



# Cerritos College

## MICROBIOLOGY

### Transfer Preparation

#### COMMON LOWER DIVISION MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

			UNITS
BIOL	200	Principles of Biology	5
BIOL	201	Principles of Biology	5
CHEM	111	General Chemistry	5
CHEM	112	General Chemistry	5

#### LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

##### California State University – Dominguez Hills (Option within the Biology B.S. major)

MATH	112	Elementary Statistics	4
MATH	170	Analytic Geometry and Calculus I	4
<b>or</b> MATH	116	Calculus for Managerial, Biological and Social Sciences	(4)
PHYS	101	General Physics	4
<b>and</b> PHYS	102	General Physics	4
<b>or</b> PHYS	201	Engineering Physics	(4)
<b>and</b> PHYS	202	Engineering Physics	4
<b>and</b> PHYS	203	Engineering Physics	4

##### California State University – Long Beach

CHEM	211	Organic Chemistry	5
& CHEM	212	Organic Chemistry	5
MATH	116	Calculus for Managerial, Biological and Social Sciences	4
<b>or</b> MATH	170	Analytic Geometry and Calculus I	(4)
MICR	200	Principles and Applications of Microbiology	5
PHYS	101	General Physics	4
<b>and</b> PHYS	102	General Physics	4
<b>or</b> PHYS	201	Engineering Physics	(4)
<b>and</b> PHYS	202	Engineering Physics	4

**NOTE:** *Impacted major: As a result, major will have major specific admission requirements in the form of major preparation coursework and GPA requirements. Meet with a counselor for more information. The CSU GE requirements in Written Communication, Oral Communication, Critical Thinking and Mathematics/Quantitative Reasoning must be completed with a grade of "C" or better by the end of the prior Spring term for Fall admission or by the end of the prior Summer term for Spring admission.*

##### California State University – Los Angeles

PHYS	101	General Physics	4
PHYS	102	General Physics	4
MATH	170	Analytical Geometry and Calculus I	4

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### California State Polytechnic University – Pomona

#### (Option within Biology major)

ENGL	100	Freshman Composition	4
ENGL	102	Freshman Composition and Literature	3
<b>or</b> ENGL	103	Critical and Argumentative Writing	(3)
<b>or</b> PHIL	106	Introduction to Logic	(3)
MATH	116	Calculus for Managerial, Biological, and Social Sciences	4
MICR	200	Principles and Applications of Microbiology	5
PHYS	101	General Physics	4
PHYS	102	General Physics	4
HED	100	Contemporary Health Problems	3
<b>or</b> PSYC	101	General Introductory Psychology	(3)
<b>or</b> PSYC	150	Personal and Social Adjustment	(3)
<b>or</b> PSYC	241	Introduction to Psychobiology	(3)

**NOTE:** Impacted major: Admission of upper division transfer students will be based on overall GPA in transferable courses. Applicants will only be accepted for Fall quarter. Eligible California veterans receive admission priority.

### University of California-Irvine

#### (Microbiology and Immunology B.S.)

BIOL	202	Molecular Biology/Genetics	4
CHEM	211	Organic Chemistry	5
CHEM	212	Organic Chemistry	5
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4
<b>or</b> MATH	250	Linear Algebra and Differential Equations	5
<b>or</b> MATH	112	Elementary Statistics	(4)
<b>or</b> PSYC	210	Elementary Statistics	(4)
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4

**NOTE:** The major in Microbiology and Immunology is open only to Upper-Division Biological Sciences majors who meet specified course and grade requirements as listed at [www.changeofmajor.uci.edu](http://www.changeofmajor.uci.edu). Transfer students interested in this major should apply as Biological Sciences majors. All applicants must have a cumulative GPA of 3.0 or higher. Articulation of general chemistry is based on the completion of the **entire** year.

**\*\*Students who are interested in attending Medical Professional School are recommended to take one semester of Calculus and one semester of Statistics.**

### University of California – Los Angeles

#### (Microbiology, Immunology and Molecular Genetics)

BIOL	202	Molecular Biology/Genetics	4
ZOOL	120	Introduction to Animal Biology	4
CHEM	211	Organic Chemistry	5
CHEM	212	Organic Chemistry	5
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4
MATH	220	Analytic Geometry and Calculus III	4
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4
PHYS	203	Engineering Physics	4

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**NOTE:** *At minimum complete one year of biology with laboratory, one year of general chemistry with laboratory, one year of calculus and one semester of organic chemistry with laboratory. Completion of a second semester of organic chemistry or one year of calculus-based physics is strongly recommended. For more information visit [www.mimg.ucla.edu](http://www.mimg.ucla.edu) and [www.admissions.ucla.edu](http://www.admissions.ucla.edu). All courses must be taken for a letter grade. This major is highly selective, a significant number of preparatory courses should be completed prior to transfer.*

### **CAREER OPPORTUNITIES:**

Bachelor's degree programs with an emphasis in Microbiology are designed to qualify the student for graduate study in the field. Careers include employment in various types of Federal employment; State Civil Service work such as Public Health Microbiologist; industrial microbiological work in divergent fields such as the pharmaceutical industry, brewing, industrial fermentation's, and the dairy industry; work as a hospital microbiologist or research technician positions in university research projects.

See Intersegmental General Education Transfer Curriculum list.

**IMPORTANT NOTICE:** The requirements listed for major are subject to change without notice. It is the student's responsibility to check for the most recent information with a Cerritos College counselor or by consulting ASSIST at [www.assist.org](http://www.assist.org).

**NOTE:** Courses listed may require prerequisite coursework.

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# ASSIST

How to use **ASSIST** to find your major preparation for CSU/UC:

1. **Log on:** [www.assist.org](http://www.assist.org)
2. **Select an Institution:** select "Cerritos College" or other community college from pull-down menu
3. **Select:** "Type of Transfer Institution" such as "UC Los Angeles"
4. **Select a major from pull-down menu**  
Report will show the university courses on the left and comparable community college classes on the right.
5. **PRINT:**-print by clicking on gold "**PRINT THIS REPORT**" button on top. Then use the **ASSIST** screen menu on the top toolbar or click on the printer icon that will appear at the bottom of the page.

How to use **ASSIST** to explore the majors available at University of California and California State University campuses

- Click on "EXPLORE MAJORS"

How to use **ASSIST** to figure out whether courses from the community college are transferable to the CSU/UC.

- Select the community college of interest (Cerritos College)
- Select either CSU transferable courses or UC Transferable courses
- Select a department for the courses in question

\*USC Articulation available at:

[www.usc.edu/articulation](http://www.usc.edu/articulation) and **Select:** "TRANSFER PLANNING GUIDE."

## **IMPORTANT:**

*Students are advised to contact a Cerritos College counselor for more information & for details regarding other transfer agreements & options not available on ASSIST. Students can stop by the counseling desk to make an appointment or call (562) 860-2451 ext. 2231.*