



California State University Channel Islands
Bachelor of Arts in Chemistry
Subject Matter Preparation in
Teaching Chemistry Option

Advisement Form 2010-2011

Name _____ ID _____

Students must obtain a grade of C or better in these courses to apply them to the chemistry major

Chemistry Curriculum	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
Lower Division Requirements (43-44 units)							
Chemistry							
CHEM 121 General Chemistry I	4						Prereq: Passing score on Chemistry Placement Exam or CHEM 105; GE: B1
CHEM 122 General Chemistry II	4						Prereq: CHEM 121 with a C or better; GE: B1
CHEM 250 Quantitative Analysis	3						Prereq: CHEM 122 with a C or better; Corequisite: CHEM 251
CHEM 251 Quantitative Analysis Laboratory	1						Prereq: CHEM 122 with a C or better; Corequisite: CHEM 250
Biology							
BIOL 200 Principles of Organismal and Population Biology	4						GE: B2
BIOL 201 Principles of Cell and Molecular Biology	4						Prereq: CHEM 105 or 121; GE: B2
Math							
MATH 150 Calculus I	4						Prereq: Passing score on the Calculus Placement Exam or MATH 105; GE: B3
MATH 151 Calculus II	4						Prereq: MATH 150
Physics							
<i>Select <u>one</u> of the following:</i>							
PHYS 100 Introduction to Physics I	4						GE: B1
PHYS 200 General Physics I	4						Prereq: MATH 150; GE: B1
<i>Select <u>one</u> of the following:</i>							
PHYS 101 Introduction to Physics II	4						Prereq: PHYS 100; GE: B1
PHYS 201 General Physics II	4						Prereq: PHYS 200; GE: B1
Astronomy							
ASTR/PHYS 105 Introduction to the Solar System (<i>or</i>) PHYS 107 The Stars and Beyond	4 3						GE: B1
Earth Science							
GEOL 121 Physical Geology	4						GE: B1
Total Upper Division (32-33 units)							
Upper Division Major Requirements (24-25 units)							
Chemistry							
CHEM 305 Computer Applications in Chemistry	1						Prereq: CHEM 122 with a C or better; GE: B4
CHEM 311 Organic Chemistry I	3						Prereq: CHEM 122 with a C or better
CHEM 312 Organic Chemistry I Lab	1						Prereq: CHEM 311 (or taken concurrently) with a C or better
CHEM 314 Organic Chemistry II	3						Prereq: CHEM 311 with a C or better

Chemistry Requirements, cont.	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
CHEM 315 Organic Chemistry II Lab	1						Prereq: CHEM 311, 312 & 314 (or taken concurrently) all with C's or better
CHEM/HIST 330 The History of Science: Non Western Origins and the Western Revolution	3						GE: B1, UDIGE
CHEM 371 Physical Chemistry I	3						Prereq: CHEM 122 with a C or better, PHYS 101 or 201 & MATH 150
CHEM 372 Physical Chemistry Laboratory	1						Prereq: CHEM 371 or taken concurrently
CHEM 499 Chemistry Capstone Colloquium	2						Prereq: CHEM 305 & 371
Earth Science							
BIOL 335 The Biosphere (<i>or</i>)	3						GE: B2, UDIGE
GEOL 300 Foundations of Earth Science	4						Prereq: PHSC 170
Education							
EDUC 330 Introduction to Secondary Schooling	3						GE: D, UDIGE; Recommended to be concurrently enrolled in a core course in CHEM
Upper Division Chemistry Electives (8 units)							
<i>A total of <u>eight</u> units of electives from those listed below are needed. Lab courses are denoted^L. Select from the following:</i>							
CHEM 301 Environmental Chemistry – Atmosphere and Climate	3						Prereq: CHEM 122 with a C or better
CHEM 302 Environmental Chemistry – Soil and Water ^L	4						Prereq: CHEM 122 with a C or better
CHEM 313 Organic Chemistry I Problem Solving	1						Coreq: CHEM 311
CHEM 316 Organic Chemistry II Problem Solving	1						Coreq: CHEM 314
CHEM 373 Physical Chemistry II	3						Prereq: CHEM 122 with a C or better, PHYS 101 or 201 & MATH 150
CHEM 410 Advanced Organic Synthesis ^L	4						Prereq: CHEM 305 (or concurrent enrollment), CHEM 314 & 315 or consent of instructor
CHEM 415 Molecular Structure Determination ^L	4						Prereq: CHEM 305 (or concurrent enrollment), CHEM 314 & 315 or consent of instructor
CHEM 420 Advanced Inorganic Chemistry	3						Prereq: CHEM 314 & 371
CHEM 450 Instrumental Analysis and Laboratory ^L	4						Prereq: CHEM 250, 251, 305 (or concurrent enrollment or consent of instructor) & 315 with a C or better
CHEM 460 Biochemistry I ^L	4						Prereq: CHEM 314 with a C or better
CHEM 461 Biochemistry II ^L	4						Prereq: CHEM 305 (or concurrent enrollment) & CHEM 460 with a C or better or consent of instructor
CHEM 465 Bioinorganic Chemistry ^L	4						Prereq: CHEM 305 (or concurrent enrollment), CHEM 314 with a C or better or consent of instructor
CHEM 490 Special Topics in Chemistry	1-3						Prereq: Consent of instructor. Repeatable by topic.
CHEM 491 Special Laboratory Topics in Chemistry ^L	1-3						Prereq: Consent of instructor. Repeatable by topic up to 6 units.
CHEM 492 Internship/Service Learning ^{L,R}	1-3						Prereq: Consent of instructor. Repeatable
CHEM 494 Independent Research ^{L,R}	1-3						Prereq: Consent of instructor. Repeatable
CHEM 497 Directed Studies ^R	1-3						Prereq: Consent of instructor. Repeatable
^R No more than a combined total of <u>six</u> units of CHEM 492, 494, and 497 may be applied as electives. No more than <u>one</u> CHEM 492 or 494 may be (by petition) considered a laboratory elective.							

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE (UDIGE) at CSUCI (courses numbered 330-349 or 430-449)

Upper division standing or instructor consent required for these courses

Course 1 (in major) CHEM 330 Course 2 (in major) EDUC 330 Course 3 (outside of major) _____
(outside major)

American Institutions Requirements: US History _____ State and Local Gov't _____
(choose from HIST 270, 271, 272, 275 or 350) (choose POLS 150)

Students must receive a grade of C or better in the Language and Multicultural Requirements

Language Requirement: GE C3a _____
(one semester of college level language)

Multicultural Requirement: GE C3b _____

Minimum total units to graduate: 120 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.

Advisor _____ Date Completed: _____

Advisor Comments: _____

PREREQUISITES FOR THE CHEMISTRY SINGLE SUBJECT TEACHING CREDENTIAL AT CSUCI ONLY:

CSUCI credential program requires prerequisite courses that may be taken as part of the undergraduate degree.

Please contact the Credential Office (805-437-8953, credential.assistant@csuci.edu) for a list of the required prerequisites and any question you may have regarding the credential program. It is recommended that you contact the credential office during your junior year.