BACHELOR OF SCIENCE IN BIOLOGY: CONCENTRATION IN MARINE BIOLOGY AND LIMNOLOGY – BIOL ASSOCIATE DEGREE FOR TRANSFER ROADMAP

This is a sample pathway for students who transfer to San Francisco State University in the current Bulletin year with an AS-T in Biology. Thirty-two units in the major (BIOL 230/BIOL 240, CHEM 115/CHEM 215/CHEM 216, MATH 226, required PHYS sequence) and 33 units of lower division GE requirements have been satisfied. Check with a major advisor about the most appropriate course sequence. Degree completion guaranteed in 60 units; see the Associate Degree for Transfer (ADT) section for more information (http://bulletin.sfsu.edu/undergraduate-admissions/transfer-students).

Course | Title | Units
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First Semester
BIOL 570GW | Biology of Fishes - GWAR | 4
CHEM 130 | General Organic Chemistry | 3
GE Area A: Written English Communication II (A4) | 3
GE Area C: Arts (C1) or Humanities (C2) or Humanities: Literature (C3) | 3
US History (bulletin.sfsu.edu/undergraduate-education/graduation-requirements/#USHaGR) | 3
or University Elective if US History met before transfer | 3
Units | 16

Second Semester
BIOL 355 | Genetics | 3
BIOL 458 | Biometry | 4
GE Area D: Social Sciences (D1) or U.S. History (D2) or U.S. and California Government (D3) | 3
GE Area UD-C: Upper-Division Arts and/or Humanities (Consider SF State Studies Course) | 3
University Elective | 1
Units | 14

Third Semester
BIOL 337 | Evolution | 3
GE Area UD-D: Upper-Division Social Sciences (Consider SF State Studies Course) | 3
Select 3-5 units on advisement: | 3-5
BIOL 534 | Wetland Ecology | 3
BIOL 580 | Limnology | 3
BIOL 582 | Biological Oceanography | 5

To Do at SF State:

Enough total units to reach 120 minimum for graduation; 40 units minimum at the upper division level; to include the following:

University-Wide Requirements: 15–21 Units

- ENG 214 or equivalent A4 course (0–3 units) if not taken before transfer. See note 1.
- American Institutions (0–6 units): See next bullet.
- Lower division GE (6 units) – Area C (3 units in any subarea) and Area D (3 units; D2 satisfies US History if needed; D3 satisfies US/CA Government requirement if needed)
- Upper division GE (6 units to do): 1) Major course satisfies UD-B. 2) Take UD-C and UD-D courses. See notes.
- Students entering this major with the AS-T in Biology are not required to fulfill SF State Studies or Complementary Studies requirements.

Biology – Marine Biology and Limnology Major: 36–37 Units

BIOL 230/BIOL 240, MATH 226, all PHYS, CHEM 115/CHEM 215/CHEM 216 met in transfer.
Bachelor of Science in Biology: Concentration in Marine Biology and Limnology – BIOL Associate Degree for Transfer Roadmap

- Lower Division requirements (3 units): CHEM 130
- Major Upper Division Requirements (16–17 units)
- Major Upper Division Electives – includes GWAR (17 units) – upon advisement.

University Electives: One Unit or More
Depends on course choices made at the community college, how transferred units are applied to the requirements above, and course choices at SF State. Some courses may meet more than one requirement, e.g. both in UD GE and the major.