

CHEMISTRY - ASSOCIATE IN ARTS

Chemistry is the study of the properties, composition and chemical transformations of all material substances. It is often referred to as the "central science" since it draws from mathematics and physics and forms a necessary background to the understanding of earth science and all the biological disciplines, including the various medical professions. The Chemistry program at SJCC offers courses that satisfy general education requirements, allied-health science, engineers, chemistry, biology and physics majors.

A "C" grade or better is required in all major requirement courses.

Program Learning Outcomes

- Apply increasingly challenging deductive and inductive reasoning to further develop critical thinking, problem solving, and abstract reasoning skills as they progress through the sequence.
- Employ both written and oral skills to effectively communicate scientific information.
- Evaluate and represent laboratory data using simple statistical analyses in terms of accuracy and precision.
- Utilize developed practical laboratory skills involving safe operation of laboratory equipment and materials. We also require each student take and pass (80% correct answers) a standardized safety quiz administered at the beginning of each semester.

Major Requirements

Course	Title	Credits
CHEM 001A	General Chemistry	5
CHEM 001B	General Chemistry	5
CHEM 012A	Organic Chemistry	5
CHEM 012B	Organic Chemistry	5
MATH 071	Calculus I With Analytic Geometry	5
MATH 072	Calculus II with Analytic Geometry	5
Total Units		30

A. A. Degree Requirements

Course	Title	Credits
Major Requirements		30
General Education Requirements		39
Physical Activity		1
Total Units		70

Note: If both CHEM 001A and MATH 071 are applied to General Education, the total required units would be 64. Students are strongly advised to meet with a Counselor to review applicable math courses.