Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

Molecular Environmental Biology, Lower Division B.S.

PROGRAM

College Admission Requirements for Transfer Students
This major is offered by the Rausser College of Natural Resources.

PREPARATION FOR TRANSFER AT THE JUNIOR LEVEL

Transfer applicants **must** complete the minimum admissions requirements by the end of the **spring** term preceding fall enrollment at Berkeley, and are encouraged to complete as many additional lower division requirements as possible. IGETC satisfies English R1A, R1B, both ESPM core courses, and both breadth courses. Exceptions are highly unlikely. NOTE: The ESPM Environmental Science Core and the ESPM Social Science Core requirements may be taken at Berkeley if no course is articulated at student's home institution.

To ensure full articulation of transfer coursework: if a series of courses at a community college is required (e.g., Chemistry 101 + 102 + 103 = Chemistry 1A, 1AL + 1B at UC Berkeley), all the courses in the series must be completed, and must (unless otherwise indicated) be completed at the same community college. Partial completion of the series (e.g., 2 of the 3 required courses) may result in no credit toward the requirement(s), and completion of series courses at different community colleges is not guaranteed to satisfy the requirement. Courses taken out of series will be evaluated by college faculty during the transfer admissions process.

Minimum Admissions Requirements:
Equivalent of:
- English R1A & English R1B
- Chemistry 1A & 1AL
- Chemistry 3A & 3AL
- Chemistry 3B & 3BL
- Biology 1A and 1AL
- Biology 1B
- Math 1A or Math 16A
- Math 1B or Math 16B or Stat 2, or Stat C8, or Stat 20

BIOLOGY
Courses must include a laboratory component. Minimum admissions requirement.

CHEMISTRY
Courses must include a laboratory component. Minimum admissions requirement.

PHYSICS
4-8 UNITS PHYSICS
(PHYSICS 7A or 8A [plus PHYSICS 7B or 8B, if pre-health])

NOTE: This institution may cover the topics in Berkeley's PHYSICS 7ABC series in a different order. Students who transfer before completing courses equivalent to the entire 7ABC series may need to enroll in Berkeley's PHYSICS 49 to complete missing topics such as wave motion (7A) or heat (7B).

READING & COMPOSITION
Course work comparable to Berkeley's READING & COMPOSITION (R&C) R1A and R1B is required. Minimum admissions requirement.

MATHEMATICS
Two courses in mathematics (6-8 Units).
(One course in calculus [chosen from MATH 1A or MATH 16A] and one additional course in either calculus or statistics [chosen from Math 1B or Math 16B or Stat 2, or Stat C8, or Stat 20])
Minimum admissions requirement.

ESPM CORE
One course in ESPM Environmental Science Core
One course in ESPM Social Science Core

BREADTH
One UC-transferable course in either Social and Behavioral Sciences or International Studies. See General Education/Breadth Articulation Agreement

One UC-transferable course in Art and Literature, or Historical Studies, or Philosophy and Values. See General Education/Breadth Articulation Agreement

For more information:
MEB Student Academic Advisor
Office of Instruction and Student Affairs
Rausser College of Natural Resources
260 Mulford Hall
(510) 642-0542
email: meb.ugrad@berkeley.edu

For more information on this major:
http://nature.berkeley.edu/advising/majors/molecular-environmental-biology

For more information on admission to UC Berkeley:
http://admissions.berkeley.edu

For more information on majors at UC Berkeley:
Berkeley Academic Guide: http://guide.berkeley.edu

TEST CREDIT

Some Advanced Placement, International Baccalaureate, and A-Level exams can fulfill requirements in the Rausser College of Natural Resources. For details, please see AP, IB, and A-level Exam Equivalency Chart.

READING AND COMPOSITION REQUIREMENT

ENGLISH R1A - Reading and Composition (4.00)	←	**EWRT 1A** - Composition and Reading (5.00) **--- Or ---** **EWRT 1AH** - Composition and Reading - HONORS (5.00) **--- Or ---** **ESL 5** - Advanced Composition and Reading (5.00)
ENGLISH R1B - Reading and Composition (4.00)	←	**EWRT 1B** - Reading, Writing and Research (5.00) **--- Or ---** **EWRT 2** - Critical Reading, Writing and Thinking (5.00) **--- Or ---** **EWRT 1BH** - Reading, Writing and Research - HONORS (5.00) **--- Or ---** **EWRT 2H** - Critical Reading, Writing and Thinking - HONORS (5.00)

MATHEMATICS

MATH 1A - Calculus (4.00)	←	**MATH 1A** - Calculus (5.00) **--- And ---** **MATH 1B** - Calculus (5.00) • *Regular and honors courses may be combined to complete this series* **--- Or ---** **MATH 1AH** - Calculus - HONORS (5.00) **--- And ---** **MATH 1BH** - Calculus - HONORS (5.00) • *Regular and honors courses may be combined to complete this series*
--- Or ---		
MATH 16A - Analytic Geometry and Calculus (3.00)	←	**MATH 1A** - Calculus (5.00) **--- Or ---** **MATH 1AH** - Calculus - HONORS (5.00)

--- And ---

MATH 1B - Calculus (4.00)	←	**MATH 1B** - Calculus (5.00) **--- And ---** **MATH 1C** - Calculus (5.00) • *Regular and honors courses may be combined to complete this series* **--- Or ---** **MATH 1BH** - Calculus - HONORS (5.00) **--- And ---** **MATH 1CH** - Calculus - HONORS (5.00) • *Regular and honors courses may be combined to complete this series*
--- Or ---		
MATH 16B - Analytic Geometry and Calculus (3.00)	←	**MATH 1B** - Calculus (5.00) **--- Or ---** **MATH 1BH** - Calculus - HONORS (5.00)
--- Or ---		
STAT 2 - Introduction to Statistics (4.00)	←	**MATH 10** - Introductory Statistics (5.00) **--- Or ---** **MATH 10H** - Introductory Statistics - HONORS (5.00) **--- Or ---** **MATH 17** - Integrated Statistics 2 (5.00)
--- Or ---		
STAT C8 - Foundations of Data Science (4.00) Same-As: INFO C8, COMPSCI C8, DATA C8	←	No Course Articulated
--- Or ---		
STAT 20 - Introduction to Probability and Statistics (4.00)	←	No Course Articulated

CHEMISTRY

CHEM 1A - General Chemistry (3.00) **--- And ---** **CHEM 1AL** - General Chemistry Laboratory (2.00)	←	Articulates as a Series Only
CHEM 1A - General Chemistry (3.00) **--- And ---** **CHEM 1AL** - General Chemistry Laboratory (2.00) **--- And ---** **CHEM 1B** - General Chemistry (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) • *Regular and honors courses may be combined to complete this series* **--- 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) • *Regular and honors courses may be combined to complete this series*
CHEM 3A - Chemical Structure and Reactivity (3.00) **--- And ---** **CHEM 3AL** - Organic Chemistry Laboratory (2.00)	←	**CHEM 12A** - Organic Chemistry (5.00) **--- And ---** **CHEM 12B** - Organic Chemistry (5.00)

CHEM 3B - Chemical Structure and Reactivity (3.00) **--- And ---** **CHEM 3BL** - Organic Chemistry Laboratory (2.00)	←	**CHEM 12B** - Organic Chemistry (5.00) **--- And ---** **CHEM 12C** - Organic Chemistry (5.00)
CHEM 3A - Chemical Structure and Reactivity (3.00) **--- And ---** **CHEM 3AL** - Organic Chemistry Laboratory (2.00) **--- And ---** **CHEM 3B** - Chemical Structure and Reactivity (3.00) **--- And ---** **CHEM 3BL** - Organic Chemistry Laboratory (2.00)	←	Articulates as Course-to-Course Only

BIOLOGY

BIOLOGY 1A - General Biology Lecture (Cells, Genetics, Animal Form & Function) (3.00) **--- And ---** **BIOLOGY 1AL** - General Biology Laboratory (2.00)	←	**BIOL 6A** - Form and Function in the Biological World (6.00) **--- And ---** **BIOL 6B** - Cell and Molecular Biology (6.00) **--- Or ---** **BIOL 6AH** - Form and Function in the Biological World - HONORS (6.00) **--- And ---** **BIOL 6B** - Cell and Molecular Biology (6.00)
BIOLOGY 1B - General Biology (Plant Form & Function, Ecology, Evolution) (4.00)	←	**BIOL 6A** - Form and Function in the Biological World (6.00) **--- And ---** **BIOL 6C** - Ecology and Evolution (6.00) **--- Or ---** **BIOL 6AH** - Form and Function in the Biological World - HONORS (6.00) **--- And ---** **BIOL 6C** - Ecology and Evolution (6.00) **--- Or ---** **BIOL 6A** - Form and Function in the Biological World (6.00) **--- And ---** **BIOL 6CH** - Ecology and Evolution - HONORS (6.00) **--- Or ---** **BIOL 6AH** - Form and Function in the Biological World - HONORS (6.00) **--- And ---** **BIOL 6CH** - Ecology and Evolution - HONORS (6.00)
BIOLOGY 1A - General Biology Lecture (Cells, Genetics, Animal Form & Function) (3.00) **--- And ---** **BIOLOGY 1AL** - General Biology Laboratory (2.00) **--- And ---** **BIOLOGY 1B** - General Biology (Plant Form & Function, Ecology, Evolution) (4.00)	←	Articulates as Course-to-Course Only

PHYSICS

PHYSICS 7A - Physics for Scientists and Engineers (4.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00)

PHYSICS 7B - Physics for Scientists and Engineers (4.00)	←	**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)
PHYSICS 7A - Physics for Scientists and Engineers (4.00) **--- And ---** **PHYSICS 7B** - Physics for Scientists and Engineers (4.00)	←	Articulates as Course-to-Course Only

PHYSICS 7A - Physics for Scientists and Engineers (4.00) **--- And ---** **PHYSICS 7B** - Physics for Scientists and Engineers (4.00) **--- And ---** **PHYSICS 7C** - Physics for Scientists and Engineers (4.00)	←	Articulates as Course-to-Course Only
--- Or ---		
PHYSICS 8A - Introductory Physics (4.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00) **--- And ---** **PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00) **--- Or ---** **PHYS 2A** - General Introductory Physics (5.00) **--- And ---** **PHYS 2C** - General Introductory Physics (5.00)

PHYSICS 8B - Introductory Physics (4.00)	←	**PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00) **--- And ---** **PHYS 4D** - Physics for Scientists and Engineers: Modern Physics (6.00) **--- Or ---** **PHYS 2B** - General Introductory Physics (5.00) **--- And ---** **PHYS 2C** - General Introductory Physics (5.00)
PHYSICS 8A - Introductory Physics (4.00) **--- And ---** **PHYSICS 8B** - Introductory Physics (4.00)	←	Articulates as Course-to-Course Only

ESPM ENVIRONMENTAL SCIENCE CORE COURSE

Select 1 Course(s) from the following

ESPM 2 - The Biosphere (3.00)	←	No Course Articulated
ESPM 6 - Environmental Biology (3.00)	←	No Course Articulated
ESPM C10 - Environmental Issues (4.00) Same-As: LNS C30V	←	**ESCI 19** - Environmental Biology (5.00)
ESPM 15 - Introduction to Environmental Sciences (3.00)	←	**ESCI 1** - Environmental Science (4.00)
ESPM C46 - Climate Change and the Future of California (4.00)	←	No Course Articulated

ESPM SOCIAL SCIENCE CORE COURSE

Select 1 Course(s) from the following

ESPM C11 - Americans and the Global Forest (4.00) Same-As: LNS C30U	←	No Course Articulated
ESPM 50AC - Introduction to Culture and Natural Resource Management (4.00)	←	No Course Articulated
ESPM 60 - Environmental Policy, Administration, and Law (4.00)	←	**E S 6** - Introduction to Environmental Law (4.00)

END OF AGREEMENT