

# Chemistry for Everyone

3150:101:001

Spring 2012

<b>Instructor:</b>	Mr. David Bowers, KNCL 202, (814) 715-0178 djb49@zips.uakron.edu
<b>Lectures:</b>	Tu/Th 10:45 pm – 12:15 pm, Schrank Hall North 354
<b>Office Hours:</b>	Tu/Th 2:00 pm – 3:00 pm
<b>Teaching Assistants:</b>	Mr. Nick Johnson, naj14@zips.uakron.edu, KNCL 202 Ms. Rabia Julka, rj33@zips.uakron.edu, KNCL
<b>Labs:</b>	Tu/Th 3:30 pm - 5:00 pm, KNCL 310 & 308

As a student in *Chemistry 3150:101* you are responsible for knowing the policies and procedures for the course contained in this document.

<u>Textbook and Supplementary Materials</u>	<u>Important Dates for Spring 2012</u>
Materials are available in the bookstores <u>Required</u> <ul style="list-style-type: none"><li>• <i>Chemistry for Changing Times</i>, Hill, McCreary, &amp; Kolb, 12th Edition, Prentice Hall, 2010.</li><li>• <i>Chemistry for Everyone Lab Manual</i>, UA Chemistry Department, Hayden-McNeil, 2011 edition.</li><li>• A composition-style notebook.</li><li>• A scientific calculator.</li></ul>	<p><b>Jan. 15<sup>th</sup>:</b> Last day to add a course without signatures.</p> <p><b>Jan 23:</b> Last day to drop a course without “WD” appearing on your record.</p> <p><b>Feb. 21<sup>st</sup>:</b> President’s Day- No classes.</p> <p><b>Feb. 26<sup>th</sup>:</b> Final day to process withdrawals on ZipLine.</p> <p><b>March 12-17<sup>th</sup>:</b> Spring Break- No classes.</p>
	This course is designed to meet the needs of preservice, middle-level science teachers. It is also appropriate for Early Childhood Development and General Education credit. The course is taught in lecture and in the laboratory.

## Classroom Courtesy

- Please turn off sounds on beepers and cell phones in class. DO NOT send/check text messages during class. Doing so is disrespectful and distracting to fellow students.
- If you are arriving late or leaving early please use the back doors and sit near the back of the room.

## Communication

- **Your UA email account is essential in this course.** If you do not use this account, you must set it up to forward messages to an account you do use.
- All email messages to Mr. Bowers or your TA must be signed by you at the bottom. We will not reply to or acknowledge receipt of unsigned messages.

## Asking Questions

- Don’t wait until it’s too late to ask for help.
- Ask for help or information now rather than asking for forgiveness later.

- Questions in class are welcome. Please raise your hand or otherwise signal—please don't just yell out your question.

### Course Outline (Tentative)\*

Date	Day	Lecture Topics	Chapter	Lab Expt.	
January	10	T	Chemistry, Measurements	1, Appendix A	1, 2
	12	TH	Measurement; Atoms	1,2	3
	17	T	Atoms	2	4
	19	TH	Atomic Structure	3	5
	24	T	Atomic Structure	3	6
	26	TH	Chemical Bonds	4	7
	31	T	Chemical Bonds	4	8, 9
February	2	TH	Chemical Accounting	5	worksheets
	7	T	Chemical Accounting	5	10, 11
	9	TH	<b>EXAM I</b>	<b>Lab Notebooks Due!</b>	
	14	T	Liquids, Solids, & Intermolecular Forces	6	12
	16	TH	Acids and Bases	7	13
	21	T	<b>PRESIDENTS' DAY, No Classes</b>		
	23	TH	Acids and Bases	7	14
	28	T	Gases, Air	6, 13	15
March	1	TH	Water	14	17
	6	T	Oxidation and Reduction	8	18
	8	TH	Organic Chemistry	9	20
	13	T	<b>SPRING BREAK, No Classes</b>		
	15	TH	<b>SPRING BREAK, No Classes</b>		
	20	T	Organic Chemistry	9	38
	22	TH	<b>EXAM II</b>	<b>Lab Notebooks Due!</b>	
	27	T	Polymers	10	21, 34
	29	TH	Nuclear Chemistry	11	30
April	3	T	Energy	15	23
	5	TH	Biochemistry	16	25
	10	T	Biochemistry	16	40
	12	TH	Food	17	26
	17	T	Drugs	18	26
	19	TH	Chemistry of the Earth	12	Exam
	24	T	<b>Exam III</b>	<b>Lab Notebooks Due!</b>	
	26	TH	Lecture Make-up Day/Final Review		27
			<b>FINAL EXAM (comprehensive) 12:00–1:55pm</b>		

\*Some changes in the lecture/lab schedule might occur as the semester progresses. Any changes will be announced in lecture.

*In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Such changes would be communicated by email.*

## CHEM 101, Policies and Procedures, Fall 2011

### **Attendance & Participation**

Daily attendance in lecture and lab is required. You are responsible for all information, including assignments, policy changes, schedule changes, etc., that was announced in class whether you are present in class or not. Make-up experiments, quizzes or exams are NOT possible. There is no distinction between excused and unexcused absences; plan accordingly.

### **Exams**

Three exams will be given in class and one exam in lab. Each of these exams will be given starting at the beginning of our regular class period. The exams will be individual and closed notes and closed-book. *There are no makeup exams.* Bring pencils, calculator, eraser, and Zip Card ID to each exam.

Do not arrive more than 20 minutes late to an hour exam. No one will be allowed to enter and begin the exam more than 20 minutes after the exam has begun or after the first person has finished their exam.

You may be required to erase the memory register of your calculator at any time before or during exams and quizzes. Palm devices, cell phones, and devices with a QWERTY keyboard are not acceptable for use during exams or quizzes. Each student is responsible for bringing his/her own calculator to each exam and quiz. Sharing of calculators by students is not allowed during exams or quizzes. On exams without need of a calculator, they will be prohibited.

The final exam will be cumulative over all course material. Your final exam score will replace the lowest of your hour exam scores if the final exam score is higher than your lowest hour exam score.

### **Quizzes**

Quizzes will be given periodically during class periods when there is not an exam. The quiz may be given in the lecture or lab portion of the class period, at the beginning of the period or at some time during class. Quizzes will not be announced. It is not possible to make up missed quizzes.

### **Lab Notebook**

You will keep your lab records in a bound composition style notebook. Entries in the notebook should be made in INK. Your notebook will be inspected and graded at least three times during the course. Three of the grading dates are announced (on exam dates); there may be additional unannounced grading.

### **Lab Safety**

Compliance with laboratory safety policies and procedures is not a matter of opinion or personal taste; it is a minimum requirement. Each student will receive a copy of the lab safety policies and must read and comply with them. Failure to comply with lab safety rules, including wearing required personal protective equipment as well as proper waste disposal, will result in being dismissed from the laboratory and receiving a score of zero (0) for the day's work without the possibility of making up the lab.

**Grading**

Lab notebook	400 pts.
Lab Exam	100 pts.
Quizzes	70 pts.
Participation	30 pts.
3 Class Exams (100 pts each)	300 pts.
<u>Comprehensive Final Exam</u>	<u>100 pts.</u>
<b>TOTAL</b>	<b>1000 pts.</b>

Your course grade will be determined based on the following guaranteed grade cutoffs. Lower cutoff ranges may be used if the faculty deems it appropriate.

A	920-1000 pts.	B	820-859	C	710-749	D	610-649
A-	890-919	B-	790-819	C-	680-709	D-	580-609
B+	860-889	C+	750-789	D+	650-679	F	0-579

You should save all of your graded materials until you receive your final grade for the course. If you have questions about how your paper was graded, please bring it to the person who graded it with a written explanation of what you believe was graded in error. Your paper must be written in non-erasable ink to receive regrade consideration.

**Some Sources of Help for CFE**

- Tutorial Services, LIB 68
  - (330) 972-6552
  - <http://www.uakron.edu/colleges/univcoll/tutor.php>
- Chemistry Learning Center, KNCL 314
  - Graduate student available to help with homework or general questions
  - Not one on one tutoring
- Mr. Bowers
  - Best to make an appointment (email is easiest).
  - The hour before class is reserved for preparing for class.
- Private tutors
  - See Chemistry Department office, KNCL 103, for list.
  - Any tutor listed for PRIN I/II or GOBC I/II would be good.

**DO NOT WAIT UNTIL IT IS TOO LATE TO SEEK HELP!!!!**

**University Policies**

All applicable UA policies are in force in this course. This includes, but is not limited to:

- Civility Statement
- Student Code of Conduct

- Sexual Harassment Policy

### Academic Integrity/Cheating

Cheating is a problem that I hope we will not have to deal with in this course. Violations of the Academic Integrity code include plagiarism, cheating, and other forms of academic dishonesty. The minimum penalty for violations of this policy is a grade of “F” in the course. In addition, UA Academic Integrity policy states that formal disciplinary probation, suspension, or dismissal may also occur.

### Students with Disabilities

The University seeks to fully comply with the Americans with Disabilities Act. Students who may require classroom or testing modifications must discuss this matter with the instructor as soon as possible. Appropriate documentation must be provided before accommodations can be made. Contact the Office of Accessibility, 105 Simmons Hall, for further information.