



Bachelor of Science CHEMISTRY

Advisement Form 2009-2010

Name _____ ID _____

Chemistry Curriculum	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
Lower Division Requirements (28 units)							
Chemistry							
CHEM 121 General Chemistry I <i>Must receive a C or better</i>	4						Prereq: Passing score on CHEM Placement Exam or CHEM 105; GE: B1
CHEM 122 General Chemistry II <i>Must receive a C or better</i>	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
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
Upper Division Requirements (42 units)							
Chemistry Core Courses (22 units)							
CHEM 305 Computer Applications in Chemistry	1						Prereq: CHEM 122 with a C or better; GE: B4
CHEM 311 Organic Chemistry I <i>Must receive a C or better</i>	3						Prereq: CHEM 122 with a C or better
CHEM 312 Organic Chemistry I Lab <i>Must receive a C or better</i>	1						Prereq: CHEM 311 (or taken concurrently) with a C or better
CHEM 314 Organic Chemistry II <i>Must receive a C or better</i>	3						Prereq: CHEM 311 with a C or better
CHEM 315 Organic Chemistry II Lab	1						Prereq: CHEM 311, 312, & 314 (or taken concurrently) all with C's or better
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 373 Physical Chemistry II	3						Prereq: CHEM 122 with a C or better, PHYS 101 or 201, & MATH 150
CHEM 460 Biochemistry I	4						Prereq: CHEM 314 with a C or better
CHEM 499 Chemistry Capstone Colloquium	2						Prereq: CHEM 305, 371, & CHEM 492 or 494 (or concurrent enrollment); CR/NC
Upper Division Chemistry Electives (20 units)							
<i>A total of <u>twenty</u> units of electives from those listed below are needed, including a minimum of <u>three</u> lab courses 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 Learning Community	1						Coreq: CHEM 311

Chemistry Electives, cont.	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
CHEM 316 Organic Chemistry II Learning Community	1						Coreq: CHEM 314
CHEM/HIST 330 The History of Science: Non-Western Origins and the Western Revolution ^I	3						GE: B1, INTD
CHEM 335 The Chemistry of the Kitchen ^{L,1}	3						GE: B1, INTD
CHEM/BUS/ECON 341 Drug Discovery and Development ^I	3						GE: B1, D, INTD
CHEM 343 Forensic Science ^{L,1}	3						GE: B1, INTD
CHEM/PHYS 344 Energy and Society ^I	3						GE: B1, INTD
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 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 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

^I A maximum of three units of upper division interdisciplinary GE credit (CHEM 330-349 or CHEM 440-449) may be applied as chemistry electives towards the degree. For students pursuing an advanced degree it is not recommended to choose these courses as chemistry electives.

^R No more than a combined total of six units of CHEM 492, 494, and 497 may be applied as electives. No more than one CHEM 492 or 494 may be (by petition) considered a laboratory elective.

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE at CSUCI (courses numbered 330-349 or 430-449)		
Course 1 _____ (May choose 330, 335, 341, 343 or 344)	Course 2 _____	Course 3 _____ (outside major)
American Institutions Requirements: US History _____ (Choose HIST 270, 271, 272, 275 or 350)		State and Local Gov't _____ (Choose POLS 150)
<i>Students must receive a grade of C or better in the Language and Multicultural Requirements</i>		
Language Requirement: GE C3a _____ (one semester of college level language)		
Multicultural Requirement: GE C3b _____		
<i>Minimum total units to graduate: 120 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.</i>		
Advisor _____		Date Completed: _____