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

Atmospheric, And Oceanic Sciences/Mathematics/B.S.

IMPORTANT MAJOR INFORMATION

Listed below are the lower division preparation courses for the major. **Effective fall 2024 admission and thereafter, you must complete the following preparation by the end of spring before transfer: one and half years of calculus through multivariable, and one year of calculus based physics with lab. Completion of linear algebra, differential equations and one course in computer programming (preferably in Python) is recommended. For more information regarding this major and UCLA's transfer selection process, visit** www.atmos.ucla.edu. and https://admission.ucla.edu.

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

A&O SCI M71 - M71. Introduction to Computing for Geoscientists (4.00)	←	No Course Articulated
--- Or ---		
COMPTNG 10A - Introduction to Programming(C++) (5.00)	←	**CIS 27** - Programming in C++ for C/Java Programmers (4.50) **--- Or ---** **CIS 22A** - Beginning Programming Methodologies in C++ (4.50) **--- And ---** **CIS 22B** - Intermediate Programming Methodologies in C++ (4.50)
--- And ---		
A&O SCI 90 - Introduction to Undergraduate Research in Atmospheric and Oceanic Sciences (4.00)	←	No Course Articulated

MATH 31A - Differential and Integral Calculus (4.00) **--- And ---** **MATH 31B** - Integration and Infinite Series (4.00)	←	**MATH 1A** - Calculus (5.00) **--- And ---** **MATH 1B** - Calculus (5.00)
MATH 32A - Calculus of Several Variables (4.00) **--- And ---** **MATH 32B** - Calculus of Several Variables (4.00)	←	**MATH 1C** - Calculus (5.00) **--- And ---** **MATH 1D** - Calculus (5.00)

CHEM 20A - Chemical Structure (4.00) **--- And ---** **CHEM 20B** - Chemical Energetics and Change (4.00)	←	**CHEM 1A** - General Chemistry (5.00) **--- And ---** **CHEM 1B** - General Chemistry (5.00) **--- And ---** **CHEM 1C** - General Chemistry and Qualitative Analysis (5.00)
PHYSICS 1A - Physics for Scientists and Engineers: Mechanics (5.00) **--- And ---** **PHYSICS 1B** - Physics for Scientists and Engineers: Oscillations, Waves, Electric and Magnetic Fields (5.00) **--- And ---** **PHYSICS 1C** - Physics for Scientists and Engineers: Electrodynamics, Optics, and Special Relativity (5.00)	←	**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)

Select 1 Course(s) from the following		
A&O SCI 1 - Climate Change: From Puzzles to Policy (4.00)	←	No Course Articulated
A&O SCI 2 - Air Pollution (4.00)	←	No Course Articulated
A&O SCI 3 - Meteorology and Extreme Weather (4.00)	←	No Course Articulated
A&O SCI 5 - Climates of Other Worlds (4.00)	←	No Course Articulated
A&O SCI M7 - Perils of Space: Introduction to Space Weather (4.00)	←	No Course Articulated

STRONGLY RECOMMENDED

MATH 33A - Linear Algebra and Applications (4.00) **--- And ---** **MATH 33B** - Differential Equations (4.00)	←	**MATH 2B** - Linear Algebra (5.00) **--- And ---** **MATH 2A** - Differential Equations (5.00)
--- And ---		
One computer programming course (preferably Python)	←	No Course Articulated

END OF AGREEMENT