

## Recommended Science Education Classes for Future Teachers

These classes are designed with an active-learning format that emphasize scientific concepts for future teachers.

- Biology 102: Biology for Future Teachers
- Chemistry/Physics 102: Physical Science for Future Elementary Teachers
- Geology 102: Earth Investigations for Future Elementary Teachers
- Biology 453: Life Science Concepts
- Geology 410: Planet Earth for Educators

Completing these classes will:

- Satisfy GE areas B.1, B.2, B.3
- Prepare you for CSET exams
- Help you earn Natural Science Minor

### Natural Science Minor

Completing the Natural Science Minor provides a pathway to the Foundational Level General Science Credential. Natural science minors will also gain knowledge in a variety of scientific fields and explore important topics impacting our planet today.

#### Advising and Information:

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## How can you prepare yourself for teaching science in your classroom?

### Take science education classes at CSUF!

Classes developed specifically for K-8 teachers emphasize the investigative nature of science and stress inquiry-based learning.

Taking them will:

Provide you practical teaching experience

Increase your knowledge and confidence in science and pedagogy

Prepare you for success when you enter the Multiple Subject Credential Program

Expose you to the Next Generation Science Standards

Prepare you to take the CA State Exams

Help you earn a minor in Natural Sciences to demonstrate your knowledge and comfort with science

## The Multiple Subject Credential and Teaching Science For Grades K-8

### Quest for Success: Science Education in Your Future Classroom



CALIFORNIA STATE UNIVERSITY  
**FULLERTON**

# 40%

of elementary teachers do not feel prepared to teach science as opposed to 4% for language arts and math. <sup>(1)</sup>

# 80%

of these teachers spend 60 min or less per week on science. <sup>(1)</sup>

# 24%

of CA fourth graders scored at or above the Proficient level for science in a national assessment placing them 3rd from the bottom nationwide. <sup>(2)</sup>

(1) Dorph, R., Goldstein, D., Lee, S., Lepori, K., Schneider, S., Venkatesan, S. (2007). The status of science education in the Bay Area: Research brief. Lawrence Hall of Science, University of California, Berkeley, CA

(2) National Assessment of Educational Progress 2015 Report Card

Take advantage of these opportunities to increase your mastery of teaching science for grades K-8 before you apply to the credential program

(Descriptions in following pages)

Get Advising from Science Ed Coord and/or Center for Careers in Teaching!

Join Teaching Clubs or Professional Organizations!

Take Recommended Science Ed Classes!

**CSUF Multiple Subject Credential With Great Science Teaching Background**

Earn the Natural Science Minor for increased marketability!

Explore Scholarships or Teaching Opportunities!

Science Ed Classes Will Help You Pass the CA State Credential Exams!

Bonus: Foundational-Level General Science Credential for grades 7-9 can be added to Multiple Subject Credential

## Descriptions:

### Multiple Subject Credential:

- Authorizes holder to teach grades K-8
- Must pass CA State Educator Credentialing Exams:  
CBEST: California Basic Education Skills Test (reading, writing, mathematics)  
CSET: Multiple Subjects (Test codes 101, 214 103)

### To Earn Additional Foundational Level General Science Special Authorization Credential:

- Added to Multiple Subject Credential
- Authorizes holder to teach introductory science (General, Life, or Physical) for grades K-12 and integrated science for grades K-9
- Must pass CA State Educator Credentialing Exam:  
CSET Foundational-Level General Science Subtest 1 (Test code 215) AND
- EDSC 542S: Advanced Methods for Teaching Science

### Clubs/Organizations, Scholarships, Teaching Opportunities:

- CASSA: Child and Adolescent Studies Student Association
- LSSA: Liberal Studies Student Association
- NSTA: National Science Teachers Association
- SCTA: Student California Teachers Association
- Science/Math Ambassadors: Tutoring program
- MSTI: Mathematics and Science Teachers Initiative (partnership of the Colleges of Ed. and NSM)
- TRP: Teacher Recruitment Project
- Titan ASES: Titans After School Education and Safety Program (Center for Internships and Community Engagement)