UNIVERSITY OF CALIFORNIA, SAN DIEGO
Department of Chemistry and Biochemistry
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CHEMISTRY (CH25)

Major Requirements for the **CHEMISTRY B.S. Degree-Transfer**
Starting Fall 2022 and After – Transfer Students

The Chemistry major provides a broad introduction for the biochemistry, organic, physical, or inorganic student as well as those who prefer not to specialize. This major will enable a student to pursue further studies in chemistry or in related fields of science, medicine, or engineering

The following courses must be taken for a letter grade:

Lower Division Requirements:

- ☐ **General Chemistry** (CHEM 6A, 6B & 6C or 6AH, 6BH & 6CH)
- ☐ **General Chemistry Lab** (CHEM 7L or 7LM)
- ☐ **Physics** (PHYS 2A, 2B & 2C)
- ☐ **Physics Lab** (PHYS 2BL or 2CL or 2DL)
- ☐ **Calculus** (MATH 20A, 20B, 20C & 20D)
- ☐ **Organic Chemistry** (CHEM 41A, 41B & 41C)
- ☐ **Organic Chemistry Lab** (CHEM 43A)

Upper Division Requirements:

- ☐ **1. Physical Chemistry** (CHEM 130, 131 & 132)
- ☐ **2. Inorganic Chemistry** (CHEM 120A & B)
- ☐ **3. Biochemical Structure and Function** (CHEM 114A)
- ☐ **4. Required Laboratory Courses (must take all 3):**
  - a. Analytical Chemistry Laboratory (CHEM 100A)
  - b. Organic Chemistry Laboratory II (CHEM 143B)
  - c. Physical Chemistry Laboratory (CHEM 105A)
- ☐ **5. Laboratory Elective** (Select 2 of the following courses):
  - **a.** Instrumental Chemistry Laboratory (CHEM 100B)
  - b. Advanced Physical Chemistry Laboratory (CHEM 105B)
  - c. Protein Biochemistry Laboratory (CHEM 108)
  - d. Recombinant DNA Laboratory (CHEM 109)
  - e. Advanced Inorganic Chemistry Laboratory (CHEM 123)
  - f. Organic Chemistry Laboratory III (CHEM 143C)
  - g. Molecular Design and Synthesis (CHEM 143D)
  - h. Reading and Research (CHEM 199): 8 units worth of research with the same instructor may be petitioned to fulfill one elective lab.
- ☐ **6. Additional Electives** (Select 3 electives that match the following description):
  - a. Four-unit (minimum) upper division course offered by the Dept. of Chemistry and Biochemistry.
  - b. Taken for a letter grade.
  - c. Four units of CHEM 199, may be petitioned.

Majors sheets for students who entered prior to Fall 2022 can be found on our website:
http://chem-web.ucsd.edu/undergraduate/majors-minor/

Sample 2-year Academic Plan for Chemistry B.S.

This plan assumes completion of **Preparatory** course requirements prior to transferring to UCSD.

FALL	WINTER	SPRING
THIRD YEAR – 1ST YEAR TRANSFER		
CHEM 120A	CHEM 120B	CHEM 143B
MATH 20C	CHEM 114A	CHEM Elective
PHYS 2C or 2D	CHEM 100A	MATH 20D
PHYS 2BL or 2CL or 2DL	GE	GE
FOURTH YEAR – 2ND YEAR TRANSFER		
CHEM 130	CHEM 131	CHEM 132
CHEM Elective Lab	CHEM Elective	CHEM Elective
GE	CHEM 105A	CHEM Elective Lab
GE	GE	GE

This plan assumes completion of **ALL** lower division requirements prior to transferring to UCSD.

FALL	WINTER	SPRING
THIRD YEAR – 1ST YEAR TRASNFER		
CHEM 130	CHEM 131	CHEM 132
CHEM 120A	CHEM 120B	CHEM 143B
GE	CHEM 100A	CHEM Elective
GE	GE	GE
FOURTH YEAR – 2ND YEAR TRANSFER		
CHEM 105A	CHEM Elective	CHEM Elective
CHEM 114A	CHEM Elective Lab	CHEM Elective Lab
GE	GE	GE
GE	GE	GE

IMPORTANT NOTES:

- We do not recommend taking a chemistry lab your first quarter at UCSD and taking more than one lab per quarter starting your second quarter.
- The plans above do not include GE/University requirements. Check in with your college advisor.
- A minimum 2.0 major GPA is required for graduation.
- **No more than one "D" grade** is allowed in **upper-division** coursework. A “C-“ grade is considered passing.
- Many courses have enforced prerequisites or are offered once per year. It is your responsibility to know which prerequisites are needed for each course (course catalog).
- The quarter in which a course is offered is subject to change. Please check the department website (course offerings) each Spring quarter to see a projection of classes offered next AY.
- The best time to study abroad is Fall quarter of 2nd and/or 3rd year. Study Abroad program deadlines vary by country. Visit the Study Abroad office for assistance in planning to study abroad.

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