

THE UCLA PHYSICAL CHEMISTRY CONCENTRATION 2007-2008

The Department of Chemistry and Biochemistry offers four undergraduate majors, two concentrations, and one specialization: the *CHEMISTRY* major, the *PHYSICAL CHEMISTRY* concentration (described here), the *BIOCHEMISTRY* major, the *GENERAL CHEMISTRY* major, 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 Young Hall 4009.

THE PHYSICAL CHEMISTRY CONCENTRATION: This concentration is designed primarily for Chemistry majors who are interested in attending graduate school in Physical Chemistry/Physics or related areas. It may also satisfy some of the needs of pre-medical and other 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
Math:	31A, 31B, 32A, 32B, 33A, 33B
Physics:	1A(H), 1B(H), 1C(H), 4BL
Note: (H) indicates that an HONORS section is available	

Concentration Course Requirements	
Chemistry	Chem 110A, 110B, 113A, C113B, 114(H), 153A(H), 171, C172
One Laboratory Elective (4 units)	One additional approved upper division physics, chemistry, or electrical engineering laboratory course from Chemistry M120, 184, C185; Physics 117, 180B, 180C; Electrical Engineering 122L, 172L, 173DL
Three Lecture Electives (12 units)	Three approved elective lectures chosen from upper division or graduate courses in physics, mathematics, electrical engineering, physical chemistry, physical inorganic chemistry, biophysical chemistry, or physical organic chemistry (see approved elective list below).

Approved Lecture Electives (pick 3)	
Chemistry	Chemistry C115A, C115B, C123A, C123B, C143A, C145, 156, C176, C180, 215C, 215D, 223C, 225
Physics:	Physics 105A, 105B, 110A, 110B, 131, 132, 140A, 160
Mathematics:	Mathematics 115A, 115B, 132, 134, 135, 136, 142, 146, 151A, 151B, 153
Electrical Engineering:	Electrical Engineering 100, 101, 102, 121B, 136, 172, 173

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 physical 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.
- **By their junior year, students are strongly encouraged to join a research group within the physical chemistry division to obtain research experience.**