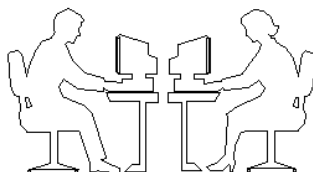




Computers in Chemistry (CHEM100) Syllabus – Spring 2009



Instructor

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Introduction

“Computers in Chemistry” is a hands-on course. Most weeks, there will be a little “listening” (to lectures) and a lot of “doing”. A typical class session will begin with a short presentation that introduces the topic for the day. Next, the instructor will demonstrate a piece of software or a particular use of a program. Finally, the remaining the class time will be spent doing; most classes will end with an exercise to be performed by the student during class.

The topics to be covered are listed on a separate “Course Outline” and include everything from the very general (basics of computer hardware, for example) to the highly specialized (computational chemistry). The course is not intended to make students experts in “computational chemistry” (a highly specialized branch of chemistry). Rather, it is intended to make students aware of what is possible in terms of using computers to aid in doing chemistry. The use of computers to aid in clearly communicating chemical concepts and results is stressed.

A list of topics (along with a tentative schedule) can be found on the course website (<http://webhost.bridgew.edu/fgorga/courses/CHEM100/index.html>).

Required Materials

- Laptop (notebook) computer – running Microsoft Windows XP (or Vista). **You will need to bring your computer to each and every class.**

The latest versions of Apple Mac’s can be run Windows using special software. However, you are on your own if you choose this route; the instructor cannot provide technical help with this.

- Microsoft Office 2007 (CD available in the bookstore; approx. cost \$10)

- ChemOffice (see <http://download.bridgew.edu>; no cost to registered students; this is a “Windows only program”; see above for info about running Windows on a Mac.)
- USB Thumb Drive (1 GB capacity should be good for this course)
- Access to the College's network (including the wireless network).

If you do not yet have an account for the College network or if your laptop is not set up to access the wireless network, please see the IT Help Desk in Moakley or the Library to get these things set up.

- There is no required text for this course.

However, students may, depending on their level of prior experience, want to purchase one of the many “How-to” books that cover the basics of Microsoft Office. Ask the instructor for more information.

- Approximately twenty-four hours prior to each class meeting, “lecture notes” (as a pdf file) will be made available on the course website.



Evaluation of Student Performance and Academic Policies

In class exercises* (50%)

“Practical” Exams --

midterm (25%) – the date of this exam will be announced well ahead of time
 final (25%) – see the College’s official final exam schedule for date and time

* These exercises will be distributed in class. Students will spend time in class working on each assignment. *Completed assignments are due by the beginning of the next class period; no exceptions allowed. However, assignments may not be turned in less than 48 hours after they were handed out.*

Since the in class exercises are integral to the material covered in this class, students must attend each class. Students missing a class will be at a large disadvantage since they will not have had the benefit of neither the introductory lecture nor the instructor’s guidance. Remember that there is no textbook on which to “fall back on”!

If an extreme emergency causes student misses a class (s)he must obtain the assignment no later than noon on the Monday immediately following the missed class and turn the completed assignment in by the regular deadline (i.e. the beginning of the following class).

In determining the final grade, I will be drop the lowest grade earned on the in class exercises. However, in order to take advantage of this policy students must have completed and turned in (on time) all assignments.

Students must take both practical exams. If a student cannot take an exam as scheduled, they must obtain arrange an alternate time with the instructor **prior** to the scheduled exam time. Such permission is not granted lightly, and should not be assumed.



Email and File Naming Conventions

You will be turning many files (both weekly assignments and on exams) into to me as email attachments. This creates a problem for me because of the number of messages and files I receive; to minimize the problems caused, I reply on strict file naming and email subject line conventions.

Each email you send me dealing with this course must have a subject line that starts with “[CH100]” (omit the quotes). Sometimes I will tell you to add something else specific to the subject line. For example, for the first assignment, I might tell you to use the subject line “[CH100] Assignment #1”.

Additionally, as part of each assignment or exam, I will tell you how to name the file(s) you will be producing. For example, most file names will look something like this “XX_Y_Assignment_1.doc”, where the “XX” should be replaced with your initials and the “Y” with an “M” if you are in the Monday section or an “R” if you are in the Thursday section.

These conventions must be followed exactly; failure to do so will result in lost work and will lower your grade.