



CHEE 321: CHEMICAL REACTION ENGINEERING

FALL 2011

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Lectures	<i>Mon 10:30, Wed 9:30, Fri 8:30</i>	STI Lecture Hall B
Tutorials:	<u>Section B</u> <i>Wednesday 16:30</i>	DUP 217
	<u>Section A</u> <i>Friday 16:30</i>	DUP 217

Course Textbook (required)

H. Scott Fogler 2011. Essentials of Chemical Reaction Engineering, Prentice Hall Inc.

Optional version: H. Scott Fogler 2006. Elements of Chemical Reaction Engineering, 4th Ed, Prentice Hall Inc.

EVALUATION (Tentative – ver. Sep 07, 2011)

Assignments (4 to 6)	10%
Design Assignments	20%
Midterm	25%
Final	45%
Total	100%

Important departmental policies on exams/assignments, etc... are found at:
<http://chemeng.queensu.ca/PDF/DepartmentalUndergradProgramPolicies.pdf>

Note that you must obtain a passing mark on the exam component (combined midterm/final) to pass the course.

Assignments

A set of practice questions will be posted for each course module. In addition, assignment questions to be handed in for marking will be posted for many (but not all) of the modules.

The assignments can be handed-in individually, or as one assignment for a team of two to three students. (Maximum group size is three; larger groups will have marks deducted.) Larger groups and copying of assignments is not tolerated.

Design Assignments

Details about the 2-3 third year design assignments for CHEE 321 will be provided later in the semester. These will be open-ended questions focusing on reactor design, and involve consideration of uncertainty, tradeoffs between operating and capital costs, etc... At least one of the assignments will require use of simulation software such as MATLAB to solve a set of coupled material and energy balances. Marks will be given for concise and coherent discussion, as well as technical calculations. Aspects of design will be covered among the regular lectures and tutorials.

Tutorials

There are no tutorial periods in Week 1 of classes.

The class is divided into two tutorial sections. Tutorial problems for the week will be posted by Tuesday. Please print and bring these to class. As well as working on the tutorial problem (solutions to be guided by the TAs), you will have the opportunity to ask questions related to assignment problems and lecture materials.

Mid-Term

Mid-term will be a CLOSED BOOK evening examination part way through the course (date to be determined soon). You will be tested on the fundamental concepts related to course material covered to that point (most likely Modules 1-3).

Final Examination

The final examination will be a 3-hour OPEN BOOK examination and will cover all material covered in the class, tutorial and assignments.