CHEMISTRY 222 Spring 2003

Instructor: Monica Ali, Pierce Hall, Room 210, Telephone Number 4-8340

Required Instructions Wade, Jr., L. G., "Organic Chemistry," 4th edition, Prentice Hall, Upper

Instructional Saddle River, New Jersey, 1999

Materials:

Simek, Jan William, "Solutions Manual, Organic Chemistry" 4th edition,

Prentice Hall, Upper Saddle River, New Jersey, 1999

Goal of Course:

This course is designed to prepare students who wish to major in the following areas, chemistry, chemical engineering, and biology, as well as provide preparation for students planning to apply to professional schools in the health sciences, such as medicine, dentistry, pharmacy, and

veterinary medicine.

Specific Objectives:

At the end of this course, it is expected that some of the skills, with which students gain familiarity, will include the following:

Classification and nomenclature of organic compounds based upon their functional groups.

Prediction of both physical and chemical properties of different classes of organic compounds based upon the functional group present in a molecule.

Understanding of the mechanisms of basic organic reactions, such as addition, elimination, and substitution.

Ability to visualize organic compounds in three-dimensional space and predict three-dimensional changes incurred as a molecule reacts (Stereochemistry)

Use of spectroscopy in the identification of various organic compounds.

Ability to apply principles discussed in class and in text to seemingly new, but similar, organic chemistry problems.

We expect to study chapters 13 through 25 in the text.

Honor Code: The Honor Code is endorsed on the Oxford College campus. The Honor Code promotes the virtues of honesty and academic integrity. Briefly, any work for which you receive a grade is to be completed with the Honor Code in mind. Your signature on your work indicates that you have abided by the Honor Code. You may not give help to anyone, nor may you accept help from anyone, for graded material. If any assignments are made for outside of class, you are to abide by the same principles. You may not give or receive help from anyone, nor may you use any materials other than those authorized.

Attendance: Attendance is required and will be taken every class. If you need to be absent from class for an emergency (only a true emergency), it is expected that you will notify the instructor. Should you be present for every class, a bonus point will be added onto your final average. Should you miss more than three classes (for whatever reason), one point, per class missed, will be subtracted from your final course average.

Tardies:

Being late to class is rude and distracting. Three tardies will be considered equal to one absence. If you come late to class, please see the instructor immediately after class to ensure that you are marked tardy and not absent. No adjustments will be made at a later time. The instructor reserves the right to exclude from further classroom participation a student who is continuously tardy.

Learnlink Conference:

The class has a learnlink computer conference. Please check the conference on a regular basis for announcements regarding the class. Problem sets for each chapter, times for help sessions, and any other appropriate notices, will be posted regularly on the conference.

Problem Sets: The study of chemistry involves the solution of problems. All tests will require solution of problems. It is imperative that you become proficient in working problems to be successful in the course. All problems in the chapters are required. In addition, problems from the end of each chapter will be assigned. The specific problems, for which you are responsible, will be listed on the class learnlink conference about the time we begin discussion of each chapter in class. You are strongly encouraged to work all the problems assigned. It is not sufficient to be able to follow the solution of a problem. You must be able to initiate such solutions yourself, and this is possible only with the practice gained from working many different problems.

Suggested Method of Study:

After attending each class, look over your class notes from that day, read that section of the text, and work any assigned problems, which pertain to the material discussed that day. Try to completely work the problems yourself before looking up answers in the back of the text or in the solutions manual. You are encouraged to form small study groups with a few other classmates. Get together with one or two other students in the class on a regular basis to help each other with any questions you may have.

You will gain the most from each class if you familiarize yourself, with the material to be discussed that day, before you come to class. Read ahead in the text so that you are always slightly ahead of the class lecture.

Help Sessions:

Help sessions will be held several times during the semester. These sessions are voluntary and will provide the opportunity for students to ask questions as well as to observe and participate in the solution of problems. These help sessions will be held on the day before a test, as well as other times during the semester. The times of these sessions will be announced in class and posted on the learnlink class conference.

Tests: Tests will be given Friday afternoons on the following dates at 3:00 PM:

February 7 February 28 March 21 April 25

Test questions may include multiple choice, short essay, and mathematics problems. Answers to test questions are expected to be thorough and show a logical progression in arriving at the answer.

If you are late for a test, no extra time will be given to take the test. **THERE ARE NO MAKEUP TESTS.** If you will miss a test, you **MUST** notify the instructor **BEFORE** the test with the reason for your absence. If your reason is acceptable to the instructor (*eg.* life and death situations), the test will not be calculated into your grade. If the reason is not acceptable to the instructor, the grade for the test will be **ZERO** if you do not take the test, and the zero will be averaged into your grade. The instructor makes the final decision about the reasonableness of any excuse. If more than one test is missed, the grade is automatically zero on the second and any subsequent missed tests, and will be averaged into the final grade.

Re-Grades: You have one day in which to submit your test for a re-grade. These submissions must be done in writing. Do not write on your test if you plan to submit it for re-grading. Exams will be randomly photocopied prior to grading and any alterations made to answers will be reported to the Honor Council.

Final Exam:

The final examination is comprehensive and will be given on Tuesday May 6th during the regularly scheduled exam period. The 10:40 AM class will take the exam at 9:00 AM and the 11:45 AM class will take the exam at 2:00 PM.

Calculation of Final Grade:

Tests = 400 points Final Exam = 200 points

Total 600 points

The grade reported for an individual will be one of the following:

A (93% - 100%) A-(90% - 92%)B+(87% - 89%) В (83% - 86%) (80% - 82%) B-C+(77% - 79%)C (73% - 76%) C-(70% - 72%) D+(67% - 69%) D (60% - 66%) F (below 60%)

Religious **Holidays:** Please notify the instructor in writing one week in advance if you will be out of class for one of the religious holidays indicated on the campus list of religious holidays.

Office Hours: I am usually in my office each day from 9AM to 5PM, except for class, lab, and lunchtime. However, to be certain of finding me available to help you, please make an appointment. You may call me on the phone, send email, or speak to me before or after class to make an appointment.