

Get into a CHEM CLASS and LAB during the REGISTRATION EVENT!

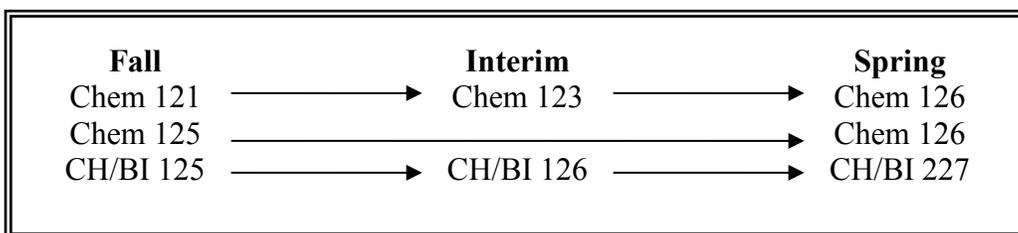
If the course or lab that you **NEED** is unavailable when you are registering *and none of the available sections will work*, come to the faculty tables at registration and talk to a Chemistry Department representative. **WE CAN BEST HELP YOU WHILE YOU'RE STILL REGISTERING!**

Students may want to take this handout to their advisor meeting on Tuesday morning.

LEVEL I CHEMISTRY COURSES—FALL

The St. Olaf Chemistry Department offers two level I chemistry courses each fall: Chemistry 121 and Chemistry 125. We also partner with the Biology Department in offering the integrated Chemistry-Biology 125 course (CH/BI 125). All three of these fall term, level I courses are designed for students planning to take additional chemistry courses, but they also satisfy one of the college's General Education science requirements: either Scientific Exploration and Discovery (SED) or Integrated Scientific Topics (IST); see the Class & Lab schedule for details. *Students not interested in a science major will usually choose to take a course designed exclusively for non-science majors. These students need not take the placement test.* More information for prospective chemistry majors can be found at this page of the department's web site: <http://wp.stolaf.edu/chemistry/prospective-chemistry-major-overview/>.

Chemistry 126 and CH/BI 227 both serve as prerequisites for all level II and III chemistry courses. There are three routes available to reach either Chem 126 or CH/BI 227: taking Chemistry 125 in the fall followed by Chemistry 126 in the spring; taking Chemistry 121 in the fall, Chemistry 123 (Chemical Structure) during interim, and Chemistry 126 in the spring; or taking the integrated CH/BI sequence. Note that **these courses are only offered in the term shown in the box below:**



Both Chem 125 and the Chem 121/123 combination prepare students for Chem 126 (Energies and Rates of Chemical Reactions). Both Chem 125 and Chem 121/123 cover an equivalent set of topics, including:

Chemical Reactions
Mass and Mole Relationships
Solutions
Gases
Chemical Equilibrium

Acids and Bases
The Periodic Table
Atomic Structure
Chemical Bonding and Molecular Structure
Coordination Chemistry

Chemistry 125 covers all these topics in a single semester. Chemistry 121 covers primarily the first seven topics, with more class time for each topic than 125; Chemistry 123 emphasizes atomic and molecular structure, chemical bonding, and coordination chemistry.

An equivalent chemistry experience is offered by the Integrated Chemistry-Biology sequence of courses. A commitment to this sequence can be made by registering for CH/BI 125 for the fall term. The completion of the three course sequence is expected. These courses meet fall, interim and spring term and are an equivalent experience to Chem 125, Chem 126 and Bio 125. The CH/BI sequence of courses was available to first year students by application and is currently full.

Calculus is a PRerequisite or COrequisite for Chemistry 126 and PRerequisite for CH/BI 126. If you are planning to take Chemistry 126 or CH/BI 126 this school year, consider taking Math 119 or 120 (or a higher level math course) this fall, according to your mathematics placement result. For Chem 126, it is acceptable to plan to take Math 119 or 120 concurrently in the spring term.

Chemistry placement recommendations should be considered. The results of the placement exam and information on your high school background enable us to recommend the most appropriate beginning chemistry level for you. Placements work as follows:

Placement notation

“Chem 121”

“Chem 125”

“Chem 125 or CH/BI 125”

Student registration

student should register for Chem 121 and one of its lab sections

student should register for Chem 125 and one of its lab sections

student should register for Chem 125 and one of its lab sections

(CH/BI 125 has been preregistered through an application process.)

We expect students to follow our recommendation. Experience has shown that students who are placed into Chemistry 125 usually do well in this course; however, those who are placed into Chemistry 121 but insist on taking Chemistry 125 usually do poorly. Likewise it is not advisable to take Chemistry 121 if you are placed into Chemistry 125. You may well be bored, you will likely develop poor study habits, and your grade in the course will suffer. Better to be an enthusiastic hard worker in Chemistry 125 than a bored “coaster” in Chemistry 121.

Your placement results are available to you and your advisor in the SIS system and on a sticker on the back side of your registration card. If these two sources of information about placement do not agree, please use the SIS recommendation, which may be updated after the printing of the stickers. If you have serious reservations about your placement, or any other questions about the Chemistry program, seek the counsel of a chemistry faculty member. Simply stop by or make an appointment.

An equation-solving calculator is required for some sections of Chemistry 121, 125, 126 and CH/BI 125 and 126. Chemists use a variety of mathematical expressions and models to aid them in their study of matter. Consequently, the calculator and computer are professional tools that pervade investigations of chemical systems and theory. Students enrolling in various chemistry courses learn to employ these tools as an integral part of their educational experience. In particular, students enrolling in fall chemistry courses may be required to use calculators that are capable of solving equations such as $PV=nRT$ or $(0.01+x)(x)/(0.01-x) = 1E-3$ for one unknown variable (that is, to get real solutions such as $P = 0.3456$ or $x = 8.4E-4$). Students having questions about the functionality and applicability of a calculator should consult the user's manual, <http://education.ti.com>, or <http://welcome.hp.com>. “Solver” functions on some calculators are easier to use than others; students may consult with their instructor.

Note: while there are calculator apps for tablets and smart phones, these types of devices cannot be used on exams.