

Chemistry 101 - Chemistry in Context
(Formerly Chemistry for Liberal Arts Majors)
Summer 2008
Master Syllabus

Purpose: This liberal arts class entails learning, thinking about, and applying major laws, concepts, and theories of chemistry to issues confronting contemporary society. It is a "Natural Science and Mathematics" general education course. The following skills will be emphasized to satisfy general education requirements in "The World of Nature" area of knowledge:

Reasoning mathematically and understanding numerical data.

You will be taught to look at and use numerical data as a means of understanding some of the issues that confront contemporary society. Selected questions and problems will exercise your mathematical and reasoning skills. Mathematical and chemical problem solving skills are best developed by the practice of hand-pencil-paper connection. Similar questions and problems on quizzes and exams will assess your skill.

Developing an understanding of scientific issues considering evidence, relevance, and validity.

Scientific issues from the broad areas of air quality, water quality, and energy will be presented. You will be coached to question the reliability of the data and guided to get your information from reliable sources that provide relevant and valid data.

Weighing the evidence through the processes of synthesis and analysis.

You will be taught the causes and effects of scientific issues. To help achieve your clear understanding, the scientific method will be emphasized. This entails your developing the skill of evaluating empirical evidence (both mathematical and nonmathematical) in terms of developing models that describe scientific issues. You will learn to assess the validity and non-validity of the information in terms of consistency with the model. Where the information is consistent with the model further refinement of the model will be developed and when the information is not consistent with the model you will learn how to modify the model to bring it in congruence with the empirical evidence

The three skills discussed above will be evaluated through homework, quizzes, class discussions, and examinations.

Textbook: *Chemistry in Context: Applying Chemistry to Society*, Sixth Edition
Eubanks, Middlecamp, Heltzel, and Keller. McGraw-Hill, 2009

Homework: Answer the assigned questions and problems. This is an opportunity for you to practice problems similar to those that may appear on quizzes and exams. It is important that you read the textbook and work problems, making an effort to understand them.

Attendance, tutors, etc. The student's best interest is served by regular attendance of lectures. Material covered in lecture is not always covered in the textbook and may be included on quizzes and exams. If you need help, tutors are available. If you need more help than the tutors can provide, see your instructor as soon as possible.

Grading: Exams (typically three hourly exams and a final exam) contribute approximately 60% of the points toward the final grade. Exams strive to give approximately equal weight to assessing achievement of the three skills discussed above. Homework, quizzes, and special assignments contribute approximately 40% of the points toward the final grade. Homework is generally weighted in favor of the skill of reasoning mathematically and understanding numerical data. Quizzes generally assess understanding of scientific issues, considering evidence, relevance, and validity. Special assignments generally involve research and weighing scientific evidence through the processes of synthesis and analysis.

Student grades typically average 2.5 on a scale of F = 0 to A = 4.

UNIVERSITY ADDITIONS – COURSE SYLLABUS – Summer 2008

Select Mission of the University:

Washburn University shall prepare qualified individuals for careers, further study and life long learning through excellence in teaching and scholarly work. Washburn University shall make a special effort to help individuals reach their full academic potential. *Washburn University Board of Regents, 1999*

Academic Misconduct Policy:

All students are expected to conduct themselves appropriately and ethically in their academic work. Inappropriate and unethical behavior includes (but is not limited to) giving or receiving unauthorized aid on examinations or in the preparation of papers or other assignments, or knowingly misrepresenting the source of academic work. Washburn University's Academic Impropriety Policy describes academically unethical behavior in greater detail and explains the actions that may be taken when such behavior occurs. For guidelines regarding protection of copyright, consult www.washburn.edu/copyright/students. For a complete copy of the Academic Impropriety Policy, contact the office of the Vice President for Academic Affairs, Morgan 262, or go on-line to: www.washburn.edu/admin/vpaa/fachdbk/FHsec7.html#VIII

Disability Services:

The Student Services Office is responsible for assisting in arranging accommodations and for identifying resources on campus for persons with disabilities. Qualified students with disabilities must register with the office to be eligible for services. The office MUST have appropriate documentation on file in order to provide services. Accommodations may include in-class note takers, test readers and/or scribes, adaptive computer technology, brailled materials. Requests for accommodations should be submitted at least two months before services should begin; however, if you need an accommodation this semester, please contact the Student Services Office immediately.

Location: Student Services, Morgan Hall Room 150

Phone: 785-670-1629 or TDD 785-670-1025

E-Mail: student-services@washburn.edu

Students may voluntarily identify themselves to the instructor for a referral to the Student Services Office.

Center for Undergraduate Studies and Programs (CUSP):

As a Washburn student, you may experience difficulty with issues such as studying, personal problems, time management, or choice of major, classes, or employment. The Center for Undergraduate Studies and Programs (Office of Academic Advising, Educational Opportunity Program, and Office of Career Counseling, Testing and Assessment) is available to help students either directly through academic advising, mentoring, career counseling, testing and developing learning strategies or by identifying the appropriate University resource. If you feel you need someone with whom to discuss an issue confidentially and free of charge, contact CUSP in Morgan 122, 785-670-1299, advising@washburn.edu.

Withdrawal Policy:

During fall and spring semesters, students may withdraw from full semester courses through the second week of class with no recorded grade. From the third through the eleventh week a "W" is recorded for any dropped course. Beginning with the start of the twelfth week, there are NO withdrawals, and a grade will be assigned for the course. For short-term or summer course deadlines, please check the appropriate Semester/Session Course Bulletin Web Site (www.washburn.edu/schedule)

Official E-Mail Address:

Your Washburn University e-mail address will be the official address used by the University for relaying important messages regarding academic and financial information and the University will consider this your official notification for important information. It may also be used by your instructors to provide specific course information. If you prefer to use an alternate e-mail address to receive official University notices, you can access your MyWashburn e-mail account, choose the "Options" tab, and select "Settings", scroll to the bottom of the screen and enter the e-mail address you would like your Washburn emails forwarded to in the "mail forwarding" area. Click on save changes. This will complete the process of forwarding your Washburn e-mail. It is your responsibility to ensure that your official e-mail box does not exceed your message quota resulting in the inability of e-mail messages to be accepted into your mailbox