Chemistry 1A 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:

<table>
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<tr>
<th>Compounds/Elements</th>
<th>States of Matter</th>
<th>Laboratory Skills</th>
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<tbody>
<tr>
<td>Reactions of Matter</td>
<td>Structure of Matter</td>
<td>Mathematics</td>
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<tr>
<td>Periodic Properties</td>
<td>Solutions: Titrations</td>
<td>Chemical Dynamics</td>
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<tr>
<td>Equilibrium</td>
<td>Stoichiometry</td>
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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.\(^1\) 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.

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 and enrolled student without a passing score will be administratively dropped once classes begin. Please be sure to bring a scientific calculator and pencil to the exam. Students must also have their Sac State SID. Scores will be posted on the chem. 1A website by date and random ID.

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 11 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 11.
3. Have a IAD (Intermediate Math Diagnostic Test) or Calculus Readiness Test score of 27.\(^3\)

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\(^1\) Students with a score below 35 that have passed chem. 4 with a “C” or better may enter chem. 1A. CSUS does not accept transfer or equivalent scores for chem. 4 as it is a remedial course.

\(^2\) Contact the Chemistry department for location and times.

\(^3\) For information about the IAD please see:  http://www.csus.edu/math/courses/diagnostic.htm