

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

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

## Microbiology, B.S.

### GENERAL REQUIREMENTS

Applicants to majors in the College of Natural and Agricultural Sciences are selected on the basis of their academic preparation, as assessed by their GPA and the strength of preparation for their intended major. A GPA of at least 2.70 is required (This is a baseline GPA for consideration and not a guarantee of admission). Courses must be completed with a letter grade, with no grade lower than a "C". To be best prepared for upper division course work at UCR, students are advised to complete as many as possible of the lower division major requirements listed below prior to transfer, and to prioritize this course work above completion of breadth/general education courses.

**Effective Fall 2024** transfer students must complete all Chemistry lab courses in-person to receive articulation to UCR's equivalent Chemistry lab courses. Completing Chemistry lab courses online will not impact your ability to transfer. Transfer students who complete Chemistry lab courses online will be required to retake the lab courses at UCR.

In addition, complete community college courses comparable to **at least three** of the following UCR year-long sequences in order to meet selection criteria for this major. Courses must be completed with "C" grades or better. First year calculus and general chemistry are required, the *third* sequence can be chosen from options listed under Potential Course Sequences.

#### Potential Course Sequences

**Chemistry** CHEM 1A/LA, CHEM 1B/LB, CHEM 1C/LC (mandatory)

**Math** 9A, MATH 9B **or** Math 7A, MATH 7B (mandatory)

**Biology** BIOL 5A/5LA, BIOL 5B (and BIOL 5C, if articulated)

**Physics** PHYS 2A/LA, PHYS 2B/LB, PHYS 2C/2LC **or** PHYS 40A, PHYS 40B, PHYS 40C

**Organic Chemistry** CHEM 8A/LA, CHEM 8B/LB, CHEM 8C/LC (minimum grade of "B" required)

#### AP Exam - Satisfy Course Requirement Section

**Mathematics: AB Exam or AB Subscore from BC Exam**

Minimum score of 3 satisfies MATH 9A **or** MATH 7A

**Mathematics: BC Exam**

Minimum score of 3 satisfies MATH 9A and MATH 9B **or** MATH 7A and MATH 7B

Minimum score of 4 satisfies MATH 9A, MATH 9B, MATH 9C **or** MATH 7A, MATH 7B, MATH 9C

**Physics: C Exam - Mechanics**

Minimum score of 4 satisfies PHYS 2A and 2LA

For additional information about this major. Please visit: [Microbiology](#).

For information about the UC Transfer Admission Guarantee (TAG) program. Please visit: [Transfer Admission Guarantee](#).

#### IGETC and General Education/Breadth Information

IGETC is not accepted for majors housed in the College of Natural and Agricultural Sciences. Courses taken for IGETC will be applied to the College's breadth pattern as appropriate. Transfer students who wish to supplement their math and science preparation with humanities or social science courses are encouraged to follow the College of Natural and Agricultural Sciences breadth pattern. You may view the breadth requirements for College of Natural and Agricultural Sciences by visiting the [2022-23 Catalog](#), pages 87-89.

### LOWER DIVISION MAJOR REQUIREMENTS

Required for admission  
Minimum grade required: C or better

**CHEM 1A** - General Chemistry (4.00)

--- And ---

**CHEM 1B** - General Chemistry (4.00)

--- And ---

**CHEM 1C** - General Chemistry (4.00)

--- And ---

**CHEM 1LA** - General Chemistry Lab (1.00)

--- And ---

**CHEM 1LB** - General Chemistry Lab (1.00)

--- And ---

**CHEM 1LC** - General Chemistry Lab (1.00)

**CHEM 1A** - General Chemistry (5.00)

--- And ---

**CHEM 1B** - General Chemistry (5.00)

--- And ---

**CHEM 1C** - General Chemistry and Qualitative Analysis (5.00)

Select 1 Sequence(s) from the following

Required for admission  
Minimum grade required: C or better

**MATH 9A** - First-Year Calculus (4.00)

--- And ---

**MATH 9B** - First-Year Calculus (4.00)

- *An AP exam may be used to satisfy this course requirement*



**MATH 1A** - Calculus (5.00)

--- And ---

**MATH 1B** - Calculus (5.00)

**MATH 7A** - Calculus for Life Sciences (4.00)



No Course Articulated

--- And ---

**MATH 7B** - Calculus for Life Sciences (4.00)



No Course Articulated

- *An AP exam may be used to satisfy this course requirement*

Select 1 Sequence(s) from the following

Required for admission

Minimum grade required: C or better

**BIOL 5A** - Intro to Cell and Molecular Biology (4.00)

--- And ---

**BIOL 5B** - Intro to Organismal Biology (4.00)

--- And ---

**BIOL 5C** - Introductory Evolution and Ecology (4.00)

--- And ---

**BIOL 5LA** - Intro to Cell and Molecular Biology Lab (1.00)



**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)

**PHYS 40A** - General Physics (5.00)

--- And ---

**PHYS 40B** - General Physics (5.00)

--- And ---

**PHYS 40C** - General Physics (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)

**PHYS 2A** - General Physics (4.00)

--- And ---

**PHYS 2B** - General Physics (4.00)

--- And ---

**PHYS 2C** - General Physics (4.00)

--- And ---

**PHYS 2LA** - General Physics Laboratory (1.00)

--- And ---

**PHYS 2LB** - General Physics Laboratory (1.00)

--- And ---

**PHYS 2LC** - General Physics Laboratory (1.00)

- *An AP exam may be used to satisfy this course requirement*



**PHYS 2A** - General Introductory Physics (5.00)

--- And ---

**PHYS 2B** - General Introductory Physics (5.00)

--- And ---

**PHYS 2C** - General Introductory Physics (5.00)

Minimum grade required: B or better

**CHEM 8A** - ORGANIC CHEMISTRY (3.00)

--- And ---

**CHEM 8B** - ORGANIC CHEMISTRY (3.00)

--- And ---

**CHEM 8C** - ORGANIC CHEMISTRY (3.00)

--- And ---

**CHEM 8LA** - ORGANIC CHEMISTRY LABORATORY (1.00)

--- And ---

**CHEM 8LB** - ORGANIC CHEMISTRY LABORATORY (1.00)

--- And ---

**CHEM 8LC** - ORGANIC CHEMISTRY LABORATORY (1.00)



**CHEM 12A** - Organic Chemistry (5.00)

--- And ---

**CHEM 12B** - Organic Chemistry (5.00)

--- And ---

**CHEM 12C** - Organic Chemistry (5.00)

**END OF AGREEMENT**