

Biology

Warriors on the Way to STEM

WOW2STEM

Fresno City College

The Department of Biological Sciences attracts students who want to study life in all its grandeur! Questions of how living organisms function and evolve are some of the areas of inquiry pursued. Some students pursue a degree in biology in order to conduct basic or applied research. Other students complete coursework required for health professional schools, such as medical school.

What can I do with a degree in Biology?

Where can a Biological Sciences degree take you? Physicians, dentists, pharmacists, nurses, clinical laboratory scientists, and physician's assistants all need solid biology backgrounds, as do teachers, veterinarians, plant geneticists, ecologists, podiatrists, horticulturists, and entomologists.

How can I participate in WOW2STEM?

- **Meet with a STEM counselor each semester at your community college.**
- **Follow a student educational plan (SEP) as outlined by a STEM counselor.**
- **Attend presentations and workshops throughout the year.**
- **Follow application dates and deadlines as directed by the Transfer Advisor and Stanislaus State.**

For more information you may contact:

Elizabeth Monroe, Transfer Specialist
209.667.3164

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www.csustan.edu/STEM-success



Dr. Terry Jones is a professor in the Biological Sciences department at Stanislaus State. His current research consists of studying modern animals to discover the biology of extinct animals.

Biology B.A. Roadmap

Prerequisites to Lower-Division Courses	Lower-Division Courses at Fresno City College	Major Course Requirements at Stanislaus State
CHEM 1A & MATH 103	BIOL 11A* & BIOL 11B * (Biology for Science Majors I & II) Or BIOL 4 * & BIOL 6* (Principles of Zoology/Botany)	BIOL 3310 - Cellular and Molecular Biology (3 units) BIOL 3350 - Introductory Genetics (3 units) BIOL 3680 - Ecology (4 units) BIOL 4400 - Evolution (3 units)
MATH 103		
(H.S. Chem w/lab, or CHEM 101P or CHEM 3A) & MATH 103	CHEM 1A** (General Chemistry I)	Genetics and Biotechnology course (2 units)
CHEM 1A	CHEM 1B** (General Chem II & Quant)	Structure and Function course (4 units)
MATH 4A	PHYS 2A (General Physics I) or PHYS 4A (Physics for Scientists) or CHEM 28A*** & 29A*** (co-req) (Organic Chem I w/ lab)	Diversity and Systematics courses (8 units)
MATH 5B		Elective courses (10 units)
CHEM 1B		
*The Biology requirement may be transferred as a series only. Both the lecture and lab must be completed at Fresno City College to receive credit at Stanislaus State. **CHEM 1A & 1B must be completed before transferring to Stanislaus State to ensure timely progress. ***While CHEM 28A & 29A satisfies the Organic Chemistry requirement, it does not count as upper-division units. Upon transfer, four units of upper-division will be required to complete the major.		

For all degree requirements, visit www.csustan.edu/roadmaps

Biology B.S. Roadmap

Prerequisites to Lower-Division Courses	Lower-Division Courses at Fresno City College	Major Course Requirements at Stanislaus State
CHEM 1A & MATH 103	BIOL 11A* & BIOL 11B * (Biology for Science Majors I & II) Or BIOL 4* & BIOL 6* (Principles of Zoology/Botany)	BIOL 3310—Cellular and Molecular Biology (3 units) BIOL 3350—Introductory Genetics (3 units) BIOL 4400—Evolution (3 units) BIOL 3680—Ecology (4 units) Genetics and Biotechnology course (2 units) Structure and Function course (4 units) Diversity and Systematics courses (8 units) Elective courses (18 units) Or may choose one OPTIONAL Concentration: Molecular, Cellular, & Microbial Biology Organismal, Ecological, & Evolutionary Biology
MATH 103		
(H.S. Chem w/lab, orCHEM 101P orCHEM 3A) & MATH 103	CHEM 1A ** (General Chemistry)	
CHEM 1A	CHEM 1B ** (General Chem II & Quant)	
CHEM 1B	CHEM 28A*** & 29A*** (co-req) (Organic Chem I w/ lab)	
MATH 103 or equivalent	MATH 11 or MATH 42/ PSY 42 (Statistics) Or MATH 5A (Math Analysis I)	
MATH 4B or equivalent		
MATH 4A; PHYS 2A	MATH 11 or MATH 42/ PSY 42 (Statistics) Or	
COREQUISITE: MATH 5B	MATH 5A (Math Analysis I)	
*The Biology requirement may be transferred as a series only. Both the lecture and lab must be completed at Fresno City College to receive credit at Stanislaus State.		
**CHEM 1A & 1B must be completed before transferring to Stanislaus State to ensure timely progress.		
***While CHEM 28A/29A satisfies the Organic Chemistry requirement, it does not count as upper-division units. Upon transfer, four units of upper-division will be required to complete the major.		

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