**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 three level I chemistry courses each fall: Chemistry 121, Chemistry 122 and Chemistry 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*.* We also partner with the Biology Department in offering the integrated Chemistry-Biology 125 course (CH/BI 125). *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 several routes available to reach either Chem 126 or CH/BI 227: taking Chemistry 122 or 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; taking the integrated CH/BI sequence or with AP score of 5, an IB HL score of 5-7, or a score of A on the Cambridge A-level exam. Note that **these courses are only offered in the term shown in the box below:**

**Fall**

Chem 121

Chem 122 or 125

CH/BI 125

**Interim**

Chem 123

CH/BI 126

**Spring**

Chem 126

Chem 126

CH/BI 227

Chem 122, Chem 125 and the Chem 121/123 combination can prepare students for Chem 126 (Energies and Rates of Chemical Reactions). Chem 122, Chem 125 and Chem 121/123 all cover an equivalent set of topics at an equivalent depth, but the order of the topics is different and the number of weekly meetings is different. Additionally, both Chem 122 and Chem 125 covers all the topics in a single semester while the combination of Chem 121 and Chem 123 utilizes Fall and Interim terms to cover the topics. The additional practice time present in 121/123 is also available in 122 during the additional weekly meeting times but leaves interim open for other academic pursuits. Students who obtain a high level of understanding of course topics in Chem 122 or 125 and Chem 121/Chem 123 will be well-prepared for Chem 126.

**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 followed.** 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 Student registration

“Chem 121 or 122” student should register for Chem 121 or 122 and one of the corresponding lab sections lab sections

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

“Chem 125 or CH/BI 125” 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. 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 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 227. While the CH/BI sequence of courses was available to incoming first year students by application, this year there are a few spaces remaining. If you are interested in enrolling in this learning community, you may meet with Prof. Abdella on Monday between 2:00 and 4:00 in her office, RNS 362.

**An equation-solving, graphing calculator is handy in the study of chemistry.** 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 may learn to employ these tools as an integral part of their educational experience. In particular, students enrolling in fall chemistry courses may be strongly encouraged to use calculators that are capable of solving equations such as

PV = nRT or 

for one unknown variable (that is, to get real solutions such as P = 0.3456 or *x* = 1.8E-3). Graphing calculators all have some level of equation solver, some of which are more robust than others (TI-89 has a more flexible solver than TI-84, for example). The TI-36X Pro is a much less expensive alternative calculator that also has a good numeric equation solver, but is not a graphing calculator. 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.

Students are allowed to use their calculators on most in-class exams. **Note: students may NOT use calculator apps on tablets and smart phones for exams.**