

Crafton Hills College
Associate of Science
CHEMISTRY (CHEM)
2014-2015

Student Name: _____

ID #: _____

Date: _____

Counselor: _____

The chemistry program prepares students with an understanding of the fundamental principles of chemistry in a variety of applications. Students learn how chemical knowledge is derived, theorized, and applied in solving problems in everyday life.

To complete the requirements for the Associate of Science for this degree*, a student must:

1. Complete the requirements for an associate degree.
2. **Complete a minimum of eighteen (18) units with a "C" or better in each course** in the following program.
3. Complete elective units to meet the minimum 60 units required for the associate degree.

Required Courses:		Units	IP	Need	Grade
CHEM 150 or 150H	General Chemistry I	5			
CHEM 151 or 151H	General Chemistry II	5			
CHEM 212	Organic Chemistry I	4			
CHEM 213	Organic Chemistry II	4			
Total Required Units:		18			

Recommended Courses:		Units	IP	Need	Grade
<i>These courses are typically prerequisites for third year chemistry majors. Students are encouraged to complete the recommended courses to prevent postponement of continued coursework in this major.</i>					
MATH 250	Single Variable Calculus I	4			
MATH 251	Single Variable Calculus II	4			
PHYSIC 110	General Physics I	4			
PHYSIC 111 ¹	General Physics II	4			
¹ Students may substitute PHYSIC 250, 251, and 252 in lieu of PHYSIC 110 and 111. See a Counselor for details.					
Total Recommended Units:		16			

**Lower division requirements for students interested in transferring to a four-year institution in this field may differ from Associate degree requirements. Prospective students should complete the general education and lower division requirements of the school to which they will be transferring. See a counselor for details. Information is also available at www.assist.org.*

A student receiving a degree in this field will be able to:

- Identify the basic areas of Chemistry that are appropriate to each Chemistry course. This content will allow students to continue in successive Chemistry courses, as well as relate to knowledge for matriculation and life-long learning.
- Comprehend and use laboratory skills in synthetic, quantitative and instrumental methods as scientific approaches to gathering and verifying knowledge.
- Demonstrate critical thinking in Chemistry including interpretation, evaluation, explanation and critical inquiry, how to ask appropriate questions, gather relevant information efficiently and creatively, sort through this information, reason logically from this information and come to reliable and trustworthy conclusions.
- Collect, analyze and articulate results clearly and effectively in speech and in writing in an acceptable style of presentation.