**SYLLABUS: Technology & Society**

**Chem:1050 (Spring 2018)**

**Instructor:** Dr. Phil Pagano  
Office: E309 CB (Chemistry Building)  
e-mail: philip-pagano@uiowa.edu  
**Office hours:** T/Th 12:30 PM-2:00 PM E309 CB  
**Location/Time:** Lectures, E264 Chemistry Building (CB); Tue & Thu 11:00AM-12:15PM

**Course Materials:**  
- *Chemistry for Changing Times 14th Ed* by J.W. Hill, T.W. McCreary  
- Handheld calculator  
- Course Website (ICON): icon.uiowa.edu  
**IMPORTANT:** Programmable or graphing calculators are NOT ALLOWED during exams.

**Co- or Prerequisite:** none

**Course Description:** Exploration of societal and technological issues from a chemical perspective. The course emphasizes chemical and scientific literacy as a means to better understand topics like air and water (and the trace materials found in them that are sometimes referred to as pollutants); energy from natural sources (e.g., solar and renewable forms), from fossil fuels (like gas, oil and coal) and from nuclear fission; materials like plastics and polymers and their natural analogs, proteins and nucleic acids (DNA); and chemical reactivity and molecular inter-conversions from simple examples like combustion to complex instances like genetic engineering and the manufacture of drugs. Calculations and mathematical manipulations are minimal, and no college-level science preparation is required. This course is approved as a component of the General Education program of the College of Liberal Arts and Sciences.  

**Course Objectives:** The student will be introduced to the language and basic principles of chemistry and application of these to the technology of today’s society. Critical thinking, analysis, and communication skills will be developed through class assignments and discussions.

**Course Administration:** Go to the Chemistry Center, room E225 CB, for add/drop signatures, make-up exam scheduling, and other administrative matters. (If make-ups are needed, also contact me regarding this. Proper paperwork is necessary for scheduling make-up assignments.)  
Chemistry Center Hours: 8am-12pm and 1pm-5pm (M-Th); 8am-12pm and 12:30pm-4:30pm (F). Chemistry Center Manager: Trent Tappan ([chemistry-center@uiowa.edu](mailto:chemistry-center@uiowa.edu) (preferred) OR [trent-tappan@uiowa.edu](mailto:trent-tappan@uiowa.edu); phone: 319-335-1341)

**Quizzes:** Quizzes will be given during the class (see schedule on ICON). Questions will be multiple choice and cover course material (i.e. textbook, lecture notes, back of chapter questions, etc.) and is closed book/notes. The quiz grades collectively over the semester can be used to replace an exam grade.
**Examinations:** There will be three total exams (two plus a comprehensive final). The exam dates are listed below along with tentative chapters to be covered. The first two exams will be held in E264 CB (in our classroom). The location of the final exam will be announced later on the MyUI website. Students should bring a #2 pencil, their University ID, and a basic scientific calculator (programmable or graphing calculators are not allowed).

Exam Schedule and Tentative* material

- Exam #1: Thursday, February 15th
- Exam #2: Thursday, March 29th
- Final Exam: TBA

*May be subject to change

**Course project:** Students will pick a topic covered in class and research it on their own time. Students will give a brief 5-7 minute presentation on this topic during the last several weeks of class and submit a relevant question based on the content they present. This question will be considered in writing of the final exam and students are expected to attend the presentations in class to acquire knowledge of the material that their peers will be presenting. The score for this project will be based on participation, organization, and quality of presentation.

**Make-up Exams:** Students are expected to attend all scheduled events. You will have the opportunity for a make-up exam if your excuse for illness, mandatory religious obligations, University activity, etc. conforms to the University policy as explained in the Schedule of Courses. You must contact me as soon as an issue or conflict arises. Students may take one make-up exam per semester. You have a maximum of 7 days (one week) after a missed assignment to schedule a makeup, or your request may not be considered.

**Grades:** 3 exams (80 points each), 9 quizzes (80 points total), and the course project (80 points) will be graded, with the lowest quiz grade dropped. Collectively, the scored quizzes will count as one exam and can replace your lowest exam score, or be dropped all together if not replacing an exam. The course project can not be dropped and will be comparable to an exam score, and will be based mostly on participation and completion. The final grade will be out of 320 points (3*80 exam/quiz points + 80 project points.) Plus/minus grading will be used for the final grade. Grading will be on a curve, the average will be approximately B’/C+.

**College of Liberal Arts & Sciences Policies and Procedures**

**Electronic Communication**

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences (Operations Manual, III.15.2, k.11).

**Accommodations for Disabilities**

A student seeking academic accommodations should first register with Student Disability Services and then meet with the course instructor privately in the instructor's office to make particular arrangements. See [http://sds.studentlife.uiowa.edu/](http://sds.studentlife.uiowa.edu/) for more information.
Academic Honesty

All CLAS students or students taking classes offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS Academic Policies Handbook).

CLAS Final Examination Policies

The final examination schedule for each class is announced by the Registrar generally by the fifth week of classes. Final exams are offered only during the official final examination period. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period. Once the Registrar has announced the date, time, and location of each final exam, the complete schedule will be published on the Registrar's web site and will be shared with instructors and students. It is the student's responsibility to know the date, time, and place of a final exam.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS Academic Policies Handbook).

Understanding Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Office of the Sexual Misconduct Response Coordinator for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Department of Public Safety website.