

CHEMISTRY 100
Spring 2005

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

Lecture: Monday, Wednesday, and Friday 9:35 – 10:25 AM

Location: Pierce Hall, Room 201

Required Instructional Materials: Bettelheim, F.A., Brown, W.H. & J. March, "General, Organic, & Biochemistry," 7th edition, Harcourt College Publishers, New York, NY 2004 (required)

Study Guide to accompany text (optional but strongly encouraged)

Solutions Manual to accompany text (optional but strongly encouraged)

Goals of Course: The study of science, particularly chemistry in this case, can lead to an understanding and appreciation of science as a part of a liberal arts education. One goal of a liberal arts education is an awareness and appreciation of one's surroundings. In order to begin to understand the natural world around us, one needs to have a basic concept of the nature and workings of chemical materials, which comprise our bodies and all other materials around us.

The ability to think clearly and critically is a skill, which is a valuable asset in any part of life. In order to think clearly and critically, one must be able to solve problems. The ability to think, to consider different pieces of information and formulate a rational and reasonable plan of action, based upon that information, is a skill that may be learned, partially, through the study of chemistry.

In a time when multiple, significant developments in science and technology, many of which may have profound ethical consequences, are taking place, all people need to have some understanding, at least in general terms, of both the nature and possible significance of these developments. The study of chemistry can develop a scientific literacy, which can provide part of the basis upon which to make decisions about the appropriate uses of the scientific and technological developments.

Course of Study: We will study Part One: General Chemistry, Chapters 1 to 9, in the text. In addition, we will consider water and air pollution issues in the State of Georgia, specifically in the City of Atlanta, as well as pollution in China. Some handouts and websites will be provided in connection with this

study. Group projects and presentations will be involved in the study of pollution in Georgia and in China.

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, you may not accept help from anyone, nor may you use any unauthorized materials for graded material. In addition, you are bound by the Honor Code to report any cheating of which you are aware.

Electronics: The use of beepers and cell phones in class is not allowed. Laptop computers are allowed if they are quiet.

Attendance: Attendance is required and will be taken every class. Should you be present for every class, a bonus point will be added onto your final average. In addition to coming to class, you must come on time. Your walking into the class late is disruptive to both the teacher and the students. If you come late, it is your responsibility to see me immediately after class to be certain that you are marked late and not absent. No adjustments will be made at a later time. Coming to class more than 15 minutes late will count as an absence.

When you are in class, you are expected to be attentive, participatory, and not disturbing to others. Leaving a class early counts as an absence, as does sleeping through a class or being generally inattentive.

Coming to class late more than five times will count as one absence. Should you incur more than three absences, **one point, per class missed, will be subtracted** from your final average. There are no excused absences. You will be counted absent whenever you are not present in class,

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, any changes to the syllabus schedule and other appropriate notices, will be posted regularly on the conference.

Handouts of Chapter: A brief sketch outline of each chapter will be provided on the learnlink computer conference. You may print the outline and use it to take notes in class. This outline will be an indication of important topics for each

chapter and should prove to be helpful when studying for tests and quizzes. Some individuals may prefer to completely take their own notes. This decision to use or not use the outline is totally up to the student.

Problem Sets: 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. You are strongly encouraged to work all the problems assigned. At least one problem from each problem set **will be** seen on the test or quiz for that material.

Suggested Method of Study: 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. Before coming to class, read the material that will be discussed that day. After attending each class, look over your **class notes** from that day 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. Utilize the **Study Guide** for additional practice with chemistry problems. One or more problems from pertinent material in the Study Guide **may** appear on each test or quiz.

Help Sessions: A general help session with the instructor outside of class time will be held before each test. Usually the meetings are Thursday afternoons. Additional help sessions may be provided as needed. The session is optional on the part of the student. No new material will be taught. Questions from the students will be answered. It is to the benefit of the student to attend. Often questions which are asked in the help sessions appear on tests. Check the learnlink class conference for the times of the meetings.

Tests: Tests will be given for fifty-five minutes during the class period. Four tests will be given.

Friday, February 11
Friday, March 4
Friday, April 1
Friday, April 29

Everything discussed in class may appear on the tests. In addition, anything in the assigned chapters in the text, unless you are told that you are not responsible for something, may appear on tests.

Test questions may include multiple choice, short answer, word and mathematics problems, and short essays. Please bring a calculator to all tests.

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 final exam will be used to replace the missing 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 subsequently missed tests and will be averaged into the final grade.

In addition, there will be an evaluation of the pollution issues in Atlanta and in China. This evaluation will include a PowerPoint presentation and a short memo. More detail will be provided in class and on the LearnLink class site.

Because some sections of the text are more difficult than others and may require more time in class, all tests will not cover equal amounts of text material. Some tests may include more or fewer pages.

Final Exam: The final examination is **comprehensive** and will be given on Tuesday, May 10th, 2-5pm. The examination may not be taken at any other time.

Calculation	Tests & Pollution Issue Evaluation	=	60%
of Final	Final Exam	=	15%
Grade:	Laboratory	=	20%
	My evaluation	=	5%

My evaluation will consider **your attitude, preparedness for class and participation in class.** My evaluation, as well as your performance on tests, and the final exam, will be involved in determining your final grade.

The grade reported for an individual will be one of the following:
A, A-, B+, B, B-, C+, C, C-, D+, D, or F

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: By appointment and Wednesday, and Friday, 1:30-2:30 PM. I encourage you to come to my office to discuss any questions and concerns you may have with chemistry.

Laboratory: You will receive a syllabus for the laboratory containing the rules and procedures for laboratory. **IN ORDER TO PASS THE COURSE, IT IS NECESSARY TO PASS THE LABORATORY PORTION OF THE COURSE.** Laboratories are held Tuesday and Thursday afternoons from 2:30-5:30 PM. You will meet first in the classroom, Pierce Hall, room 201, before going into the laboratory. Laboratories will begin the first full week of class, the week of August 30th.

The laboratories are **Theory Practice Service Laboratories**, meaning that you will use concepts that you learn in class to help others. In the chemistry laboratory you will work with young children for three laboratory periods, teaching them about chemistry.