

# Chemistry 2710

## Chemical Kinetics

### Spring 2006

**Instructor:** Marc R. Roussel  
**Office:** E864  
**Phone:** 329-2326  
**Email:** roussel@uleth.ca  
**Course web site:** <http://people.uleth.ca/~roussel/C2710>  
**Regular office hours:** Monday, Wednesday and Friday from 10:00 a.m. to noon  
and from 3:00 to 5:00 p.m.

### Course prerequisites

The prerequisites for this course are **Chemistry 2000** and **Mathematics 1560**. You are expected to be *fully versed* in the material covered in these courses and in their prerequisites.

### Required materials

The textbook is *Physical Chemistry*, 4th ed. by Laidler, Meiser and Sanctuary.

You will also need a graphing calculator. A basic graphing calculator, if you don't already have one, is a great tool. You will however have to invest a little time learning to use it. In addition to the usual arithmetic operations, make sure that you can (1) perform a linear regression to obtain the slope and intercept of some data displaying a linear relationship, and (2) obtain a graph of some data points, preferably with the line of best fit. It is *your responsibility* to learn these features of your calculator.

### Email and web site

Important information will frequently be communicated to the class via email. It is *your responsibility* to keep an eye on your email during the term. This includes making sure that you do not exceed your email quota such that you become unable to read emails sent to you. You can check your email account status at [https://www.uleth.ca/webtools/account\\_tools/acctstatus](https://www.uleth.ca/webtools/account_tools/acctstatus).

The course web site contains several resources which you will probably find useful. In particular, it contains old problem sets and tests with solutions which you can use to test yourself as the course progresses.

### Office hours

My office hours are subject to change due to other commitments. I will try to inform you by email if I have to cancel some of my office hours.

If you can't meet me during my office hours, please phone or email to make an appointment. I can also answer certain types of questions by email, although that's not generally the best way to interact.

## Grading scheme

Evaluation type	Number	Formula 1	Formula 2	Dates
Lab	—	30%	30%	
In-class tests	2	15%	0%	Feb. 10 and March 17
Final exam	1	40%	70%	April 22, 9:00 a.m.

I will compute your course mark based on each of the two formulas given above. Your grade will be based on the better of the two scores.

A grade of F will automatically be assigned if your lab mark is less than 15/30. A grade of F will also automatically be assigned if you score less than 30/70 in the lecture part of the course.

If you miss one of the in-class tests, you will receive a grade of zero unless you have a medical or other equally serious, documentable reason. **It is your responsibility to notify me.** You should be prepared to present appropriate documents on request to support any claims you make with respect to a missed test. If you do miss an in-class test with a valid reason, the weight of the final exam will be increased accordingly.

If you miss the final exam, the provisions of the University Calendar (2005–06 edition, Part 4 (Academic Regulations), section 4, subsection f) take effect.

## Conduct of exams

In each exam, you will be permitted to bring one  $8\frac{1}{2} \times 11$ -inch piece of paper containing any information you want (formulas, instructions for using your calculator, etc.). Any numeric data you need (universal constants, etc.) will be given on the exams, so you don't have to put that on your formula sheet.

## Material to be covered

This course will mainly focus on chemical kinetics (chapters 9 and 10 of the textbook), although we may also cover some topics in physical kinetics (e.g. diffusion from chapter 19), time permitting. Note also that the textbook is not a complete reference for this course and that additional materials will be presented in class. In some cases, notes may be posted to the web site.