# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: University of California, Los Angeles 2022-2023 General Catalog, Quarter

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

## Biophysics/B.S.

#### **IMPORTANT MAJOR INFORMATION**

Listed below are the lower division preparation courses for the major. To be considered for this major, you must complete: one and a half years of calculus through multivariable, one year of calculus based physics (mechanics, electricity, and magnetism) and linear algebra by the end of spring before transfer. It is strongly <u>recommended</u> that the remainder of the major prep be completed prior to transfer. All courses must be taken for a letter grade. For more information regarding this major and UCLA's transfer selection process, visit <a href="https://www.pa.ucla.edu">https://www.pa.ucla.edu</a> and <a href="https://www.pa.ucla.edu">https://www.pa.ucl

PLEASE NOTE: the community college courses listed below have been approved to satisfy the preparation requirements for this major at UCLA, but they may not be exact equivalents of the UCLA courses listed.

#### **LOWER DIVISION MAJOR REQUIREMENTS**

CHEM 20A - Chemical Structure (4.00)	CHEM 1A - General Chemistry (5.00)
And	And
CHEM 20B - Chemical Energetics and Change (4.00)	CHEM 1B - General Chemistry (5.00)
	And
	CHEM 1C - General Chemistry and Qualitative Analysis (5.00)
MATH 31A - Differential and Integral Calculus (4.00) ←	MATH 1A - Calculus (5.00)
Or	
3 , , ,	No Course Articulated
MATH 31B - Integration and Infinite Series (4.00) ←	
integration and minime series (1.00)	MATH 1B - Calculus (5.00)
	And
	MATH 1C - Calculus (5.00)
	Or
	MATH 1B - Calculus (5.00)
	And
	MATH 1CH - Calculus - HONORS (5.00)
	Or
	MATH 1BH - Calculus - HONORS (5.00)
	And
	MATH 1C - Calculus (5.00)
	Or
	MATH 1BH - Calculus - HONORS (5.00)
	And
	MATH 1CH - Calculus - HONORS (5.00)
MATH 32A - Calculus of Several Variables (4.00)	MATH 1C - Calculus (5.00)
And	And
MATH 32B - Calculus of Several Variables (4.00)	MATH 1D - Calculus (5.00)
	and the same (the same )

MATH 33A - Linear Algebra and Applications (4.00) MATH 2B - Linear Algebra (5.00) --- And ---MATH 33B - Differential Equations (4.00) --- And ---MATH 2A - Differential Equations (5.00) LIFESCI 7A - Cell and Molecular Biology (5.00) **BIOL 6B** - Cell and Molecular Biology (6.00) **PHYSICS 1A** - Physics for Scientists and Engineers: Mechanics **PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00) (5.00)--- And ------ And ---PHYS 4B - Physics for Scientists and Engineers: Electricity and PHYSICS 1B - Physics for Scientists and Engineers: Oscillations, Magnetism (6.00) Waves, Electric and Magnetic Fields (5.00) --- And ------ And ---**PHYSICS 1C** - Physics for Scientists and Engineers: PHYS 4C - Physics for Scientists and Engineers: Fluids, Waves, Electrodynamics, Optics, and Special Relativity (5.00) Optics and Thermodynamics (6.00) --- And ---**PHYSICS 4AL** - Physics Laboratory for Scientists and Engineers: Mechanics (2.00) --- And ---PHYSICS 4BL - Physics Laboratory for Scientists and Engineers: Electricity and Magnetism (2.00) Articulates as a sequence only PHYSICS 17 - Modern Physics (4.00) PHYS 4D - Physics for Scientists and Engineers: Modern Physics (6.00)PHYS 4D - Physics for Scientists and Engineers: Modern Physics (6.00)

### **END OF AGREEMENT**