

**B.A. in BIOLOGICAL SCIENCES (AY 2024-2025)
CONCENTRATION IN BIOLOGY EDUCATION (74-75 units)**

CORE COURSE REQUIREMENTS (39 units)

LOWER DIVISION BIOLOGY	UNITS	OFFERED	PREREQUISITES
BIOL 140A <i>Principles of Cell & Molecular Biology</i>	5	Fall & Spring	N/A
BIOL 140B <i>Principles of Organismal Biology</i>	5	Fall & Spring	BIOL 140A*
subtotal	10		
LOWER DIVISION PHYSICAL SCIENCE & MATH	UNITS	OFFERED	PREREQUISITES
CHEM 111 & 111L <i>General Chemistry I (Lec & Lab)</i>	5	Fall & Spring	MATH 120(25) or 130 (co-)
CHEM 112 & 112L <i>General Chemistry II (Lec & Lab)</i>	5	Fall & Spring	CHEM 111* & 111L*
GEOL 100 <i>Earth System Sciences</i>	4	Fall & Spring	N/A
MATH 120 <i>Precalculus</i> (MATH 125 acceptable alt)	3	Fall & Spring	MATH 115 (C- or better)
PHYS 115 <i>Elementary Physics</i>	3	Fall & Spring	N/A
subtotal	20		
UPPER DIVISION BIOLOGY	UNITS	OFFERED	PREREQUISITES
BIOL 310 <i>Genetic Analysis I</i>	4	Fall & Spring	BIOL 140B*
BIOL 320 <i>Evolutionary Biology</i>	3	Fall & Spring	BIOL 310*
subtotal	7		

CONCENTRATION COURSE REQUIREMENTS (39 units)

UPPER DIVISION BIOLOGY	UNITS	OFFERED	PREREQUISITES
BIOL 330 <i>Microbiology</i>	5	Fall	BIOL 140B*, CHEM 112 (co-)
BIOL 350 <i>Ecology</i>	4	Fall & Spring	BIOL 140B*
BIOL 370 <i>Animal Physiology</i>	4	Fall & Spring	BIOL 140B*, CHEM 112*
subtotal	13		
TEACHER ED, UD PHYSICAL SCI, & STATISTICS	UNITS	OFFERED	PREREQUISITES
CHEM 230 <i>Survey of Organic Chemistry</i>	5	Fall	CHEM 112*
STAT 303 <i>Statistical Methods in Biology</i>	3	Fall & Spring	GE Area B4
PHIL 371 <i>Philosophy of Education</i>	3	Fall & Spring	GE Areas A1, A2, A3, B4
SCI 308 <i>Hands-On Science Teaching</i>	1	Fall & Spring	Departmental Consent
TED 301 <i>Introduction to Education</i>	3	Fall & Spring	N/A
subtotal	15		
CAPSTONE (Select 3-4 units from the list below)	UNITS	OFFERED	PREREQUISITES
TED 302 <i>Introduction to Teaching</i>	3	Spring	N/A
BIOL 426 <i>Advanced Molecular and Cell Biology**</i>	3	Spring	BIOL 310*
BIOL 430 <i>Microbial Physiology & Metabolism</i>	3	Spring	BIOL 330*
BIOL 469 <i>Conservation Biology**</i>	4	Spring	BIOL 350*
BIOL 488 <i>Environmental Physiology**</i>	3	Fall	BIOL 370*
CHEM 340 <i>Survey of Biochemistry</i>	3	Fall & Spring	CHEM 230* or 332*
subtotal	3-4		
ELECTIVES (Select 6 units from the list below)	UNITS	OFFERED	PREREQUISITES
subtotal	6		

Choose an additional 6 units of upper division BIOL (300 & 400-level courses) as electives.

Note: BIOL 490 *Independent Study*, BIOL 493 *Directed Research in Biology*, BIOL 498 *Internship* or a combination of one or two of these courses may be used for a maximum of 2 total units of elective credit.

* Must pass this prerequisite course with a C- or better to move onto the next course.

**Capstone course for the Microbiology and Biomedical Sciences concentration

†Recommended for students interested in applying for CLS programs

- **Freshman/Sophomore Biology Ed Concentration & GE Advisor:** Ms. Joanna Cady-Aguilar (joanna.cadyaguilar@csueastbay.edu)
- **Junior/Senior Biology Ed Concentration & GE Advisors:** Mr. Avel Perez or Dr. Kelley Gove (cscistudentcenter@csueastbay.edu)
- **Biology Education Concentration Career & Course Sub Advisor:** Dr. Erica Wildy (erica.wildy@csueastbay.edu)

DEGREE: B.A. in Biological Sciences (AY 2024-25)

CONCENTRATION: Biology Education

Graduation Semester: _____

Name (Last, First): _____

Net ID: _____

CORE REQUIREMENTS

Course	Grade	Semester & Year	Units	College/University Where Equivalent Course Was Taken	Equivalent Course Number	TES Verification
CHEM 111	3	.....	.....	.....
CHEM 111L	2	.....	.....	.....
CHEM 112	3	.....	.....	.....
CHEM 112L	2	.....	.....	.....
PHYS 115	4	.....	.....	.....
MATH 120	4	.....	.....	.....
BIOL 140A	5	.....	.....	.....
BIOL 140B	5	.....	.....	.....
BIOL 310	4	.....	.....	.....
BIOL 320	3	.....	.....	.....

CONCENTRATION REQUIREMENTS (# = chosen capstone course)

Course	Grade	Semester & Year	Units	College/University Where Equivalent Course Was Taken	Equivalent Course Number	TES Verification
BIOL 330	5	.....	.....	.....
BIOL 350	4
BIOL 370	4
BIOL 469	4
CHEM 230	5
PHIL 371	3
SCI 308	1
STAT 303	3
TED 301	4
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ELECTIVES (At least 6 units of upper division major biology courses)

Course	Grade	Semester & Year	Units	College/University Where Equivalent Course Was Taken	Equivalent Course Number	TES Verification
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Total Units for Concentration: (74-75 min.) _____

Note: A C- or better required in all courses that serve as a prerequisite.