Chem 110 Spring 2014 Syllabus

Dr. Sam Abrash

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C-208 Gottwald Science Center INTC 307 289-8248 (office) Office Hours MW: 2-3 PM (INTC) TR: 10:30-11:30 (Gottwald) Textbooks:

Chemistry in Context, 7th edition **Laboratory Manual - Chemistry in Context**, 7th edition

| Course Grade | | Test Dates | | Due Dates | |
|---------------|-----|-------------------|---|----------------|--------|
| Participation | 15% | Test #1 | Feb 17 | HW #1 (air) | Jan 29 |
| Homework | 15% | Test #2 | Mar 26 | HW #2 (air) | Feb 14 |
| Tests (3) | 30% | Test #3 and FINAL | Apr 28, 2:00 PM or self scheduled between April 28 th and May 2 nd (except for graduat- ing seniors, who may self-schedule be- tween April 28 th and April 30 th) | HW #3 (energy) | Mar 24 |
| Final | 15% | | | HW #4 (water) | Apr 9 |
| Laboratory | 25% | | | HW #5 (water) | Apr 25 |

Tests

There will be three 75 minute tests given during the semester. The tests will be closed-book but you will be allowed to use a "test packet" consisting of your answers to the Lecture Questions prepared for each lecture, as well as your Homework and possibly other group assignments. The test packet must be turned in with the test. Please note that you will be assembling your test packets from your copies of these assignments. (More detail on lecture questions and homework assignments is given below.)

More details on the topics covered by each test are given in the Lecture Schedule. There will also be a cumulative, 75 minute Final during Exam week. You may use all your Lecture Questions for the Final, as well.

Lecture Questions

For every section (i.e., The Atmosphere, The Ozone Layer, etc.) in the course, I will assign a portion of the textbook and/or some articles to read, and several questions to answer based on this material. You are to type up your answers to these questions and bring them to the first class in which the material is discussed. They will be turned in at the end of that class.

If you turn in these answers on time and there is no handwriting on them, they will become part of a "test packet" that you can use when taking tests. For this reason, I strongly recommend that you include both the question and the answer in your submissions.

My suggestion it that you turn in your answers to the Lecture Questions as email attachments;

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see below. This will be your "clean" copy that will be part of your test packet. Also print out a hard copy of your answer and bring it to class. You will refer to this during class as we discuss the material; you can write on it as you wish and use it as a study aid. However, you must print out your own "fresh" copy of the lecture questions to bring to the test. I will not be printing out the lecture questions for you.

Homework Assignments

There will be five homework assignments due during the course of the term (see table above). Each homework assignment will consist of a brief (approx two pages, double-spaced) paper about an article that deals with an environmental issue related to the sources or effects of chemical pollutants. The article may be a news story from a newspaper, or a feature in a magazine, or a scientific research article - it is up to you. If you choose a short article, you will also need one or more *related* articles to include in your summary paper.

Your grade on the homework assignment will depend on the following factors: the length and sophistication of your source article(s), the accuracy of your summary, and the understanding of the environmental issues that you demonstrate in the summary. Please note, however, that articles from the popular media will earn a lower grade than articles from scholarly journals. It is also possible to earn bonus points towards your homework grade, as described below.

The first two homework assignments are to be related in some way to **air pollution**, the third assignment must deal with **energy sources**, and the last two assignments should be related to **water pollution**. You do NOT need to choose "chemistry" articles; in fact, as long as it relates to the topics just described, you are encouraged to choose articles based on your interests (politics, economics, public health, science, current events, international relations, etc). You should, however, avoid articles that are too dated.

On the day a homework assignment is due, come to class with hard-copies of both your summary and the original article(s). The class will be divided into 4-5 small groups. Each group member will summarize his/her article and then the group will choose one to be presented to the class. Bonus points will be awarded to the person chosen from each group. After each group's representative has summarized his/her article, every student present will vote (privately) on the homework that you found the most interesting or informative. You may not vote for the article presented by a member of your own group. The winner will be awarded further bonus points, as will every member of his/her group.

The articles presented to the class are considered "testable" material. You are advised to take notes during the presentations and to ask questions. Although not required, you will be allowed to submit your notes (typewritten) by the next class period to be included in your test packet. Links to the articles presented to the class will also be posted online.

You may submit homework assignments as hardcopy printouts or electronically (see below). In

either case, your article summary *must include the article title and citation* information in a format that allows me to find the article online. An active link to the article is very helpful. If you submit your summary as a printout you must also submit a printout of the original article as well, including the full bibliographic information.

Electronic Submission of Assignments

You may submit answers to lecture questions or homework assignments electronically, as MS Word documents attached to an email message. If you do, please follow these rules:

- *Include your name* in the document.
- For homework assignments, you must include a "live" link *in your email message* (not just in the summary document). Verify that this link works before sending it to me.

Participation Grade

Your participation grade will be calculated based on the number of lecture questions sheets you turn in (on time) and your attendance/participation in the in-class discussions of homework assignments.

Extra Credit Notebook

This semester you will be given the option of keeping a double entry notebook on your reading. The notebook must be a bound notebook, with each page divided vertically in half. On the lefthand side you are to summarize what you have read in a given section of the text, while on the right hand side you are to write a response consisting of questions, comments or ideas that arise from the reading. I will grade this notebook at the end of the semester. The notebook grade will be based on completeness (did you do all the chapters?), on the accuracy and clarity of your summaries, and on the thoughtfulness of your responses. Up to 3.5 points of extra credit added to your final grade can be earned for completion of the notebook.

Policy for Late Assignments

Late assignments will not be accepted except for reasons of illness or other excused absences (ie, due to University events such as athletic competition or artistic performances). Making up work for the laboratory portion of the course is entirely up to the discretion of your lab instructor.

Honor Code

All work submitted under your signature in this course is pledged as being your own work. The honor code applies to answers to Lecture Questions, lab reports, homework assignments, and tests. In some cases, assignments may be given as group projects, and are considered to be a collaborative effort of the entire group. Every student in the group will receive the same grade.

The honor pledge is "I pledge that I have neither given nor received unauthorized assistance

during the completion of this work."

For electronic submission of assignments, typing your name after the honor pledge constitutes an electronic signature that carries the same weight as a normal signature.

Attendance

Although your presence is expected in class, no attendance will be taken *except on days in which homework assignments are due* (and will be discussed in class). If you are absent -- even if the absence is excused -- you are still responsible for all announcements and material covered in class.

Any missed test or homework discussion will count as zero points unless it is an excused absence (illness, participation in a scheduled University event, etc.) which should be cleared with me before or immediately following the missed class.

If a student misses a significant number of classes, such that I feel that his/her work is affected, I will notify the student's residential college dean.