Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Santa Barbara 2022-2023 General Catalog, Quarter	From: De Anza College 2022-2023 General Catalog, Quarter

Chemistry, B.S.

GENERAL INFORMATION FOR ALL MAJORS

All transfer applicants must satisfy University of California admissions eligibility requirements as well as meeting campus admission selection criteria. Completing the UC transfer admission requirements in English and mathematics by the end of the fall term prior to the fall application quarter makes an applicant more competitive for admission to UCSB. All admission requirements must be completed by the end of spring prior to transfer. For more information on UC admissions eligibility requirements and admission to UCSB, please visit the Admissions website: www.admissions.ucsb.edu

This articulation agreement lists course-to-course or sequence-to-sequence substitutions for preparation in the major. **Transfer students are strongly encouraged to complete as many major preparatory courses as possible prior to enrolling at UCSB. Completion of all major preparatory courses is not an admissions requirement, but some majors require certain courses to be completed prior to transfer with a specified GPA, and completion or near completion of major preparatory courses will help students move more efficiently toward graduation after transfer.**

Please note that the course "equivalencies" do not necessarily apply to UCSB general education. For information concerning satisfaction of UCSB general education requirements, please refer to the General Education/Breadth articulation agreement.

Advanced Placement (AP) and **International Baccalaureate (IB)** exams may or may not be used to meet course requirements, depending on the exam. Please refer to the AP Chart and IB Chart in the UCSB General Catalog for information on how we use AP and IB exams.

TIME TO DEGREE

New UCSB students might need more than two years to graduate if a significant amount of lower-division major preparation is not completed prior to transfer. Students should complete as many of the pre-major (if applicable) and major preparation courses as possible prior to transfer if they wish to graduate within two years after transfer.

CHEMISTRY, B.S.

Please visit the department's website to learn more about this major: www.chem.ucsb.edu

PRE-MAJOR INFORMATION

Upon admission, all prospective Chemistry and Biochemistry majors are accepted into the **Pre-Chemistry** major. Students who have completed all pre-major coursework may petition to declare the full major immediately after the completion of their first quarter at UCSB. Transfer students need to obtain a UC GPA of 2.0 or above in each of the 6 pre-major course sequences. Only applicable UC courses will be included in this GPA calculation, regardless of course transferability. For example, if the equivalent of MATH 3A is completed prior to transferring, then a student must achieve a GPA of at least 2.0 in MATH 3B and 4A at UCSB. **Admission to the pre-major does not guarantee admission to full major status.**

Prospective transfer students are strongly encouraged to complete all of the Pre-Major and Preparation for the Major coursework prior to transfer in order to ensure timely progress to degree. Failure to complete all requirements prior to transfer is likely to delay graduation by a full year; students missing preparatory coursework are barred from enrolling in required upper-division course sequences and will have to wait a full year until these sequences are offered again.

I. PRE-MAJOR REQUIREMENTS

Chemistry 1A-B-C

Chemistry 1AL-BL-CL

Chemistry 6AL-BL

Chemistry 109A-B-C

Mathematics 3A, 3B, 4A

Physics 1-2-3-4

II. PREPARATION FOR THE MAJOR

The following courses are not required to be admitted into the Chemistry, B.S. major, but MATH 6A and PHYS 3L-4L are required for enrollment in Physical Chemistry (CHEM 113A-B-C at UCSB). Physical Chemistry sequences start in the fall quarter; transfer students arriving at UCSB in the fall without having completed all pre-major requirements and MATH 6A and PHYS 3L-4L will be unable to enroll in Physical Chemistry for a full year.

Chemistry 6CL

Mathematics 4B and 6A

Physics 3L-4L

Students must earn a minimum grade of C- in all major-applicable transfer courses in order to satisfy UCSB major requirements.

Advisory note for fall 2025 applicants to Chemistry, B.S. (October-November 2024 application filing period)

NEW ADMISSION SELECTION CRITERIA FOR FALL 2025: Transfer applicants must complete the following (in addition to general admission requirements) with a minimum 2.85 GPA in these courses, with no grade lower than C. (Letter grades are required.)

- Full year of general chemistry with labs (courses articulating with UCSB's CHEM 1A-1AL-1B-1BL-1C-1CL series)
- Full year of organic chemistry with labs (courses articulating with UCSB's CHEM 109A-B-C series and CHEM 6AL and 6BL) [NOTE: UCSB's CHEM 6CL is not articulated so an equivalent will not be required for admission]
- Calculus I, Calculus II, Differential Equations, Multivariable/Vector Calculus (courses articulating with UCSB's MATH 3A, 3B, 4B, 6A)
- Full sequence of calculus-based physics for science majors with labs (courses articulating with UCSB's PHYS 1-2-3-4 and 3L-4L)

NOT required for admission but **HIGHLY RECOMMENDED** before transfer: Linear Algebra (course articulating with UCSB's MATH 4A)

PRE-MAJOR REQUIREMENTS

An AP exam cannot be used to satisfy this course requirement
An IB exam cannot be used to satisfy this course requirement

CHEM 1A - General Chemistry (3.00)
--- And ---
CHEM 1AL - General Chemistry Laboratory (2.00)
--- And ---
CHEM 1B - General Chemistry (3.00)
--- And ---
CHEM 1BL - General Chemistry Laboratory (2.00)
--- And ---
CHEM 1C - General Chemistry (3.00)
--- And ---
CHEM 1CL - General Chemistry Laboratory (2.00)

←

CHEM 1A - General Chemistry (5.00)
--- And ---
CHEM 1B - General Chemistry (5.00)
--- And ---
CHEM 1C - General Chemistry and Qualitative Analysis (5.00)

--- Or ---

CHEM 1AH - General Chemistry - HONORS (5.00)
--- And ---
CHEM 1BH - General Chemistry - HONORS (5.00)
--- And ---
CHEM 1CH - General Chemistry and Qualitative Analysis - HONORS (5.00)

CHEM 6AL - Laboratory Methods of Organic Chemistry (3.00)
--- And ---
CHEM 6BL - Laboratory Methods of Organic Chemistry (3.00)

←

CHEM 12A - Organic Chemistry (5.00)
--- And ---
CHEM 12B - Organic Chemistry (5.00)
--- And ---
CHEM 12C - Organic Chemistry (5.00)

CHEM 109A - Organic Chemistry (4.00)
--- And ---
CHEM 109B - Organic Chemistry (4.00)
--- And ---
CHEM 109C - Organic Chemistry (4.00)

←

CHEM 12A - Organic Chemistry (5.00)
- *Lower division credit only*

--- And ---

CHEM 12B - Organic Chemistry (5.00)
- *Lower division credit only*

--- And ---

CHEM 12C - Organic Chemistry (5.00)
- *Lower division credit only*

MATH 3A - Calculus with Applications, First Course (4.00)

←

MATH 1A - Calculus (5.00)
--- Or ---
MATH 1AH - Calculus - HONORS (5.00)

MATH 3B - Calculus with Applications, Second Course (4.00)	←	**MATH 1B** - Calculus (5.00) **--- Or ---** **MATH 1BH** - Calculus - HONORS (5.00)
MATH 4A - Linear Algebra with Applications (4.00)	←	**MATH 2B** - Linear Algebra (5.00) **--- Or ---** **MATH 2BH** - Linear Algebra - HONORS (5.00)
PHYS 1 - Basic Physics (4.00) **--- And ---** **PHYS 2** - Basic Physics (4.00) **--- And ---** **PHYS 3** - Basic Physics (3.00) **--- And ---** **PHYS 4** - Basic Physics (3.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00) **--- And ---** **PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00) **--- And ---** **PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)

PREPARATION FOR THE MAJOR

CHEM 6CL - Organic Chemistry Labs (3.00)	←	No Course Articulated
MATH 4B - Differential Equations (4.00)	←	**MATH 2A** - Differential Equations (5.00) **--- Or ---** **MATH 2AH** - Differential Equations - HONORS (5.00)

****REFER TO TOP OF AGREEMENT****

MATH 6A - Vector Calculus with Applications, First Course (4.00)	←	**MATH 1C** - Calculus (5.00) **--- And ---** **MATH 1D** - Calculus (5.00) **--- Or ---** **MATH 1CH** - Calculus - HONORS (5.00) **--- And ---** **MATH 1DH** - Calculus - HONORS (5.00)

****REFER TO TOP OF AGREEMENT****

PHYS 3L - Physics Laboratory (1.00) **--- And ---** **PHYS 4L** - Physics Laboratory (1.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00) **--- And ---** **PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)

END OF AGREEMENT