Chem 4:005:SCA

Technology and Society

(From a Chemist's Point of View)

Spring 2013

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Dale C. Swenson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor's office/</td>
<td>W437CB, W436CB</td>
</tr>
<tr>
<td>lab</td>
<td></td>
</tr>
<tr>
<td>E-mail address</td>
<td><a href="mailto:dale-swenson@uiowa.edu">dale-swenson@uiowa.edu</a></td>
</tr>
<tr>
<td>Office hours</td>
<td>4:30-6PM T, 10-11:30AM W or by appointment</td>
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<tr>
<td>Phone</td>
<td>335-0291 office</td>
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<tr>
<td>Department</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Departmental office</td>
<td>E225 CB</td>
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<tr>
<td>Departmental officer</td>
<td>Jessica Alberhasky 335-1341</td>
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<tr>
<td>Dept. office hours</td>
<td>8-12, 1-5 M-Th; 8-12, 12:30-4:30 F</td>
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Text

Chemistry for Changing Times 11th Ed.
by John W. Hill, Doris K. Kolb

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 referred to as pollutants); energy from natural sources (i.e., solar and renewable forms), from fossil fuels and from nuclear fission; materials like plastics and polymers and their natural analogs, proteins and nucleic acids; 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-science preparation is required.

Approved GE

Natural Sciences

Prerequisites

none

Co-requisites

none

Grading

3 exams; 9 quizzes (lowest quiz dropped). Course grade will be based on the three highest of four scores (3 exams and the total of 8 quizzes). plus/minus grading used for the final grade. Grading will be on a curve, the average will be approximately B'/C'.
Attendance

Strongly recommended but not required (except exams, of course).

Assignments

Strongly recommended but not required.

Examinations and Quizzes

Multiple choice format covering material from the text and lectures. Quizzes will be given at the end of the lecture period. No make-up quizzes will be given. The exam schedule is below.

Disabilities

Any student with special needs due to a disability should contact the instructor as soon as possible.

Goals and 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.

Location/Time

E215CB Tuesdays 6:30-9:15

Schedule

<table>
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<tr>
<th>Unit</th>
<th>Chapters</th>
<th>Exam date</th>
<th>Exam location</th>
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<tbody>
<tr>
<td>I</td>
<td>1-3, 5-8</td>
<td>Feb. 25</td>
<td>E215CB</td>
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<tr>
<td>II</td>
<td>4, 9-14</td>
<td>Apr. 9</td>
<td>E215CB</td>
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<tr>
<td>III</td>
<td>15-20</td>
<td>TBA</td>
<td>TBA</td>
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Administrative Home of the Course
The College of Liberal Arts and Sciences is the administrative home of this course and governs such academic matters as the add/drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various graduation requirements. Different colleges may have different policies. Students with questions about these or other CLAS policies should speak with an academic advisor or with the staff in 120 Schaeffer Hall. Also see the CLAS Academic Handbook: www.clas.uiowa.edu/students/academic_handbook/index.shtml

Academic Fraud
Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences who deals with academic fraud according to these guidelines: www.clas.uiowa.edu/students/academic_handbook/ix.shtml

Making a Suggestion or a Complaint
Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate, and next with the departmental DEO. All complaints must be made within six months of the incident. www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

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 a SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations. See www.uiowa.edu/~sds/

Understanding Sexual Harassment
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. See www.sexualharassment.uiowa.edu/

Reacting Safely to Severe Weather
If severe weather is indicated by the UI outdoor warning system, class members will seek shelter in the innermost part of the building, if possible at the lowest level, staying clear of windows and of free-standing expanses which might prove unstable. The class will resume after the severe weather has ended. See the Operations Manual section 16.14.i.

Student Classroom Behavior
The ability to learn is lessened when students engage in inappropriate classroom behavior, distracting others; such behaviors are a violation of the Code of Student Life. When disruptive activity occurs, a University instructor has the authority to determine classroom seating patterns and to request that a student exit immediately for the remainder of the period. One-day suspensions are reported to appropriate departmental, collegiate, and Student Services personnel (Office of the Vice President for Student Services and Dean of Students).

University Examination Policies
Missed exam policy. University policy requires that students be permitted to make up examinations missed because of illness, mandatory religious obligations, certain University activities, or unavoidable circumstances. Excused absence forms are available at the Registrar web site: www.registrar.uiowa.edu/forms/absence.pdf

Final Examinations. An undergraduate student who has two final examinations scheduled for the same period or more than three examinations scheduled for the same day may file a request for a change of schedule before the published deadline at the Registrar's Service Center, 17 Calvin Hall, 8-4:30 M-F, (384-4300).