

ChemE 465

Reactor Design

Instructor: Professor Daniel Schwartz (dts@u.washington.edu)
Office: 263 Benson Hall
Office Hours: TBA

TAs: Ms. Fu-Chen Yu
Office: 356 Benson Hall
Office Hours: TBA
fuchenyu@u.washington.edu

Mr. Jason Kilgore
129 Benson Hall
TBA
killgoj@u.washington.edu

Examinations, Grading, and Homework

Grades will be determined from the scores on homework (50 pts), two midterm exams (100 pts each), and a final exam (150 pts). All midterm and final exams must be taken to pass the course.

A 2.0 or better grade in this course indicates the student has demonstrated satisfactory ability to:

- Identify the major types of chemical reactors, list their attributes, and determine the best reactor for a given situation.
- Design reactors for a desired conversion for both isothermal and nonisothermal conditions.
- Design multiple reactor systems and recycle reactor systems, and determine situations in which these are required.
- Perform unsteady mass and energy balances.
- Solve chemical reaction equilibria problems.

Homework is due at the beginning of class each **Wednesdays**. Late homework will receive no points, but its receipt will be acknowledged in the grade book. The TAs may grade all or some fraction of the assigned homework problems to grade; complete solutions for all problems will be placed on the course website. The TA is under no obligation to grade sloppy or illegible homework.

Text

The required text is *Elements of Chemical Reaction Engineering*, by H. Scott Fogler. The 4th Edition was recently released. You should be fine if you have the 3rd Edition, but make sure to check you are doing the right problems.

Course Schedule

The department Chair will lead the first four classes. The class will meet the first time on 9/30, and a lecture will be given during the first quiz sections on 10/4. Aside from that, other events should follow the regular schedule.

MWF	9:30 am – 10:20 am, New Lecture Material
T	Quiz/Homework/Problem Sections 9:30-10:20 am and 10:30-11:20 am.
11/11	Veterans Day (No class)
11/25	Thanksgiving (No class)

Examination Schedule

Midterm Exams: 11/2, 11/30

Final Exam: 12/14, 8:30-10:20 am (this date is fixed by the University; no make-up exams given).