

PROSPECTUS

CHEMISTRY 322 - ORGANIC CHEMISTRY II

Spring Semester 2005

Professor in charge:	Dr. Bruce Knauer
Office/Phone/ E-mail:	Physical Science Rm. 213 / 607-436-3434 / knauerbr@oneonta.edu
Office Hours:	Mondays: 1 - 1:50pm; Wednesdays: 11 - 11:50am; Thursdays 4 - 4:50pm; or by appointment. I shall also be available to answer questions, on a shared time basis, in the lab on Wednesdays (2-4pm), and Tuesdays and Thursdays (1-3pm).
Required texts and materials:	1) John McMurry, "Organic Chemistry," 5th edition, Brooks/Cole, 2000. 2) Study guide for above text by Susan McMurry. 3) Set of molecular models. 4) Splashproof goggles: required for laboratory. 5) Laboratory notebook, sewn – not spiral – bound; not looseleaf!
Approximate Course Content (subject to modification):	Lectures in Chem 322 will generally follow the order of topics in McMurry. It is likely that we will cover material in Chapters 14-24 and 26, along with parts of 25 and 27, and possibly selected additional material.
WWW Homepage:	The Chem 322 homepage can be reached <i>via</i> http://employees.oneonta.edu/knauerbr . It has links to an Adobe Acrobat (pdf) version of this document, lecture material, old exams, suggestions on how to study and how to take exams, and other chemistry related www pages.
Homework:	The most important factor for learning the material and for success on examinations in this course is working (and reworking) problems. Consequently you will be assigned problems to work in each chapter of McMurry that we cover. Answers to problems may be found in the answer book and further information about any problem may be obtained from the instructor. Homework will be collected; if it is up to one week late you will lose 5 points; if it is more than one week late you will lose 10 points. Of course, in order to be able to work the problems you will need to study (and restudy) the text. If you work the problems <i>before</i> the corresponding material is covered in class, the classwork will seem more concrete and you will be able to ask questions about concepts that you find difficult.

When you hand in assignments be sure that your name and chapter number are prominently displayed on the first page and that the pages are stapled together.

Examinations: Each of the four preliminary examinations will emphasize material that has been covered in classwork or assigned reading since the previous exam. However, it is the nature of organic chemistry that it is not possible to completely segregate more recent material from earlier material. The final examination will consist of two parts. *The first part is prepared by an American Chemical Society panel and is comprehensive, covering Chem 221 and 322.* The second part, prepared locally, is also comprehensive, but strongly emphasizes material from Chem 322. On the final examination, only, you will be able to use your copy of the textbook as a reference. Questions on these exams will range in difficulty from those which merely require memorization of facts or the application of simple rules to those which require mastery of the facts and concepts as well as mature and critical thinking.

Exam #1: Monday, February 14, 2005. Exam #2: Monday, March 14, 2005.
Exam #3: Monday, April 11, 2005. Exam #4: Monday, May 2, 2005.
Final (at least in part: *American Chemical Society - covers Chem 221 & 322*):
Friday, May 13, 8 AM. **There will be no makeup examinations for Exams 1-4.** If you are unable to attend one of the examinations because of illness or other valid reason, and inform the instructor in writing, in timely fashion, the final examination will be used as a makeup exam. Questions concerning the grading of an examination will be considered only until the next examination is given.

Class Participation: In order to participate you need to be here. Consequently, attendance will be taken. If you are absent *and provide a good reason, in writing, in timely fashion*, your absence will be excused. If you accrue more than two unexcused absences, you will be penalized 2 points for each such absence beyond the first two.

Grading:	Four examinations: 125 points each	= 500 points
	Class participation	= 50 points
	Final examination	= 200 points
	Laboratory	= <u>250 points</u>
	Course total	= 1000 points

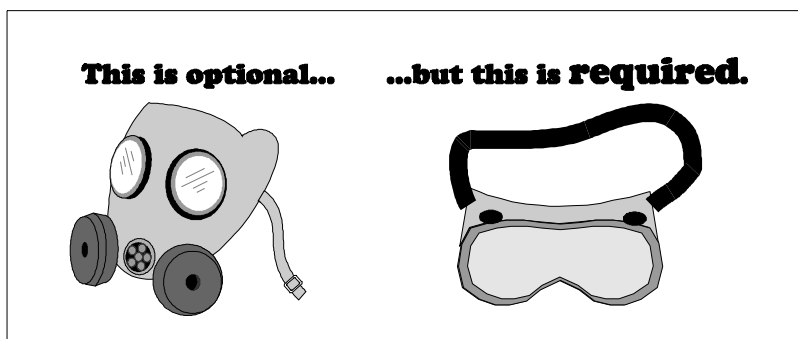
Grading Scale:	<u>Total Points</u>	<u>Grade</u>	<u>Total Points</u>	<u>Grade</u>
	900 - 1000	A	600 - 649	C
	850 - 899	A-	550 - 599	C-
	800 - 849	B+	525 - 549	D+
	750 - 799	B	500 - 524	D
	700 - 749	B-	475 - 499	D-
	650 - 699	C+	0 - 474	E

The grade of incomplete is assigned only in the rarest of circumstances. In no case will it be used as a substitute for a withdrawal after the withdrawal deadline has passed. Your final course grade is final; by college policy the only exception would be in case of clerical error.

Lab: Physical Science Rm. 210. *Weekly attendance in the laboratory section for which you are registered is mandatory.* Excused absences are at the option of your laboratory instructor, but will generally be allowed for illness, religious holidays, and varsity sports meets. In any event, if you are absent, it is your responsibility to make up missed work.

LABORATORY SCHEDULE

THE SAFETY GOGGLES MUST BE WORN AT ALL TIMES IN THE LABORATORY



<u>Dates</u>	<u>Experiment</u>
1/25 - 1/27	Check In, Make Polymers. [Polymer property analysis 2/1-2/3.]
2/1 - 3/17	Qualitative Analysis of Two Unknowns including Preparation of Four Derivatives. Deadline: Reports and derivatives to be handed in on the day <i>your</i> lab section meets: 3/22 - 3/24.
3/8 - 3/10	Deadline: Independent Project selected or proposal due on the day <i>your</i> lab section meets.
3/22 - 4/14	Independent Projects & Molecular Modeling.
<u>4/19 - 5/5</u>	<u>Multistep Synthesis</u>
4/19 - 4/21	Acetanilide from Nitrobenzene.
4/26 - 4/28	p-Nitroaniline from Acetanilide.
5/3 - 5/5	Para Red from p-Nitroaniline.
4/19 - 4/21	Deadline: Independent Project report/materials due on the day <i>your</i> lab section meets.
5/3 - 5/5	Deadline: Submit report and materials from para red synthesis. Check Out.