

# MINOR IN CHEMISTRY

## Requirements Worksheet

Based on the 2022-2023 CSULB Catalog

This worksheet is not intended to replace advising from the Chemistry & Biochemistry Department. Students should consult with the undergraduate advisor to determine the appropriate course sequence. This worksheet informs students of minor requirements and course prerequisites only; the CSULB Catalog takes precedence in any conflict. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

The Chemistry minor is available to any Chemistry or Biochemistry major. The minimum nineteen units must include a minimum of six units of upper-division Chemistry courses.

Before adding minors, students must determine that their new plan conforms to CSULB's Graduation for Undergraduate Students policy. Under this policy, students may earn up to 120% of the units required for their declared primary major degree and additional degree objectives (e.g., majors, minors, certificates, etc.). The policy also requires students to file a Request to Graduate with Enrollment Services by the time they complete 100% of the primary major's required units.

All prerequisites require a "C" or better. See the current catalog for more details.

The following courses are NOT accepted in the minor: CHEM 90, 100, 140, 224A, 224B, 301, 302, 304, 361, and 461.

## Organic Chemistry Paths

If you choose to take Organic Chemistry, you may take classes from only one of the paths to meet the requirements of the minor

### Organic Path 1

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 227	Fundamentals of Organic Chemistry (3)	CHEM 111A Recommended CHEM 111B

### Organic Path 2

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 220A	Organic Chemistry I (3)	CHEM 111B Corequisite CHEM 223A
		CHEM 220B	Organic Chemistry II (3)	CHEM 220A Corequisite CHEM 223B or 320L

## Additional Eligible Lower-Division Chemistry & Biochemistry Courses

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 223A	Organic Chemistry Laboratory I (1)	Prerequisite

*Physical Chemistry Path 2*

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 375	Physical Chemistry for Engineers (3)	MATH 123 and PHYS 151 and CHE 310; PHYS 152 or EE 210/EE 210L; CHEM 111A/B; CHEM 220A or 227

*Physical Chemistry Path 3*

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 397	Physical Chemistry for Biosciences (4)	(CHEM 111B or CHEM 112B), CHEM 220A (MATH119A or MATH123), and PHYS 100B or PHY 152

**Biochemistry Paths**

If you choose to take Biochemistry, you may take classes from only one of the following paths to meet the requirements of the minor

*Biochemistry Path 1*

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 441A	Biological Chemistry (3)	CHEM 220B; CHEM 320L or 223B
		CHEM 441B	Biological Chemistry (3)	CHEM 441A

*Biochemistry Path 2*

Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 448	Fundamentals of Biological Chem(3)	CHEM 220B or 227

**Additional Eligible Upper Division Chemistry & Biochemistry Courses**

Semester/Year	Grade	Course #
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Semester/Year	Grade	Course #	Course Title (units)	Prerequisites
		CHEM 496	Undergrad Directed Research (-B)	Consent of Instructor (Typically one unit per semester.) Note: max of 3 units may be used to complete Minor in Chemistry.

The courses below are also accepted but their prerequisites or coes