

## Adding a Single Subject Teaching Credential in Science

Multiple Subject Teaching Credential holders may obtain a Single Subject Teaching Credential in Foundational-Level General Science (FLGS), Biological Sciences, Chemistry, Geosciences, or Physics by . . .

- Passing the appropriate CSET subtests (go to [www.ctcexams.nesinc.com](http://www.ctcexams.nesinc.com) to determine the appropriate subtests and learn about test content), and
- Successfully completing an appropriate 3-unit single subject methods course, such as EDSC542S: Advanced Methods of Teaching Science

The Single Subject Teaching Credential authorizes holders to teach the specific subject in departmentalized classes such as those in most middle schools and high schools.

Alternatively, Multiple Subject Teaching Credential holders who completed a 32-semester-unit course of study or have a bachelor's degree in the subject area may apply to California's Commission on Teacher Credentialing for an Introductory Subject Matter Authorization, allowing them to teach up to grade 9 subject matter. To apply, go to [www.ctc.ca.gov/credentials/applications.html](http://www.ctc.ca.gov/credentials/applications.html).

## Teacher Recruitment Project

The Teacher Recruitment Project is dedicated to increasing the number of qualified mathematics and science teachers at all levels. Financial support may be available to Multiple Subject Credential candidates and holders who obtain an additional credential in mathematics or one of the sciences.

### Contact Information

For more information and to apply for funding, go to the TRP website: <http://ed.fullerton.edu/TRP>

### Project Leadership

Dr. Kim Norman ([knorman@fullerton.edu](mailto:knorman@fullerton.edu))

Dr. Mallika Scott ([mhscott@fullerton.edu](mailto:mhscott@fullerton.edu))

Department of Elementary & Bilingual Education



## Helpful Websites

Department of Elementary & Bilingual Education

<http://ed.fullerton.edu/edel>

Secondary Education Department

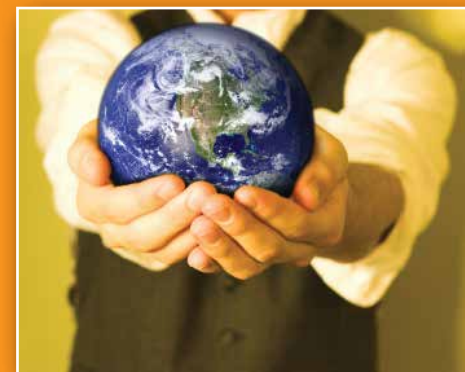
<http://ed.fullerton.edu/seced>

CSET Exams

[www.ctcexams.nesinc.com](http://www.ctcexams.nesinc.com)

## Multiple Subject Credential . . . and Beyond!

Meet Josh  
Middle School  
Science Teacher



*Josh enjoys helping students understand the world!*



CALIFORNIA STATE UNIVERSITY  
**FULLERTON**<sup>™</sup>

Josh is a completer of CSUF's Multiple Subject Credential Program whose memory of his own middle school years combined with his passion for science and mathematics propelled him toward obtaining a second credential — a decision that he says was one of the best of his professional life!

## Are you interested in adding a Single Subject Teaching Credential?

That's what Josh did, and after six years of teaching science at the middle school, he can't imagine working with students or content he would enjoy more! Josh says that it is enormously beneficial to have both credentials. "I have a richer understanding of my students because of my multiple subject preparation, and I know how to help struggling readers. At the same time, because the students are older, we can go deeper into the content. We apply the scientific method and discover what the world of science has to offer!"

The Single Subject Teaching Credential and the Multiple Subject Teaching Credential is a winning combination!

## Josh's Story

When Josh reflects on his own school experiences, he remembers clearly how he struggled with science and math when he was in middle school. "Many days I dreaded going to class, but I remember how much fun science labs were!" When he completed the credential program, he decided he wanted to help young adolescents who were finding the middle school years difficult, just as he did. Josh's goal is to bring the excitement of learning to these students.

**"I knew I wanted to do something to help kids who find science and math challenging."**

The key to successful science teaching, he says, is igniting curiosity. "It's about sparking students' interest in the subject matter. It's about engaging students in the exciting process of exploration." Science investigations also allow Josh to bring math skills, such as data collection and statistical analysis, into his curriculum.



## 12 Ways Josh Engages His Students

1. Provides laboratory and outdoor experiences
2. Incorporates inquiry-based approaches to learning, with opportunities for extended investigations
3. Draws upon students' lives and experiences
4. Sets up live explorations, such as having fish tanks in the classroom where students learn about self-contained environments and abiotic and biotic factors
5. Uses technology, including websites for students and parents, ProScopes, interactive whiteboards, and group response systems
6. Poses thought-provoking questions about authentic, real-world issues
7. Utilizes rich visuals
8. Offers extension opportunities, such as an Ecology Club, open to all students at the school
9. Differentiates instruction to provide ongoing support and appropriately challenging learning experiences
10. Helps students make connections across the curriculum and between theory and practice
11. Nurtures a community of collaborative science learners
12. Takes a sincere interest in his students