

THE UCLA CHEMISTRY MAJOR 2007 - 2008

The Department of Chemistry and Biochemistry offers four undergraduate majors, two concentrations, and one specialization: the *CHEMISTRY* major (described here), the *PHYSICAL CHEMISTRY* concentration, the *BIOCHEMISTRY* major, the *GENERAL CHEMISTRY* major (for students who want to acquire a good chemical background in preparation for careers outside chemistry), the *CHEMISTRY-MATERIALS SCIENCE* major, the *CHEMISTRY-MATERIALS SCIENCE ORGANIC* concentration, and the *COMPUTING SPECIALIZATION*. For more details about these majors, consult your faculty advisor or the Undergraduate Office in 4009 Young Hall.

The major is designed primarily for students who are interested in attending graduate school in Chemistry or related areas. It also satisfies some of the requirements of pre-medical and pre-professional schools. Refer to the UCLA General Catalog for course descriptions.

Preparation for the Major	
General Chemistry:	Chem 20A(H), 20B(H), 20L, 30AL
Organic Chemistry:	Chem 30A(H), 30B, 30BL, 30C, 30CL
Math:	31A, 31B, 32A, 32B, 33B
Physics:	1A(H), 1B(H), 1C(H), 4BL
Note: (H) indicates that an HONORS section is available	

Upper Division Major Requirements	
Chemistry	Chem 110A, 113A, 110B <u>or</u> C113B, 114(H), 136 <u>or</u> 144, 171, C172
Biochemistry	Chem 153A(H), 153L
Two Chemistry Electives (8 units)	One upper division or graduate-level courses offered in the Dept. of Chemistry & Biochemistry (at least 4 Units)
	One laboratory from Chemistry 136, 144, 154, 174, 184, C185

Important Notes

- You may not take or repeat a chemistry or biochemistry course for credit if it is a prerequisite for a more advanced course for which you already have credit.
- Seminars, individual study courses, and research courses (e.g. 196, 199) *may not be used* to satisfy the requirements for the Chemistry major.
- You must maintain at least a 2.0 GPA in all upper division coursework taken to fulfill the major requirements.
- All prep for major and major courses must be taken for a letter grade.

Class Scheduling - Tips & Suggestions

SCHEDULE: The following schedule for the first six quarters is strongly recommended for students planning to major in Chemistry:

COURSES		QUARTER					
		1	2	3	4	5	6
	Chemistry:	20A	20B and 20L	30A and 30AL	30B and 30BL	30C and 30CL	171 plus either 110A or 113A
	Mathematics:	31A	31B	32A	32B	33B	
	Physics:		1A	1B	1C/4BL		

UPPER DIVISION COURSES: The program of upper division courses for the Chemistry major should be planned with care. Particular attention should be paid to prerequisites for advanced courses and the quarter(s) in which courses are offered. Please use this prerequisite list as a guide to plan your courses. Consult with an Undergraduate Advisor for assistance.

COURSE	PREREQUISITE
<i>Required:</i>	
110A	Chem 20B; Math 32A or 3C; Physics 1A(H), 1B(H), 1C(H)*, or Physics 6A(H), 6B(H), 6C(H)*
110B	Chem 110A, 113A; Math 32B
113A	Chem 20B; Math 32A, 32B 33B; Physics 6A, 6B, 6C or 1A, 1B, 1C
C113B	Chem 113A
114(H)	Chem 30AL, 110A, 113A and EITHER 110B* or C113B*
136	Chem 30C and 30CL
144	Chem 30C and 30CL
153A(H)	Chem 30B (Life Science 2 & 3 recommended)
153L	Chem 30B and 30BL, and 153A(H)*
171	Chem 30B
C172	Chem 171
<i>Possible Electives:</i>	
103	Chem 30B, 30BL, 110A, 153A(H) and 153L
C115A	Chem 113A; Math 32B, 33A (see catalog for recommended courses)
C115B	Chem C115A
C123A	Chem 110B or 156, (113A recommended)
C123B	Chem C123A
125	Chem 110A, 110B, 113A + knowledge of Fortran IV or PL/1
C126A	Chem 110A, Math 33B
C140	Chem 30C, 110A
C143A	Chem 30C and 30CL*, 110B, 113A
C143B	Chem C143A
C145	Chem 30C, 113A
153B	Chem 153A, Life Sci 2, 3
153C	Chem 153A
CM153G	Chem 110A, 153A, 153B, 153C, 156
154	Chem 153A, 153B, 153L, (156 recommended)
156	Chem 110A, 153A
C160A	Statistics recommended
C160B	Chem C160A
C161A	Chem 153C
C174	Chem C172, 30CL
C175	Chem 110AB, 113A, C172
C176	Chem 113A, C172
C179	Chem 153A, 171
C180	Chem C172
C181	Chem 30B, 110A
184	Chem 30CL, 110A
C185	Chem 30AL, 110A, 113A, 171

* indicates *may be taken concurrently* with the course

COLLEGE REQUIREMENTS FOR THE B.S. DEGREE: Requirements for the B.S. degree established by the College of Letters and Science are listed in the UCLA General Catalog. A total of at least 180 quarter units are required for the degree, **60 of these 180 units must be upper division (course numbers 100-199).**