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LEARN BY DOING	CAL	POLY
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NOTE: This is a snapshot of the curriculum as originally published in the catalog. The Degree Progress Report (DPR) reflects updates to the published catalog. The DPR will be used to award your degree and calculate your EAP.

NAME STUDENT ID CONCENTRATION MINOR Cal Poly, Higher Ed, and Major GPA at least 2.00 [] YES [] NO US Cultural Pluralism Met [] YES [] NO 60 Units Upper-Division Met Taken/Remaining [] YES [] NO **GWR Met** [] YES [] NO Upper-Division GE Met Taken/Remaining [] YES [] NO Free Electives Met [] YES [] NO C- or higher in A1, A2, A3, and B4 [] YES [] NO Residency Requirements Met 1YES [1NO

Note: No Major, Support or Concentration course ma	v he sala	eted as a	rodit/no avodi
MAJOR COURSES (76-82)	Units		GrdPts
	4	Graue	Graris
CHEM 124 Gen Chem I for PSE (B1&B3) ¹ CHEM 125 Gen Chem II for PSE	4		
CHEM 126 Gen Chem III for PSE	4		
CHEM 203 Undergrad Seminar I	1		
CHEM 216 Org Chem I	5		
CHEM 217 Org Chem II	3		
CHEM 218 Org Chem III	3		
CHEM 221 Org Chem. Lab II	2		
CHEM 303 Undergrad Seminar II	1		
CHEM 324 Org Chem Lab III	2		
CHEM 331 Quantitative Analysis ²	5		
CHEM 351 Physical Chem I	3		
CHEM 352 Physical Chem II	3		
CHEM 353 Physical Chem III	3		
CHEM 354 Physical Chem Lab	2		
CHEM 371 Biochemical Principles	5		
CHEM 372 Metabolism	4		
CHEM 373 Molecular Biology	3		
CHEM 403 Undergrad Seminar III: Snr Prj	1		
CHEM/BIO 475 Molecular Bio Lab	3		
Select three units from the following:	3		
BIO 476; CHEM 474			
Select 12 units of Adv Biochemistry Electives	12		
or declare and follow the 18-unit Polymers and	or		
Coatings Concentration ³ (see reverse)	18		

SUPPORT COURSES (32-33)

BIO 161 Intro to Cell & Molecular Bio (B2&B3) 1	4
BIO 452 Cell Biology or MCRO 224 Gen. Micro I	4-5
MATH 141 Calculus I (B4) ¹	
MATH 142 Calculus II (GE Electives) ¹	4
MATH 143 Calculus III	4
PHYS 141 Gen Physics IA	4
PHYS 132 Gen Physics II	4
PHYS 133 Gen Physics III.	4

GENERAL EDUCATION (GE)	
72 units required, 16 of which are specified in Major and Sup	port
Minimum of 12 units required at the 300 level.	

Area A	English Language Comm and Critical Thinking	
A1	Oral Communication	4
A2	Written Communication	4
A3	Critical Thinking	4
Area B	Scientific Inquiry & Quantitative Reasoning	
B1	Physical Science (4 units in Major) 1	
D2	T:C G: (4 : C G A)	

Area C	rts and Humanities	
Uppe	r-Division B	4
B4	Math/Quant. Reasoning (4 units in Support) 1	
	Laboratory Activity (in Major/Support) 1	
B 2	Life Science (4 units in Support)	

		_
Lower-division Area C courses must come from 3 different subje	ct prefixes	j
C1 Arts ⁷	4	
C2 Humanities ⁷	4	
Lower-Division C Elective: C1 or C2 ⁷	4	

Upper-Division C	4	
Area D Social Sciences		16
D1 American Inst. (Title 5/40404)	4	

		,
Courses in D2 must come	from	2 different subject prefixes

rea F I	Lifelong Learning and Self-Development		4
Upp	er-Division D	4	
D2	Lower-Division D ⁸	4	
D2	Lower-Division D ⁸	4	

elect a course from Area C or D; may be lower- or upper- division	
GE Elective (GE Area C or D)	. 4

FREE ELECTIVES	9-
GE Elective (4 units of Area B in Support) 1	
GE Elective (GE / Hear C of B)	•

Required in Major/Support; also satisfies GE.
 Students should take CHEM 331 directly after completing CHEM 126.

³ Consultation with advisor is recommended prior to selecting Advanced Biochemistry Electives; bear in mind your selections may impact pursuit of post-bacc studies and/or goals.

⁴No more than 6 units may apply to Advanced Biochemistry Electives.

 $^{^{5}\,\}mbox{No}$ more than 2 units may apply to Advanced Biochemistry Electives.

⁶ If a General Education (GE) course is used to satisfy a Major or Suport requirement, additional units of Free Electives may be needed to complete the total units required for the degree.

⁷C1, C2, and C elective must come from three different subject prefixes.

⁸ Second D2 must be a different subject prefix from the first D2.

⁹ Course may also satisfy a GE requirement.

ADVANCED BIOCHEMISTRY ELECTIVES or POLYMERS AND COATINGS CONCENTRATION

ADVANCED BIOCHEMISTRY ELECTIVES.....12

Select 12 units from Adv Biochemistry Electives (one course must be a lecture and at least two courses must be from List A).

LIST A (at l	east two courses)
CHEM 252	Laboratory Glassblowing
CHEM 302	Marine Chemistry
CHEM 341	Environmental Chemistry: Water Pollution
CHEM 357	Physical Chemistry III Lab
CHEM 377	Chemistry of Drugs and Poisons
CHEM 401	Advanced Undergraduate Research ⁴
CHEM 405	Advanced Physical Chemistry
CHEM 414	Advanced Organic Chemistry - Mechanisms
CHEM 419	Bioorganic Chemistry
CHEM 420	Advanced Organic Chemistry - Synthesis
CHEM 428	Nutritional Biochemistry
CHEM 439	Instrumental Analysis
CHEM 441	Bioinformatics Applications

CHEM 444 Polymers & Coatings I

CHEM 445 Polymers & Coatings II

CHEM/MATE 446 Surface Chemistry of Materials

CHEM 447 Polymers and Coatings Laboratory I

CHEM 448 Polymers and Coatings Laboratory II

CHEM 449 Polymers and Coatings Internship

CHEM 450 Polymers and Coatings III

CHEM 451 Polymers and Coatings Laboratory III

CHEM 454 Functional Polymeric Materials

CHEM 458 Instrumental Organic Qualitative Analysis

CHEM 463 Honors Research

CHEM 465 College Teaching Practicum

CHEM 466 Learning Assistant Seminar

CHEM 470 Selected Advanced Topics

CHEM 474 Protein Techniques Laboratory

CHEM 477 Biochemical Pharmacology

CHEM 481 Inorganic Chemistry

CHEM 484 Inorganic Chemistry Laboratory

CHEM 485 Cooperative Education Experience ⁵

CHEM 495 Cooperative Education Experience ⁵

SCM 302/ENGR 322 The Learn by Doing Lab Teaching Practicum

LIST B	
BIO/CHEM	308^9 or CHEM 349^9 or ENVE 324^9 or SCM 335^9 or SCM 360^9
BIO 351	Principles of Genetics
BIO 361	Principles of Physiology
BIO 405	Developmental Biology
BIO 406	Neuroscience
BIO 407	Endocrinology
BIO 408	Cardiorespiratory Physiology
BIO 409	Muscle and Locomotion
BIO 410	Functional Histology
BIO 426	Immunology
BIO 452	Cell Biology
MCRO 402	General Virology
MCRO 423	Medical Microbiology
MCRO 424	Microbial Physiology
STAT 312	Statistical Methods for Engineers

POLYMERS AND COATINGS CONCENTRATION

CHEM 444 Polymers & Coatings I	3
CHEM 445 Polymers & Coatings II	3
CHEM 446 Surface Chemistry of Materials	3
CHEM 447 Polymers and Coatings Laboratory I	2
CHEM 448 Polymers and Coatings Laboratory II	2
CHEM 450 Polymers and Coatings III	3
Select one course from the following:	2
CHEM 449 Polymers and Coatings Internship	
CHEM 451 Polymers & Coatings Laboratory III	
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