# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: University of California, San Diego 2022-2023 General Catalog, Quarter

From: De Anza College 2022-2023 General Catalog, Quarter

## Chemistry and Biochemistry: Pharmacological Chemistry B.S.

### **GENERAL INFORMATION**

DATED MATERIAL, SUBJECT TO CHANGE. PLEASE CONSULT CURRENT UCSD GENERAL CATALOG FOR ANY ADDITIONAL INFORMATION.

Effective Fall 2017, major preparation will be required for this major. For details, visit: <a href="http://admissions.ucsd.edu/MajorPrep">http://admissions.ucsd.edu/MajorPrep</a>

This major provides a strong background in chemistry and includes most courses required by California pharmacy schools. The major is intended primarily to prepare students for pharmacy school (Pharm.D.). Students fulfilling their elective requirements with appropriate courses would be prepared for graduate school to obtain a Ph.D. in pharmacology, biochemistry or other areas of science. Degree recipients would also be prepared for other professional schools in the health care field, or for jobs in the biotechnology and chemical industries. If American Chemical Society Certification is desired, additional coursework is required.

#### Special Advising Note:

Transfer students are strongly advised to complete as many preparatory courses as possible for their major before enrolling at UCSD. Students should complete all other transfer courses before taking organic chemistry.

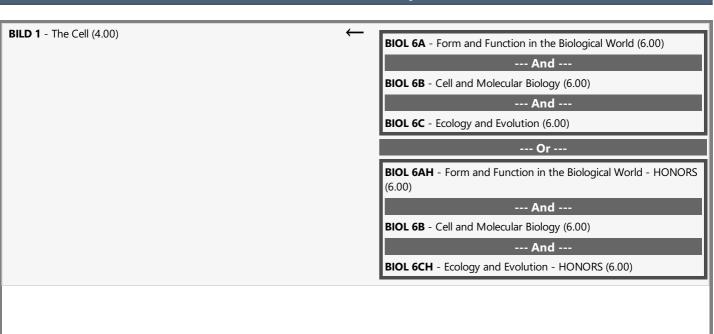
For more information please visit <a href="http://www-chem.ucsd.edu/undergraduate/majors-minor/index.html">http://www-chem.ucsd.edu/undergraduate/majors-minor/index.html</a>

UC San Diego Advanced Placement (AP) and International Baccalaureate (IB) credit policies are detailed in the links below:

Advanced Placement (AP) <a href="https://www.ucsd.edu/catalog/pdf/APC-chart.pdf">https://www.ucsd.edu/catalog/pdf/APC-chart.pdf</a>

International Baccalaureate (IB) <a href="https://catalog.ucsd.edu/\_files/international-baccalaureate-credits-chart.pdf">https://catalog.ucsd.edu/\_files/international-baccalaureate-credits-chart.pdf</a>

## **LOWER DIVISION MAJOR REQUIREMENTS**



BIOL 6A - Form and Function in the Biological World (6.00)
And
BIOL 6B - Cell and Molecular Biology (6.00)
And
BIOL 6C - Ecology and Evolution (6.00)
Or
<b>BIOL 6AH</b> - Form and Function in the Biological World - HONORS (6.00)
And
BIOL 6B - Cell and Molecular Biology (6.00)
And
<b>BIOL 6CH</b> - Ecology and Evolution - HONORS (6.00)

`	CHEM 1A - General Chemistry (5.00) Or
	CHEM 1AH - General Chemistry - HONORS (5.00)
$\leftarrow$	CHEM 1B - General Chemistry (5.00)
	Or
	CHEM 1BH - General Chemistry - HONORS (5.00)
$\leftarrow$	CHEM 1C - General Chemistry and Qualitative Analysis (5.00)
	Or
	<b>CHEM 1CH</b> - General Chemistry and Qualitative Analysis - HONORS (5.00)
$\leftarrow$	CHEM 1B - General Chemistry (5.00)
	And
	CHEM 1C - General Chemistry and Qualitative Analysis (5.00)
	Or
	CHEM 1BH - General Chemistry - HONORS (5.00)
	And
	<b>CHEM 1CH</b> - General Chemistry and Qualitative Analysis - HONORS (5.00)
	<b>← ← ←</b>

CHEM 41A - Organic Chemistry I: Structure and Reactivity (4.00)	CHEM 12A - Organic Chemistry (5.00)
CHEM 41B - Organic Chemistry II: Reactivity and Synthesis (4.00)	CHEM 12B - Organic Chemistry (5.00)
CHEM 41C - Organic Chemistry III: Synthesis, Reactivity, and Macromolecules (4.00)	CHEM 12C - Organic Chemistry (5.00)
CHEM 43A - Organic Chemistry Laboratory (4.00)	CHEM 12A - Organic Chemistry (5.00)  And CHEM 12B - Organic Chemistry (5.00)

<b>MATH 10A</b> - Calculus I (4.00)	$\leftarrow$	No Course Articulated		
<b>MATH 10B</b> - Calculus II (4.00)	$\leftarrow$	No Course Articulated		
MATH 10C - Calculus III (4.00)	$\leftarrow$	No Course Articulated		
MATH 11 - Calculus Based Elementary Probability and Statistics (5.00)	<b>←</b>	MATH 10 - Introductory Statistics (5.00) Or MATH 10H - Introductory Statistics - HONORS (5.00)		
Or				

MATH 20A - Calculus for Science and Engineering (4.00)	← MATH 1A - Calculus (5.00)  Or  MATH 1AH - Calculus - HONORS (5.00)
MATH 20B - Calculus for Science and Engineering (4.00)	← MATH 1B - Calculus (5.00)  Or  MATH 1BH - Calculus - HONORS (5.00)
MATH 20C - Calculus and Analytic Geometry for Science and Engineering (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)
MATH 20D - Introduction to Differential Equations (4.00)	← MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)

PHYS 1A - Mechanics (3.00)  PHYS 1AL - Mechanics Laboratory (2.00)  PHYS 1B - Electricity and Magnetism (3.00)  PHYS 1BL - Electricity and Magnetism Laboratory (2.00)		← PHYS 2A - General Introductory Physics (5.00)								
		<ul> <li>← PHYS 2A - General Introductory Physics (5.00)</li> <li>← PHYS 2B - General Introductory Physics (5.00)</li> <li>← PHYS 2B - General Introductory Physics (5.00)</li> </ul>								
						PHYS 1C - Waves, Optics, and Modern Physics (3.00)	← PHYS 2C - General Introductory Physics (5.00)			
						PHYS 1CL - Waves, Optics, and Modern Physics Laboratory (2.00)	<del></del>	PHYS 2C - General Introductory Physics (5.00)		
	- Or -									
PHYS 2A - Physics - Mechanics (4.00)	$\leftarrow$	PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)								
PHYS 2B - Physics - Electricity and Magnetism (4.00)	<b>←</b>	<b>PHYS 4B</b> - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)								
<b>PHYS 2C</b> - Physics - Fluids, Waves, Thermodynamics, and Optics (4.00)	<b>←</b>	<b>PHYS 4C</b> - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)								
	- Or -									
PHYS 2D - Physics - Relativity and Quantum Physics (4.00)		<b>PHYS 4D</b> - Physics for Scientists and Engineers: Modern Physics (6.00)								
	And									
PHYS 2BL - Physics Laboratory - Mechanics (2.00)	$\leftarrow$	PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)								
PHYS 2CL - Physics Laboratory - Electricity and Magnetism (2.00)	<b>←</b>	<b>PHYS 4B</b> - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)								
	- Or -									
PHYS 2DL - Physics Laboratory-Modern Physics (2.00)	$\leftarrow$	<b>PHYS 4D</b> - Physics for Scientists and Engineers: Modern Physics (6.00)								