ChemPrep can help!

Students who completed ChemPrep received higher grades in:

Chem 110 - PreNursing Chemistry
Chem 111 - General Chemistry for Scientists
Chem 121 - Honors General Chemistry

“I struggled for a while in my high school chemistry class and wanted a review before I went into my next course so I would have a good basis before the class ....”

–General Chemistry Student, Fall 2004

“The prep course was a good refresher.”

–Honors Chemistry Student, Fall 2004

ChemPrep will be available in early January for the spring semester and in mid-summer for the fall semester. For detailed scheduling and enrollment information go to:

www.chem.umass.edu/chemprep

We sincerely hope that you will join us!

Professors Beatrice Botch and Roberta Day
University of Massachusetts Amherst
OWL Chemistry Developers
General Chemistry is often one of the first really challenging courses faced by college students. We have found that students can overestimate their “readiness” to do well in this course. We have therefore developed ChemPrep, an on-line, short course that has proved to be very effective at helping students to review key chemistry concepts and to hit the ground running in first term general chemistry.

ChemPrep is a web-based course delivered through the OWL system.

- 24-hour access
- Self-paced
- Self-contained (no textbook)
- Non-credit
- Free of charge
- Taken before the semester begins
- Approximately 20 hours to complete
- For skill building and review

Although you will work independently, you are encouraged to interact with the course instructors via the OWL message system while the course is in session. No formal grade will be assigned and there are no penalties for incomplete performance.

Who Should Take ChemPrep

ChemPrep is appropriate for students of all levels. If you have a strong high school background you should be able to move through the materials quickly, focusing on those areas where you may have gaps. If you did not have a comprehensive high school chemistry course, struggled through chemistry, or scored below 20 on the math placement exam, evaluation studies show that you are at risk of failing General Chemistry. Time spent in ChemPrep will help you to lay a good foundation for your General Chemistry course.

Topics

1. Introduction to the OWL System
2. The Structure of Matter
3. Naming Chemical Compounds
4. Measurement and Calculations
5. Calculations involving Quantities of Matter
6. Chemical Reactions
7. Algebra, Temperature, Density, Graphs and Logs

“The flash tutorials were great, and it was an amazing help. I did not think something like this existed for students who really want to excel. It was very helpful.”

–General Chemistry Student, Fall 2004

About OWL

OWL (Online Web-based Learning) is an electronic learning environment originally created in a joint project between the Chemistry and Computer Science Departments at the University of Massachusetts Amherst. OWL is currently in use by over 30 departments on campus in disciplines ranging from physics and chemistry to resource economics and art history.

OWL Chemistry

- Mastery Learning System (material must be mastered in order to receive credit)
- Extensive database of questions and interactive modules
- Questions - Fully parameterized (numerical and chemical systems change for each question)
- Feedback - Complete and parameterized
- Interactive Modules - Tutors, Simulations and Exercises
- Chemical drawing and visualization tools

Students may answer each question as often as they like. Questions have variable numbers and chemical systems, so that a new set of questions is presented each time. Highly detailed solutions are provided for every question as soon as the student submits an answer for judging. In this way, each question presents an opportunity for learning and students learn by doing.