

UCLA PHYSICAL CHEMISTRY CONCENTRATION 2016-2017

CHEMISTRY MAJOR (B.S.), PHYSICAL CHEMISTRY CONCENTRATION: This major is designed 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 (www.registrar.ucla.edu/catalog) for course descriptions and requisites.

For more details about this major and others offered in the Department of Chemistry and Biochemistry, consult the Undergraduate Office in 4006 Young Hall.

Preparation for the Major	
General Chemistry (CHEM)	Chem 20A(H), 20B(H), 20L, 30AL
Organic Chemistry (CHEM)	Chem 30A(H), 30B, 30BL
Math (MATH)	Math 31A, 31B, 32A, 32B, 33A, 33B
Physics (PHYSICS)	Physics 1A(H), 1B(H), 1C(H), 4BL

(H) indicates that an Honors section may be available.

Upper Division Major Requirements	
Chemistry (CHEM)	CHEM 110A, 110B, 113A, C113B, 114(H), 153A(H), 171, 172
One Laboratory Elective (4 units)	CHEM M120, 184, 185; PHYSICS 117, 180B, 180C
Three Lecture Electives (12 units)	CHEM C115A, C115B, C123A, C123B, 125, C143A, C145, 156, C176, C180, C215C, 215D, M223C, 225; EL ENGR 100, 101A, 102, 121B 136, 173; MATH 115A, 115B, 132, 134, 135, 136, 142, 146, 151A, 151B, 153; PHYSICS 105A, 105B, 110A, 110B, 131, 132, 140A, 160

⁺ Course may only be applied once to the major.

Important Notes

- You must have a minimum of 180 units to graduate, and 60 of those units must be upper division (courses numbered 100 to 199).
- The Physical Chemistry Concentration Upper Division Major Requirements satisfy at least 49 upper division units.
- All Preparation for the Major and Upper Division Major courses must be taken for a letter grade.
- Seminars, individual study courses, and research courses (e.g. 196, 199) may not be used to satisfy the requirements for the Physical Chemistry Concentration.
- You must have a 2.0 GPA in the major to graduate with a degree. If you fall below a 2.0 GPA in the major, it is strongly recommended that you change majors.
- 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.

UCLA PHYSICAL CHEMISTRY CONCENTRATION 2016-2017 – Sample Major Course Plans

INCOMING FRESHMEN

FRESHMAN YEAR

FALL	WINTER	SPRING
CHEM 20A (4)	CHEM 20B (4)	CHEM 30A (4)
MATH 31A (4)	CHEM 20L (3)	MATH 32A (4)
	MATH 31B (4)	

SOPHOMORE YEAR

FALL	WINTER	SPRING
CHEM 30B (4)	MATH 32B (4)	MATH 33A (4)
CHEM 30AL (4)	PHYSICS 1B (5)	PHYSICS 1C (5)
PHYSICS 1A (5)	CHEM 30BL (3)	PHYSICS 4BL (2)

JUNIOR YEAR

FALL	WINTER	SPRING
MATH 33B (4)	CHEM 113A (4)	CHEM 110B (4)
CHEM 110A (4)	Lecture Elective #1 (4)	CHEM 172 (4)
CHEM 171 (4)		

SENIOR YEAR

FALL	WINTER	SPRING
CHEM 153A (4)	CHEM C113B (4)	CHEM 185 (5)
CHEM 114 (5)	Lecture Elective #2 (4)	Lecture Elective #3 (4)

(Numbers in parentheses indicate the number of units.)

Important Notes

- This plan is just one EXAMPLE of how to schedule classes to graduate in 4 years. Other schedules may be equally valid.
- This plan only includes required courses for the Preparation for the Major and the Upper Division Major Requirements.
- **This plan does not include General Education and other College requirements.** For these requirements, please consult with your College Advising Unit (College Academic Counseling, AAP, Honors, Athletics).
- Be sure to check your Degree Audit Report (DAR) frequently to ensure you are meeting all degree requirements.

TRANSFER STUDENTS

JUNIOR YEAR

FALL	WINTER	SPRING
CHEM 153A (4)	CHEM 110A (4)	CHEM 110B (4)
CHEM 171 (4)	CHEM 113A (4)	CHEM 172 (4)

SENIOR YEAR

FALL	WINTER	SPRING
CHEM 114 (5)	CHEM C113B (4)	CHEM 185 (5)
Lecture Elective #1 (4)	Lecture Elective #2 (4)	Lecture Elective #3 (4)

(Numbers in parentheses indicate the number of units.)

Important Notes

- This plan is just one EXAMPLE of how to schedule classes to graduate in 2 years. Other schedules may be equally valid.
- Assuming that incoming transfer students have already completed the Preparation for the Major, this plan only includes required courses for the Upper Division Major Requirements.
- **This plan does not include General Education and other College requirements.** For these requirements, please consult with your College Advising Unit (College Academic Counseling, AAP, Honors, Athletics).
- Be sure to check your Degree Audit Report (DAR) frequently to ensure you are meeting all degree requirements.

Courses may not always be taught in the quarter shown. Check with the Chemistry/Biochemistry Department for the most current list of projected course offerings.