

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

Mathematics/Applied Science/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 four semesters/five quarters of calculus through multivariable and either linear algebra or differential equations by the end of spring before transfer.** All courses must be taken for a letter grade. For more information regarding this major and UCLA's transfer selection process, visit www.math.ucla.edu and <https://admission.ucla.edu>.

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

ADDITIONAL MAJOR INFORMATION

Additional recommended courses prior to transfer include: completion of the full calculus series (encompassing single variable, multivariable, linear algebra and differential equations) and one introductory course in C++.

In addition to the Mathematics and Computing courses listed below, courses should be completed from the History and Life Science Plans outlined below.

LOWER DIVISION MAJOR REQUIREMENTS

MATH 31A - Differential and Integral Calculus (4.00)



MATH 1A - Calculus (5.00)

--- Or ---

MATH 31AL - Differential and Integral Calculus Laboratory (5.00)



No Course Articulated

MATH 31B - Integration and Infinite Series (4.00)



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)

--- And ---

MATH 32B - Calculus of Several Variables (4.00)



MATH 1C - Calculus (5.00)

--- And ---

MATH 1D - Calculus (5.00)

MATH 33A - Linear Algebra and Applications (4.00)



MATH 2B - Linear Algebra (5.00)

MATH 33B - Differential Equations (4.00)



MATH 2A - Differential Equations (5.00)

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)

HISTORY

Select 3 Course(s) from the following

HIST 2B - Social Knowledge and Social Power (5.00)



No Course Articulated

--- Or ---

HIST 3A - History of Science: Renaissance to 1800 (5.00)



No Course Articulated

--- Or ---

HIST 3B - History of Science: Enlightenment to 1900 (5.00)



No Course Articulated

--- Or ---

HIST 3C - History of Science: 20th Century (5.00)



No Course Articulated

--- Or ---

HIST 3D - History of Modern Medicine (5.00)



No Course Articulated

--- And ---

LIFE SCIENCE

CHEM 20A - Chemical Structure (4.00)

--- And ---

CHEM 20B - Chemical Energetics and Change (4.00)

--- And ---

CHEM 20L - General Chemistry Laboratory (3.00)

--- And ---

CHEM 30AL - General Chemistry Laboratory II (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)

CHEM 30A - Organic Chemistry I: Structure and Reactivity (4.00)



CHEM 12A - Organic Chemistry (5.00)

PHYSICS 1A - Physics for Scientists and Engineers: Mechanics (5.00)



PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)

PHYSICS 1B - Physics for Scientists and Engineers: Oscillations, Waves, Electric and Magnetic Fields (5.00)



PHYS 4B - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

LIFESCI 7A - Cell and Molecular Biology (5.00)



BIOL 6B - Cell and Molecular Biology (6.00)

LIFESCI 7B - Genetics, Evolution, and Ecology (5.00)



BIOL 6C - Ecology and Evolution (6.00)

--- Or ---

BIOL 6CH - Ecology and Evolution - HONORS (6.00)

LIFESCI 7C - Physiology and Human Biology (5.00)



BIOL 6A - Form and Function in the Biological World (6.00)

LIFESCI 23L - Introduction to Laboratory and Scientific Methodology (3.00)



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 ---

BIOL 6A - Form and Function in the Biological World (6.00)

--- And ---

BIOL 6B - Cell and Molecular Biology (6.00)

--- And ---

BIOL 6CH - Ecology and Evolution - HONORS (6.00)

END OF AGREEMENT