

CHEMISTRY 1010

CHEMISTRY, HUMANITY AND ENVIRONMENT

Spring 2006

Instructor:	Dr. Laya Kesner, HEB 1319, 581-6536, kesner@chem.utah.edu , Mailbox in HEB 1504
Office hours:	M W F 10 - 11:30 a.m. or by appointment
Class times:	Lecture Chem 1010 - 001 M, W, F HEB 2006 11:50 a.m.-12:40 p.m. Discussion: Chem 1010 - 002 H ST 205 11:50 a.m.-12:40 p.m.
Teaching Assistant:	Chem 1010-002 Michelle Taliaferro, michelle@chemistry.utah.edu TA has mailbox in HEB 1504
Office hours:	Arranged at first discussion meeting.
Secretary:	Sue Wolfe, 1320 HEB, 581-5784; Tricia Tucker, 2170 HEB, 581-4383
Office hours:	M - F, 8:00 a.m. - 5:00 p.m. M - F; 9:30 a.m. - 5:30 p.m.
Textbook:	Chemistry for Changing Times, 10 th Edition, Hill & Kolb, Prentice-Hall

- Notes from the Registrar:**
1. The last day to drop classes (no W) is Wednesday, January 18.
 2. The last day to add classes, select C/NC option or to audit a class is Jan. 23.
 3. The last day to withdraw from term length classes is Friday, March 3.
 4. Tuition payment is due Monday, January 23.

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

Prerequisites: Chemistry 1010 is an introduction to the chemistry of the environment, primarily for non-science students. No background in chemistry is required, but a basic mathematical competence will be useful.

Course Emphasis: Chemistry 1010 aims to promote understanding of the basic environmental ingredients, energy, atoms, and molecules, and the application of the understanding to a multitude of environmental problems, e. g. resources of energy, minerals, air and water. Your instructors are enthusiastic about this course, believing that it should be highly meaningful to the student on a topic of great importance to the future of mankind. Our studies will involve most of the first fourteen chapters of the text; small portions of later chapters may be included. Each month, a complete **schedule** of course activities will be distributed.

Lecture: During the lecture periods, I will work with you to systematize and elaborate on the text material as well as enrich the topics with material from other sources. You will find it helpful to read the appropriate text material before the lecture, as listed on the schedule. The lecture outlines and diagrams will be on reserve at the Marriott Library for your use. They *may* also be available on a Chem 1010 website.

Finally, eight of the lecture periods (indicated on the monthly schedules) will be devoted to brief laboratory experiments. This laboratory component has been added to the course at the suggestion of a majority of former students. The **laboratory experiments** will be distributed in advance, allowing you ample time to be well-prepared for the exercises. Data and answers to questions will be recorded on the handout. You

do *not* need an additional laboratory notebook. The experiment will be graded for completeness of data and care in answering questions. *It is not possible to make up laboratory work.* To allow for unavoidable absences, only the best seven experiments will count toward the grade.

Discussion: Student participation is a prime objective of the discussion periods. There are two specific areas: to aid in solving problems and to provide time for environmental analysis and student reports. In the first few weeks of the semester, problem-solving will be emphasized in order to establish a foundation for later work. Homework questions, *assigned on each **Study Guide***, will be collected in the discussion and graded for effort.

To generate material for discussions and to promote a wider view of environmental issues, a **written report** (double-spaced typewritten, 750 word minimum) is required of each student as part of the discussion program. The report is due at lecture class time on **Monday, February 27**. A handout will provide you with detailed requirements for the report. After the instructors have read the reports, you will present them orally to your fellow discussion classmates.

Aside from the report, you are encouraged to collect newspaper and magazine articles to bring with you both to the classroom and to discussions whenever possible. (Two articles will earn 10 participation points.)

Examinations and Grades: Exams will consist of nine brief quizzes worth 40 points each. The lowest quiz score will be dropped. Thus, the quiz total will be 320 points. Quiz dates are listed on the monthly schedule; they will generally coincide with the completion of chapters. **There will be no makeup quizzes.** If you miss a quiz, the missed quiz will be the quiz not counted. The final exam (Tuesday, May 2, 10:30 a. m. - 12:30 p. m.) will be valued at 160 points.

In addition, 60 points will be based on your paper and 40 points on your presentation of the paper and the subsequent discussion. Late papers will be accepted but will be downgraded 10% for each calendar day late. Another 26 points will be based on general participation in the class. Homework preparation will be valued at 24 points. The best seven experiments will be worth 70 points. Thus, the point total for the course will be 700. Grading will be on an *approximate* percentage basis:

90-100% A-, A
80-89% B-, B, B+
70-79% C-, C, C+
60-69% D, D+ (C-)

Summary of Grading

1. Best eight quizzes	320
2. Written paper	60
3. Oral presentation	40
4. Class participation	26
5. Homework	24
6. Best seven experiments	70
7. Final exam	<u>160</u>
TOTAL	700