

## CHEMISTRY MAJOR 2012-2013

This checklist is for reference only. Please see the College Catalog and check with your major adviser or department chair to assure compliance with graduation requirements.

### Note: Pre-requisites in parentheses

#### I. Required Courses

Sem. Taken	Cr. Earned	
		a. Chemistry Core Courses (28 credit-hours)
		CHEM 106 General Chemistry II ( <b>pre-requisite CHEM 103 or successful completion of the placement exam</b> )
		CHEM 305 Quantitative Analysis ( <b>CHEM 106</b> )
		CHEM 311 Organic Chemistry I ( <b>CHEM 106</b> ).
		CHEM 312 Organic Chemistry II ( <b>CHEM 311</b> )
		CHEM 405 Inorganic Chemistry ( <b>CHEM 312</b> )
		CHEM 451 Physical Chemistry I ( <b>CHEM 106, PHYS131, MATH 152</b> )
		CHEM 452 Physical Chemistry II ( <b>CHEM 451</b> )

#### b. Cognate Courses (16 semester-hours)

		MATH 151 Calculus I
		MATH 152 Calculus II ( <b>MATH 151</b> )
		PHYS 141 General Physics I (recommended) or PHYS 151 Fundamentals of Physics
		PHYS 142 General Physics II (recommended) or PHYS 152 Fundamentals of Physics

#### c. Elective Courses (4 credit-hours) selected from the following list of options:

##### Option 1: ACS-Certified Major

Course 1: \_\_\_\_\_

Courses selected from the following:

CHEM 325	Chem Literature ( <b>CHEM 312</b> )
CHEM 420	Biochemistry I ( <b>CHEM 312</b> )

##### Option 2: non-ACS-Certified Major (4 semester-hours)

Course 1: \_\_\_\_\_

Courses (4 semester-hours) selected from the following list:

CHEM 306	Instrumental Analysis ( <b>CHEM 305, 312</b> )
PHYS 462	Quantum Mechanics ( <b>PHYS 231, MATH 256</b> )
CHEM 480	Topics in Chemistry
CHEM 397, CHEM 399, CHEM 497, CHEM 499	Directed Research/Independent Study (as approved by the Chemistry Faculty)
PHYS 462:	Quantum Mechanics

#### II. Every Chemistry major must complete a St. Mary's Project

		CHEM 493 St. Mary's Project
		CHEM 494 St. Mary's Project