

BS CHEMISTRY

2007-09 Cal Poly Catalog

Chemistry & Biochemistry Department

Faculty Offices East Bldg. (25), Room 125B
(805) 756-2693

- 60 units upper division GWR
 2.0 GPA USCP

* = Satisfies General Education requirement

Course sequencing: See flowcharts at
www.calpoly.edu/~cosamac

MAJOR COURSES

CHEM 127 General Chemistry (B3 & B4)*	4
CHEM 128 General Chemistry	4
CHEM 129 General Chemistry	4
CHEM 313 Survey of Biochemistry and Biotechnology or CHEM 371 Biochemical Principles	5
CHEM 316 Organic Chemistry I	5
CHEM 317 Organic Chemistry II	5
CHEM 318 Organic Chemistry III	3
CHEM 319 Advanced Organic Chemistry Lab	2
¹ CHEM 331 Quantitative Analysis	5
CHEM 351 Physical Chemistry I.....	3
CHEM 352 Physical Chemistry II.....	3
CHEM 353 Physical Chemistry III.....	3
CHEM 354 Physical Chemistry Laboratory.....	2
CHEM 357 Physical Chemistry III Laboratory.....	1
CHEM 439 Instrumental Analysis	5
² CHEM 459 Undergraduate Seminar (2) or SCM 491 Student Teacher Seminar (1) (1).....	2
CHEM 461 Senior Project Report.....	1
CHEM 481 Inorganic Chemistry	3
CHEM 484 Inorganic Chemistry Lab	2
³ Advanced advisor approved chemistry electives to complete major, or concentration	15-18
	77-80

SUPPORT COURSES

BIO 161 Intro to Cell & Molecular Biology (B2)*	4
MATH 141, 142, 143 Calculus I, II, III (B1)*.....	4,4,4
MATH 241 Calculus IV	4
MATH 244 or 200-400 level STAT or CSC course	4
PHYS 141 General Physics IA.....	4
PHYS 132 General Physics II.....	4
PHYS 133 General Physics III.....	4
Physics elective (200-level and above)	3

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GENERAL EDUCATION (GE)

72 units required; 16 units are in Major/Support.

→See page 56 for complete GE course listing.

→Minimum of 12 units required at the 300-400 level.

Area A Communication (12 units)

A1 Expository Writing	4
A2 Oral Communication	4
A3 Reasoning, Argumentation, and Writing	4

Area B Science and Mathematics (no additional units are required)

B1 Mathematics/Statistics * 8 units in Support	0
B2 Life Science * 4 units in Support.....	0
B3 Physical Science * 4 units in Major.....	0
B4 One lab taken with either a B2 or B3 course	

Area C Arts and Humanities (20 units)

C1 Literature	4
C2 Philosophy	4
C3 Fine/Performing Arts	4
C4 Upper-division elective	4
Area C elective (Choose one course from C1-C4)	4

Area D/E Society and the Individual (20 units)

D1 The American Experience (40404)	4
D2 Political Economy	4
D3 Comparative Social Institutions	4
D4 Self Development (CSU Area E)	4
D5 Upper-division elective	4

Area F Technology Elective (upper division)

(4 units)	4
	56

ELECTIVES.....	5-8
	180

Polymers and Coatings Concentration

CHEM 444 Polymers and Coatings I	3
CHEM 445 Polymers and Coatings II.....	3
CHEM 446 Surface Chemistry of Materials	3
CHEM 447 Polymers and Coatings Lab I.....	2
CHEM 448 Polymers and Coatings Lab II.....	2
CHEM 449 Internship in Polymers and Coatings ...	2
MATE 210 Materials Engineering	3
	18

¹ Students should take CHEM 331 during their second year.

² SCM 491 only for students pursuing Single-Subject Teaching Credential.

³ See department for advanced electives list.