

Chemistry in Context Syllabus CH 101, Spring 2003, Dr. Schmidt

Lecture: TTh 1pm – 2:15pm, ST300

Instructor: Dr. Shaun E. Schmidt
Office: 302 Stoffer Science Hall
Phone: 231-1010 x-2265

e-mail: shaun.schmidt@washburn.edu
URL: <http://www.washburn.edu/cas/chemistry/sschmidt/>
Office hours: MF 11am-noon, T 2:15pm-3:15pm, W 3-4pm

Purpose: “Designed to meet the general education requirements in science for students who are not majoring in science, mathematics, or science related areas. Emphasizes the history, philosophy, and major theories of chemistry and some science related areas of our time, such as pollution, pesticides, and drugs. Chemistry 101 will not count toward a major or minor in chemistry. No prerequisite. Three lecture hours per week.” CH 101, “Chemistry in Context,” is a survey course of current societal issues, presented from a scientific point of view. Basic chemical concepts will be introduced as needed. Significant student involvement in class discussions is expected.

The following skills will be emphasized to satisfy general education requirements

- Reason mathematically and understand numerical data – you will be exposed to fundamental mathematical skills both in lecture and laboratory. You will be taught to use numerical data as a means of developing some of the fundamental laws of chemistry. Some direct applications of these skills will involve development of the gas laws, law of definite proportions and the stoichiometry of chemical reactions.
- Process information both in terms of synthesis and analysis – you will develop the skill of evaluating empirical evidence (both mathematical and nonmathematical) in terms of developing models that describe chemical phenomena. You will learn to assess the validity and nonvalidity 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.
- Solve problems using the methods of analysis considering evidence, relevance, and validity. In both lecture and laboratory you will develop the skill of analyzing both numerical and other data to draw conclusions concerning chemical and physical systems.

The three skills discussed above will be evaluated through the hourly exams, the project and the final exam.

Prerequisite: none

Textbook: *Chemistry in Context: Applying Chemistry to Society*, 3rd Ed., by C. L. Stanitski, L. P. Eubanks, C. H. Middlecamp, and W. J. Stratton, 2000 (required)

Attendance: Attendance is required. The instructor must be notified by e-mail and in person at least one week prior to any potentially excused absence. In the very unlikely case of a dire emergency, you must immediately notify your instructor by phone or in person and then request an excuse by e-mail once the situation has passed. In addition, **missed quizzes, homework and exams will receive a zero and will not be made-up.** In the rare case that you have an excused absence, an exam grade based on your Final Exam grade may be recorded for the missed hourly exam. If a university field trip or athletic event conflicts with an exam time, it is the **student’s responsibility** to make arrangements with the instructor to take the exam early.

Grading: Final grades will be assigned based on homework/quizzes (exam curve, see below), three hourly exams (150 points each), a project (250 points), and a cumulative final exam (300 points). Grades will be assessed based on a 1,000 point total. The project must receive a D or better to pass the course.

Homework: Since the solutions to all of the blue numbered problems are given, it is not unreasonable to expect completion of all of the blue numbered problems. There will be some problems or questions that will be collected for credit. You will receive credit for these as a curve on the pertinent exam. Late homework will not be accepted. Just as a note, the end-of-chapter questions are excellent examples for exam questions.

Project: In order to pass this course with a D or better, your project must receive a D or better. In other words, if you fail the project with an F, then you fail the class with an F.

Success: How can you further your success in this course? Read the book, do all of the chapter problems, participate in lecture, study some more, think about what you've studied, ask questions about what you've studied, take advantage of the "free" tutors, get help from Dr. Schmidt...

Here is what I expect you to do:

1. Quickly read the chapter.
2. Start on some of the chapter homework problems.
3. Re-read the chapter in more detail and start asking a lot of questions (Why, How, Where, When, Why not, etc.). In some cases you may need to make some flashcards.
4. Participate in Lecture.
5. Complete all of the chapter homework problems (even those not turned in for credit).
6. Re-re-read the chapter; ask a lot of questions (Why, How, Where, When, Why not, etc.). You should be assimilating your ideas by now into your understanding of the Universe.
7. The day before the exam, review the material.
8. Perform at your peak level of expertise on the exam.

Students with Disabilities: Washburn University provides reasonable accommodations to students who are qualified individuals with a disability. Qualified individuals with disabilities must register with, and provide documentation to, the Services for Students with Disabilities Office (SSWDO) to be provided accommodations. Accommodations will only be provided upon receipt of the request by the SSWDO. Initial requests for accommodations should be submitted two months or more prior to the date services are anticipated; however, you should contact SSWDO as soon as a need may arise. Examples of accommodations provided include in-class notetakers, test readers and/or scribes, adaptive technology and brailled materials. Location: Morgan Hall, Room 150, Phone: 785-231-1010, ext 1629, TDD: 785-231-1025

www.washburn.edu/services/studentaffairs/stuservices

Advising, Counseling and Career Services: Students at times experience difficulty with issues such as studying, personal problems, time management, or choice of major, classes, or employment. The Center for Learning and Student Success (CLASS) is available to help students with counseling, testing, learning assistance, career services, and academic advising. To discuss issues confidentially and free of charge, contact: CLASS, Morgan 122, 231-1010 ext. 1299, zzdpclas@washburn.edu, www.washburn.edu/services/class.

Academic Misconduct: 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 a complete copy of the Academic Impropriety Policy, contact the office of the Vice President for Academic Affairs, Morgan 270, or go on-line to: www.washburn.edu/admin/fac-handbook/FHSEC7.htm#VIII.

"Chemistry requires rigorous and meticulous habits."