

Bachelor of Science in Chemistry Program Requirements Check-List 2011/12/13 bulletin

1. B.S. IN CHEMISTRY MAJOR REQUIREMENTS¹

	Semester	Grade
ACHM 111 (General Chemistry I and Lab) ¹	(4) _____	_____
ACHM 112 (General Chemistry II and Lab)	(4) _____	_____
ACHM 331 (Organic Chemistry I)	(3) _____	_____
ACHM 331L (Organic Chemistry I Lab)	(1) _____	_____
ACHM 332 (Organic Chemistry II)	(3) _____	_____
ACHM 332L (Organic Chemistry II Lab)	(1) _____	_____
ACHM 310 (Methods of Research & Computers)	(1) _____	_____
ACHM 321 (Quantitative Analysis)	(3) _____	_____
ACHM 321L (Quantitative Analysis Lab)	(1) _____	_____
ABIO 541 (Biochemistry I) ²	(3) _____	_____
ACHM 541 (Physical Chemistry I)	(3) _____	_____
ACHM 541L (Physical Chemistry I Lab)	(1) _____	_____
ACHM 542 (Physical Chemistry II)	(3) _____	_____
ACHM 542L (Physical Chemistry II Lab)	(1) _____	_____
ACHM 311 (Introduction Inorganic Chemistry)	(3) _____	_____
ACHM 311L (Introduction Inorganic Chemistry Lab)	(1) _____	_____
ACHM 511 (Advanced Inorganic Chemistry)	(3) _____	_____
ACHM 511L (Advanced Inorganic Chemistry Lab)	(1) _____	_____
ACHM 522 (Instrumental Analysis and Lab)	(4) _____	_____
ACHM 499 (Senior Research) ³	(2-3) _____	_____
ACHM 499 (Senior Research) ³	(1-3) _____	_____

Total Hours Required 47 - 50 credit hours

2. GENERAL EDUCATIONAL REQUIREMENTS

A. Intellectual and Practical Skills

	Semester	Grade	Test Out
Critical Inquiry			Test Out
AFCI 101 (Critical Inquiry)	(1) _____	_____	Transfer exemption _____
English			
AEGL 101 (Composition) ⁴	(3) _____	_____	
AEGL 102 (Composition and Literature) ⁴	(3) _____	_____	
Oral Communication (choose one of the following:)			
ACOM 201 or ACOM 241	(3) _____	_____	
Mathematics			Test Out
AMTH 111 (Pre-Calc I) ⁵	(3) _____	_____	_____
AMTH 112 (Pre-Calc II) ⁵	(3) _____	_____	_____
AMTH 141 (Calculus I) ⁵	(4) _____	_____	
AMTH 142 (Calculus II)*	(4) _____	_____	
* AMTH 142 is a prerequisite for ACHM 541			
Undergraduate Writing Proficiency			
Junior Writing Portfolio turned in _____ approved _____			
OR AEGL 201 (Writing in the Univ.)	(4) _____	_____	
Writing Intensive Requirement (3 courses completed <u>after</u> completion of AEGL 102, at least one in Chem.)			
ACHM 541L (Physical Chemistry I Lab)	_____	Others _____	_____
ACHM 542L (Physical Chemistry II Lab)	_____	_____	_____
ACHM 511L (Advanced Inorganic Chemistry Lab)	_____	_____	_____
(transfer students need one course for each 30 hours at USCA)			

Total Hours Required 18 credit hours (24 hr MTH 111 plcm)

B. Knowledge of Human Cultures and the Physical and Natural World

	Semester	Grade
Natural Sciences		
ABIO 121 (Biology I)	(4) _____	_____
APHY 211 (Calc Physics I) OR APHY 201* (General Physics I)	(4) _____	_____
APHY 212 (Calc Physics II) ⁶ APHY 202* (General Physics II)	(4) _____	_____
*Note: APHYS 201 and 202 may be substituted for 211 and 212 in some cases with permission of advisor.		
History of Civilization		
AHST 101 or AHST 102 (circle one)	(3) _____	_____
Second Language at least 2 semesters of the same language		
_____ ()	(4) _____	_____
_____ ()	(4) _____	_____

B. Knowledge of Human Cultures and the Physical and Natural World (continued)

Social and Behavioral Sciences (at least 2 areas, at least 6 credits)⁷

Psychology, Sociology, Anthropology, Economics, Political Science, Geography, Honors

Course Num.	Course Title	√ non-Western ⁷	Semester	Grade
_____	(_____)	_____	() _____	_____
_____	(_____)	_____	() _____	_____
Total at least 6 credit hours				

Humanities (at least 2 areas, at least 9 credits)⁷

Communications (last two digits must be in 50s or 60s), History, Literature, Art History, Music History, Theater History, Religion, Philosophy (not logic), selected Language courses, Humanities (AHUM), Honors (AHON)

Course Num.	Course Title	√ non-Western ⁷	Semester	Grade
_____	(_____)	_____	() _____	_____
_____	(_____)	_____	() _____	_____
_____	(_____)	_____	() _____	_____
Total at least 9 credit hours				

Total Hours Required 38 credit hours

C. Personal and Social Responsibility

American Political Institutions

APLS 201, or AHST 201, or AHST 202 (circle one) Semester Grade
(3) _____

ICE events

Students are required to attend at least 2 ICE approved events for each semester enrolled at USCA. ALL of these events must be completed prior to application for graduation.

First Year	Second Year	Third Year	Fourth Year	Extra Semesters
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Total Hours Required 16 ICE events + 3 credit hours

3. COGNATE OR MINOR

Cognate: An additional concentration of study intended to support course work in the major. Cognates may be distributed over more than one subject area and more than one department. Cognate courses should be junior-senior level courses and must be approved by the major department. Cognate courses cannot be counted as major or general education requirements with the exception of free electives. Classes that can count as cognate include any 300+ course, AENG 200+, APHY 212, AMTH 241/242, & ABIO 242. A minor in another discipline will replace the cognate requirement.

Students may choose to complete the 12 credit hour cognate requirement with either:

- 4 three and/or four credit hour courses possibly including one summer course.

OR • 3 four credit hour courses (e.g. AMTH 241, APHY 212, ABIO 242)

[A partial list of 4 credit cognates includes; AMTH 241, APHY 212, APLS 301, AHST 300, ASCY 310, ABIO 242, several 300+ ABIO courses including ABIO 302/312/315/316/320/325/330.]

Minor: Requirements are established by the college/school which offers the minor. See the specific department listings for specific minor requirements. Students who wish to have a minor may have to take more hours than those who select a cognate.

COGNATE / MINOR (circle one)

[additional courses for a minor]

Course Num.	Course Title	Semester	Grade	Course Num.	Course Title	Semester	Grade
_____	(_____)	() _____	_____	_____	(_____)	() _____	_____
_____	(_____)	() _____	_____	_____	(_____)	() _____	_____
_____	(_____)	() _____	_____	_____	(_____)	() _____	_____
_____	(_____)	() _____	_____	_____	(_____)	() _____	_____

Cognate: Total 12 credit hours

Minor: Dept. _____ Total _____ credit hours

4. ELECTIVES (A total of at least 120 credit hours is required for graduation)

Course Num.	Course Title	Semester	Grade
_____	(_____)	() _____	_____
_____	(_____)	() _____	_____

- 1 - A grade of C or higher is required in all chemistry courses counting toward the degree. Students placing in Mathematics 108 or below will successfully complete these courses before enrolling in any chemistry course.
- 2 - ABIO 121 and ACHM 332 are prerequisites for ABIO 541.
- 3 - Completion of a thesis and seminar on the research project are required for graduation.
- 4 - Students must complete English 101/102 with a grade of C or better in order to fulfill general education requirements. Freshmen should take English in their first semester unless they have already completed the 101/102 requirement. Students must complete AEGL 102 with a grade of C or better before taking other English courses and for any course to count as Writing Intensive including ACHM 541L, 542L, and 511L.
- 5 - Freshmen should take Math in their first semester unless they have already completed their math requirement. AMTH 111 and AMTH 112 may be taken in any order or at the same time. AMTH 111 and 112 count as elective credits but are pre-requisites for AMTH 141/142.
- 6 - APHY 212 can be counted toward a cognate.
- 7 - At least three (3) credit hours of the degree must be in non-Western studies. A list of courses that meet this requirement can be found in the Academic Regulations/General Education Section of the appropriate Student Bulletin. (May 2013 Revised)