

# Chemistry 10030 – Chemistry in Our World – Spring 2009

Dr. Clarke W. Earley  
Kent State University Stark Campus  
403 Main Hall  
Phone: (330) 244-3403  
email: cearley@kent.edu  
Web site: <http://www.personal.kent.edu/~cearley/>

Dr. Earley's Schedule				
	M	T	W	R
9:30-12:20pm		Organic Lab		
10:00-11:00pm	Office Hrs.	Organic Lab	Office Hrs.	
11:00-12:15pm	Fund. Chem.	Organic Lab	Fund. Chem.	
12:15-1:00pm	Office Hrs.		Office Hrs.	
1:00-2:00pm		Office Hrs.		Office Hrs.
2:00-2:50pm		Basic Organic		Basic Organic
3:00-4:00pm		Office Hrs.		
5:00-5:30pm	Office Hrs.		Office Hrs.	
5:30-6:45pm	Chem. World		Chem. World	
7:00-9:50pm	Chem. World Lab			

*Additional office hours available by appointment*

## Text

- Required: *Napoleon's Buttons: 17 Molecules That Changed History*, Le Couteur, P.; Burreson, J.: Penguin, 2003; 1<sup>st</sup> Ed.

## Prerequisites

While there are no specific courses required as prerequisites, students are expected to be at a college-level reading level and able to perform basic math (addition, subtraction, multiplication, and division).

## Course Description

*Catalog Description:* A course for nonscience majors which utilizes environmental and consumer topics to introduce chemical principles and develop critical thinking skills. This course may be used to satisfy the LERs.

This course is designed for nonscience majors and is intended to develop an understanding of basic chemistry principles and to show the application of chemistry to everyday life. Utilization of the scientific method on practical applications will illustrate both the potential benefits and the limitations of chemistry. The applications/phenomena discussed will be dictated, in part, by student interest.

The book that we are using for this course is not a chemistry textbook. We will be emphasizing the chemical aspects of the topics covered in lecture, and will often be supplementing this information. In addition to the assigned readings, you are responsible for this supplementary information presented in lecture.

## Grading

Grades for this course will be based the results of the best three (3) out of four (4) exams, three papers, and the final examination. Tentative dates for each of the exams are given below. I will inform you of in changes in these dates as early as possible. Grades will be based on the scale shown below and will not be curved or arbitrarily adjusted in any manner. Extra credit will not be given.

Grading Scale		
Top three (of 4) exams	3 x 100 pts	300 pts
Papers	3 x 25 pts	75 pts
Cumulative Final	125 pts	125 pts
<b>Total</b>		<b>500 pts</b>

Grade	A	B+	B	B-	C+	C	C-	D	F
%	90-100%	88-89%	82-88%	80-81%	78-79%	72-78%	70-71%	60-70%	<60%
Points	450-500	440-449	410-439	400-409	390-399	360-389	350-359	300-349	<300

## Attendance

Attendance in lecture is optional, but strongly encouraged. Note that a significant portion of the material covered in this class is NOT in the book. Students are responsible for all material presented in lecture whether or not they are present. If you must miss class for an extended period, please see me.

## Examinations

The format of examinations will be varying combinations of multiple choice, true/false, calculations, drawing chemical structures, and short answer. While the content of this course can change dramatically between semesters, copies of old examinations will be made available on my web site. While the topics and dates to cover these topics listed on the Tentative Schedule below are likely to change, I will make every effort to NOT change the dates for any of these exams. Any necessary changes of exam dates will be announced as far in advance as possible.

The final examination is scheduled for Monday, May 11 at 6:00 pm. This examination will be cumulative and will include material covered after the last, regularly scheduled examination.

If you are unable to attend any examination during the regularly scheduled time, you must contact Dr. Earley BEFORE the examination is given to arrange a makeup. Makeups must normally be completed within two weeks of the scheduled date, and will only be given for legitimate, documented excuses. All makeups MUST be completed before the start of finals week. If an examination is not made-up or excused, it will be assigned a score of zero (0).

## Papers

Details for the three assigned papers will be given during lecture. For some of these papers, students may be given an opportunity to choose one of several selected topics related to material covered in lecture. For some of these papers, a portion of the grade may be based on participation in lecture where the information obtained for your paper may be shared with the class. Late papers will be accepted, but penalized 1 point for each weekday (Mon-Fri) late.

## Homework

Because the book we are using for this course is not designed as a textbook, there are no homework problems included. Supplemental assignments will be distributed occasionally, which are meant to give students practice working problems covering key topics to help prepare for examinations. Although these assignments will not be collected or graded, it is important that they be completed in a timely manner. Students are encouraged to work together on homework.

## Student email accounts

All students enrolled in the Kent State University system are given a FlashLine account. FlashLine is the internet 'portal' that provides access to e-mail, Web for Students, WebCT/Vista, and a number of other resources. University policy states that email is a valid method of transmitting information to students, so it is important to check your e-mail periodically.

## Computers and Internet Usage

I will occasionally make reference to material that is available either locally or on the Internet throughout the semester. All of this material will be accessible using any modern Internet browser (Microsoft Internet Explorer, Netscape Navigator, Mozilla, Firefox, Opera, etc.) While it is not required that you take advantage of this information, some of this material can be quite helpful. The address for my Web site is:

<http://www.personal.kent.edu/~cearley>.

## Final Grades and Web for Students

Final grades for students are NOT mailed to students at the end of every semester. The ONLY way for students to find their grades is to look at Web-For-Students (<http://wfs.kent.edu> or through Flashline). I will not be able to give final course grades out over the phone, by e-mail, etc.

## Office Hours

Office hours are listed near the top of this syllabus. If you would like to meet with me outside of these normal times, see me before or after class (or call) and we can set up additional time to meet.

## Course Withdrawl

If you are considering withdrawing from this or any other course, you are encouraged to consult with a staff member in the Student Services Office, 134 Main Hall. Withdrawal from a course can affect financial aid, student status, or progress within your major. For withdrawal deadlines, please refer to [http://www.registrars.kent.edu/home/TermUpdate/sche\\_adj.htm](http://www.registrars.kent.edu/home/TermUpdate/sche_adj.htm).

## Academic Honesty

Use of the intellectual properties of others without attributing it to them is considered a serious academic offense. Cheating or plagiarism will result in a failing grade for the work or for the entire course. Repeat offenses result in dismissal from the University. University guidelines require that all infractions be reported to the Student Conduct Officer on our campus.

## Students with Disabilities

Kent State University recognizes its responsibility for creating an institution atmosphere in which students with disabilities can succeed. In accordance with University Policy Subpart E...104.44, if you have a documented disability, you may request accommodations to obtain equal access in this class. Please contact the disability coordinator on campus, Kelly Kulick in Student Accessibility Services, located in the Student Success Center, lower level of the Campus Center, phone (330)244-5047, or [kkulick@kent.edu](mailto:kkulick@kent.edu). After your eligibility for accommodations is determined, you will be given a letter which, when presented to instructors, will help us know best how to assist you.

## Campus Security

If you need to reach Campus Security, their phone number is 330-705-0430.

## Grievance

The "Kent State University Digest of Rules and Regulations" (available online at <http://www.kent.edu/regional/>) should be consulted for information on grievance procedures, statement of non-discrimination, and additional information on official policies.

## Classes Canceled - Campus Closings

Announcements of class cancellations and/or campus closings will be made on the campus home page. In the case of an emergency, weather-related or otherwise, please check the web page at [stark.kent.edu](http://stark.kent.edu) for information on the buildings and times of the closing. While information may be broadcast by radio and television, this should be confirmed by the web page, which is the official announcement of the campus and which will be the information used to determine issues related to student attendance, rescheduling of tests, and other concerns.

## Recycling

The KSU Stark Campus has made a commitment to recycling. Please take a few seconds to separate your trash. Aluminum cans and plastic and glass bottles may be placed in the blue recycling bins, and all types of paper may be placed in the blue recycling bins. All other waste may be placed in the black, brown or gray trash cans.

## Tentative Schedule

Week Beginning	Topic	Topic
Jan. 19	<b>MLK Holiday - No class</b>	Scientific Method
Jan. 26	Measurements and Scientific Notation	Classifying Matter, Periodic Table
Feb. 2	Atomic Theory, Chemical Formulas	Balancing Equations
Feb. 9 <sup>(S)</sup>	<b>Exam #1</b>	<i>Intro:</i> Drawing Chemical Structures
Feb. 16	<i>Chapter 15:</i> Salt; Ionic Compounds	Melting ice, Crystals, & Candy Making
Feb. 23	Fossil Fuels and Thermodynamics	Global Warming - Facts
Mar. 2	Global Warming - Controversy	<b>Exam #2</b>
Mar. 9	Alternate Fuels: H <sub>2</sub> , Ethanol, ...	Batteries
Mar. 16	Ozone Layer - Gas Laws	<i>Chapter 16:</i> Chlorocarbon Compounds
Mar. 23	<b>SPRING BREAK</b>	
Mar. 30 <sup>(W)</sup>	<i>Chapter 2:</i> Ascorbic Acid; Acids, Bases, and pH	Acid rain
Apr. 6	<b>Exam #3</b>	<i>Chapter 3:</i> Glucose, <i>Chapter 4:</i> Cellulose
Apr. 13	<i>Chapter 14:</i> Oleic Acid	<i>Chapter 6:</i> Silk and Nylon
Apr. 20	Metabolism, Starvation, Diets, and Diabetes	Food Pyramid
Apr. 27	<i>Chapter 13:</i> Caffeine, Chocolate	<b>Exam #4</b>
May 4	Nuclear Energy, Radioactive Decay, & Kinetics	Special Topics, Review

<sup>(S)</sup>Last day to receive any tuition refund is February 13.

<sup>(W)</sup>Last day to withdraw from a course is April 3.

<sup>(P1)</sup>Paper 1 must be completed by February 16.

<sup>(P2)</sup>Paper 2 must be completed by March 18.

<sup>(P3)</sup>Paper 3 must be completed by May 4.

The final examination is scheduled for Monday, May 11 at 6:00pm