saplinglearning.com/). In general, assignments will be made available through the site on Friday and due the following Friday by 8:00 am unless notified otherwise. Assignments are to be submitted individually, although you may, and are encouraged, to work with your classmates where helpful. Additionally, the problems are graded automatically through the site as well, which eliminates inconsistencies associated with manual grading. Because everything is arranged through the site, homework will not be able to be turned in late. In the case of special circumstances such as illness or travel, the student should inform the instructor *ahead of the due date* to make
appropriate alternative arrangements. The solutions to homework assignments will be made available following the class meeting in which the assignment is due.

Clickers
All classes will include clicker questions. You receive a percentage for each day, regardless of how many questions there are for the day. You will then get an overall percentage that will count for 10% of your grade. I will drop two clicker days. Clicker questions cannot be made up, and you will not get credit if your clicker runs out of batteries, you left it at home, etc. so please don’t ask. Clickers must be registered by the second exam in order to get credit. I will post clicker scores after the first exam. If you have all zeroes, that’s a good indication that your clicker is not registered.

Quizzes
There will be reading quizzes due on M, W and F. These will be due by 8:00 am. Missed quizzes may not be made up.

Exams
Any student who misses an exam will be dropped from the class unless he/she has a documented illness or similar catastrophe. If the student has an excused absence, the exam will be replaced by the final exam (i.e. the final will count as 30% plus the percentage of the missed exam). All exams are closed books – any necessary information will be provided for you. All students need to be aware that a course grade of C or better is required in order to enroll in future chemical engineering courses in our department which require CHEN-2120 as a pre-requisite.

Exams may be submitted for regrading to the instructor within the week after they have been returned to you. (Exams submitted after this date will be returned without regrading.) Keep in mind that I will regrade the entire exam, not just the problem you would like me to look at, and that grade will not be appealable.

Classroom
It is requested that students make every effort to arrive on-time to class such that class can be started as scheduled without interruption. Also, any discovered incidents of academic dishonesty will be reported to the Academic Dishonesty Committee of the Department of Chemical and Biological Engineering and to the CU Honor Code Council. Consequences may include receiving a failing grade in the course and are up to the discretion of the instructor.

Exam Dates
Exam #1: September 27th (Tuesday), DUAN G1B30, 7:00-9:00pm
Exam #2: November 9th (Wednesday), DUAN G1B30, 7:00-9:00pm
Final Exam: (Section 001) December 12th (Monday), JSCBB A115, 4:30pm-7:00pm
(Section 002) December 15th (Thursday), JSCBB A115, 1:30pm-4:00pm

University Policies
Honor Code
All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating,
plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode/.

Classroom Behavior
Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Disabilities
If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, C4C building, and http://www.Colorado.EDU/disabilityservices. If you have a temporary medical condition or injury, see guidelines at http://www.colorado.edu/disabilityservices/go.cgi?select=3Dtemporary.html. Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at http://www.colorado.edu/disabilityservices.

Religious Holidays
Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, the student must notify the instructor at least one week in advance of a missed class due to religious observance in order to make appropriate arrangements to turn in homework or schedule an alternative time to take an exam. See full details at http://www.colorado.edu/policies/fac_relig.html.

Discrimination and Harassment
The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office
of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://www.colorado.edu/odh.