

B.S. in BIOLOGICAL SCIENCES (AY 2025-2026)
CONCENTRATION IN PHYSIOLOGY (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*
MATH 130 <i>Calculus I</i>	4	Fall & Spring	MATH 120 or MATH 125
PHYS 125 <i>Principles of Physics I</i>	4	Fall & Spring	MATH 120 or MATH 125
PHYS 126 <i>Principles of Physics II</i>	4	Fall & Spring	PHYS 125
subtotal	22		
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 (22 units)

UPPER DIVISION BIOLOGY	UNITS	OFFERED	PREREQUISITES
BIOL 350 <i>Ecology</i>	4	Fall & Spring	BIOL 140B*
BIOL 370 <i>Animal Physiology</i>	4	Fall & Spring	BIOL 140B*, CHEM 112* & 112L*
BIOL 488 <i>Environmental Physiology**</i>	3	Fall	BIOL 370*
subtotal	11		
UPPER DIVISION PHYSICAL SCIENCE & STATS	UNITS	OFFERED	PREREQUISITES
CHEM 230 <i>Survey of Organic Chemistry</i>	5	Fall	CHEM 112* & 112L*
CHEM 340 <i>Survey of Biochemistry</i>	3	Fall & Spring	CHEM 230* or 332*
STAT 303 <i>Statistical Methods in Biology</i>	3	Fall & Spring	completion of GE Area B4 or 2
subtotal	11		
Note: Depending on their professional objective, students may opt to take CHEM 331 & 332 rather than CHEM 230 and CHEM 441 & 442 (Biochemistry I & II) . Please consult an advisor if you would like to make these substitutes.			

ELECTIVES (14 units)

ELECTIVES (Select 14 units from the list below)	UNITS	OFFERED	PREREQUISITES
BIOL 330 <i>Microbiology</i>	3	Fall	BIOL 140B*, CHEM 112* & 112L* (co-)
BIOL 425 <i>Techniques in Mammalian Cell Culture</i>	3	Spring	BIOL 310*, BIOL 330*
BIOL 430 <i>Microbial Physiology and Metabolism</i>	3	Intermittently	BIOL 140B*
BIOL 431 <i>Medical Microbiology</i>	5	Spring	BIOL 330*
BIOL 432 <i>Microbe-Host Interactions</i>	3	Fall	BIOL 320*
BIOL 440 <i>Molecular Virology</i>	3	Fall	BIOL 310*
BIOL 441 <i>Parasitology</i>	3	Fall	BIOL 310*
BIOL 443 <i>Hematology</i>	4	Intermittently	BIOL 140B*, CHEM 112* & 112L
BIOL 445 <i>Immunology</i>	3	Fall & Spring	BIOL 310*, CHEM 332*
BIOL 470 <i>Animal Senses</i>	4	Intermittently	BIOL 370*
BIOL 471 <i>Neurobiology</i>	3	Intermittently	BIOL 370*
BIOL 472 <i>Neurobiology Lab</i>	4	Intermittently	BIOL 471*
BIOL 473 <i>Comparative Physiology</i>	3	Intermittently	BIOL 370* or BIOL 270 + 271
BIOL 474 <i>Biomedical Physiology</i>	3	Intermittently	BIOL 370* or BIOL 270 + 271
BIOL 475 <i>Global Change Biology</i>	4	Spring	BIOL 370*
BIOL 476 <i>General Endocrinology</i>	3	Fall	BIOL 370*
subtotal	14		
Note: BIOL 490 <i>Independent Study</i> , BIOL 493 <i>Directed Research in Biology</i> , BIOL 498 <i>Internship</i> or a combination of 2 or more of these courses may be used for a maximum of 3 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 Physiology concentration.

- **Physiology Concentration & GE Advisor:** Mr. Avel Perez or Dr. Kelley Gove (cscstudentcenter@csueastbay.edu)
- **Physiology Concentration Career & Course Sub Advisors:** Dr. Tyler Evans (tyler.evans@csueastbay.edu) or Dr. James Murray (james.murray@csueastbay.edu)

CONCENTRATION: Physiology

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 125	_____	_____	4	_____	_____	_____
PHYS 126	_____	_____	4	_____	_____	_____
MATH 130	_____	_____	4	_____	_____	_____
BIOL 140A	_____	_____	5	_____	_____	_____
BIOL 140B	_____	_____	5	_____	_____	_____
BIOL 310	_____	_____	4	_____	_____	_____
BIOL 320	_____	_____	3	_____	_____	_____

CONCENTRATION REQUIREMENTS

Course	Grade	Semester & Year	Units	College/University Where Equivalent Course Was Taken	Equivalent Course Number	TES Verification
CHEM 230	_____	_____	5	_____	_____	_____
CHEM 340	_____	_____	3	_____	_____	_____
STAT 303	_____	_____	3	_____	_____	_____
BIOL 350	_____	_____	4	_____	_____	_____
BIOL 370	_____	_____	4	_____	_____	_____
BIOL 488	_____	_____	4	_____	_____	_____

ELECTIVES *(At least 14 units from the courses below)*

Course	Grade	Semester & Year	Units	College/University Where Equivalent Course Was Taken	Equivalent Course Number	TES Verification
BIOL 330	_____	_____	5	_____	_____	_____
BIOL 425	_____	_____	3	_____	_____	_____
BIOL 430	_____	_____	3	_____	_____	_____
BIOL 431	_____	_____	5	_____	_____	_____
BIOL 432	_____	_____	3	_____	_____	_____
BIOL 440	_____	_____	3	_____	_____	_____
BIOL 441	_____	_____	3	_____	_____	_____
BIOL 443	_____	_____	4	_____	_____	_____
BIOL 445	_____	_____	3	_____	_____	_____
BIOL 470	_____	_____	4	_____	_____	_____
BIOL 471	_____	_____	3	_____	_____	_____
BIOL 472	_____	_____	4	_____	_____	_____
BIOL 473	_____	_____	3	_____	_____	_____
BIOL 474	_____	_____	3	_____	_____	_____
BIOL 475	_____	_____	4	_____	_____	_____
BIOL 476	_____	_____	3	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Total Units for Concentration (75 min.): _____

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