

Chemistry 1A/1E Diagnostic Examination Information

The CSUS Department of Chemistry uses a National Standardized Chemistry Placement Examination to evaluate a prospective student's potential for success in a university level first semester general chemistry course.

The 55-minute test consists of 60 multiple-choice questions covering the following general topics:

Compounds/Elements	States of Matter	Laboratory Skills
Reactions of Matter	Structure of Matter	Mathematics
Periodic Properties	Solutions: Titrations	Chemical Dynamics
Equilibrium	Stoichiometry	

The test: The questions are based on content covered in a college preparatory high school chemistry course. Mathematical questions cover ratios, percentages, simple algebraic equations, geometric relationships and interpretation of graphs. The math questions are at the course prerequisite level of high school algebra I and II. Test questions have been checked for statistical and course grade validity.

Preparation: To prepare for the test, the department suggests a review the general chemistry topics listed above using a high school or college general chemistry text. The CSUS library contains numerous chemistry texts in the stacks; the Science librarian can help you locate these if you are new to this campus.

Scoring: A minimum score of 35 out of 60 (58 %) or better is required to enroll in chem. 1A/1E.¹ A score of 35 indicates that a student statistically possesses the minimum skills needed to earn a grade of C– in a university level general chemistry course. The score will be posted to your Student Center Test Score Summary and the system will not allow you to register for the class unless a passing score is present on your record.

Test Times: The diagnostic test is administered prior to each semester during the semester breaks and during finals week at the end of each semester.² The test ***WILL NOT*** be offered once classes have begun. Please be sure to bring a scientific calculator and pencil to the exam. Students must also have their Sac State SID. The Chemistry Diagnostic Exam can only be taken once per registration cycle. If a student attempts to take the exam again the first score will be the one that counts.

Chem. 4: Students that do not achieve a minimum score are recommended to enroll Chemistry 4, "Chemical Calculations". Chem. 4 is a three unit preparatory course designed to help students develop the needed skills for success in Chemistry 1A.

Math Prerequisites for Chem. 1A:

1. Have passed MATH 12 so that they are ready for the next level math class.
2. Have taken and passed or be concurrently enrolled in a math class ABOVE MATH 12.
3. Have an ALEKS placement score of 61 or greater.³
4. A Calculus AP score of 3 or higher

Math Prerequisites for Chem. 1E:

1. Have passed MATH 29 so that they are ready for the next level math class.
2. Have taken and passed or be concurrently enrolled in a math class ABOVE MATH 29.
3. Have an ALEKS placement score of 76 or greater.³
4. A Calculus AP score of 3 or higher

¹ Students with a score below 35 that have passed chem. 4 with a "C" or better may enter chem. 1A/1E. CSUS does not accept transfer or equivalent scores for chem. 4 as it is a remedial course.

² For location and times visit <https://www.csus.edu/college/natural-sciences-mathematics/chemistry/>

³ For information about the ALEKS PPL see: <https://www.csus.edu/college/natural-sciences-mathematics/math-placement-exam/>