

## Cal Teach Program Summary

### UC Santa Barbara

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| <p>Key feature(s) that distinguishes Cal Teach from (your) other teacher preparation programs</p> | <p><b>1. More time to think about teaching in their content area.</b><br/> The Cal Teach program introduces undergraduates to the processes of teaching and learning science or mathematics while taking courses in these disciplines. Rather than trying to cram all there is to learn about science and mathematics education into one year of teacher education, undergraduates participating in Cal Teach are given more time, space, and opportunity to learn and grow as beginning teachers.</p> <p><b>2. Emphasis on teaching science through inquiry or mathematics through problem solving.</b><br/> Cal Teach courses are designed to highlight the teaching and learning of science or mathematics as an active and creative endeavor. Undergraduates engage in inquiry-oriented or problem-solving activities themselves and consider ways such experiences could be incorporated into K-12 classrooms. Early and repeated exposure to such strategies is considered essential for a deeper understanding and willingness to implement inquiry or problem solving once in classrooms.</p> <p><b>3. Participation by faculty across science, mathematics, and education</b><br/> Although Cal Teach at UCSB is situated in the Gevirtz Graduate School of Education, we have established strong connections with other departments so that it is a collaborative effort. For example, we have an interdisciplinary curriculum committee who makes decisions about course offerings, helps advertise Cal Teach to STEM undergraduates, and writes grants to support and expand the effort.</p> |
| <p>Structure of the undergraduate portion of your Cal Teach program</p>                           | <p><b>Minor in Science and Mathematics Education</b></p> <p>Undergraduates in the Science and Mathematics Education Minor complete a total of five courses (18 units) across the fields of education, science, and mathematics. The minor consists of four types of classes:</p> <ul style="list-style-type: none"> <li>(a) One California Teach 2 course in either science or mathematics.<br/> California Teach 2 foregrounds the processes of teaching and learning in mathematics and science at the secondary level.</li> <li>(b) Two of three foundation courses in education. These courses include social foundations of education; culture, development and education; and introduction to child and adolescent development.</li> <li>(c) One disciplinary course intended to deepen and broaden understanding of mathematics and/or science in ways useful to teachers and their students. Undergraduates select one course from a menu of five. Courses are taught by education, science, or mathematics faculty.</li> <li>(d) One practicum course intended to provide opportunities to interact with K-12 students either in the classroom or in an informal setting.</li> </ul>  |

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|  | <p>Undergraduates select one course from a menu of six. Courses are taught by education, science, or mathematics faculty.</p> <p>Before deciding to pursue this minor, undergraduates are encouraged (but not required) to enroll in a lower division education course, California Teach 1. California Teach 1 introduces students to the teaching and learning of science and mathematics at the K-8 level. A thorough understanding of how young students learn science and mathematics is thought necessary to produce better informed and more highly skilled secondary teachers.</p>   |
| <p>Alternative pathways to the credential at your campus</p> | <p><b>1. The Education and Applied Psychology Minor: Teacher Education Track</b></p> <p>The Education and Applied Psychology Minor is comprised of three tracks: Applied Psychology, Educational Studies, and Teacher Preparation. The Teacher Preparation track is for undergraduates preparing for a career in elementary or secondary education. Courses in this minor track help fulfill prerequisite requirements to enter the UCSB Teacher Education Program.</p> <p><b>2. Subject Matter Preparation Program (Waiver): Mathematics</b></p> <p>California requires teacher candidates to demonstrate subject matter competency in the subject matter they will be authorized to teach by either: (1) completing a subject matter preparation program that meets state standards set by the Commission aligned with K-12 content standards or (2) passing a state examination in the subject matter called the CSET. The GGSE and Math Department are currently designing a credential pathway that would enable Cal Teach students to complete a subject matter preparation program in Mathematics. This pathway would offer Cal Teach students the opportunity to: (1) meet the state subject matter competency requirements by completing approved course work and waive the CSET, (2) complete a Math major and Minor in Science and Mathematics Education, (3) participate in pre-professional experiences, and (4) prepare for admission to a credential program. We anticipate this program, if state approved, would begin in Fall 2010; students enrolled prior to Fall 2010 could be grandfathered into the program.</p> |
| <p>Type/format of your credential program(s)</p>             | <p>The UCSB Teacher Education Program is a 13-month, fifth-year, fulltime program. It offers candidates one of three kinds of credentials – Multiple Subject (elementary), Single Subject (in 6 secondary content areas), or Level I &amp; II Education Specialist Moderate/Severe Teaching – and a master’s degree in teaching (M.Ed.). Teacher candidates enter as a cohort; the secondary cohort is typically 60 teacher candidates. Currently, TEP graduates an average of 17 teachers in secondary mathematics and science each year.</p> <p>The Minor in Science and Mathematics Education allows undergraduates to complete the 60 hours of pre-professional experience necessary for admission into our UCSB credential program.</p>  |

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| <p><b>Student numbers and demographics</b></p>         | <p>In the last three years, 316 undergraduates have enrolled in Cal Teach Santa Barbara courses (CaT1 and CaT2) and have served local teachers and their students for approximately 10,000 hours. Our undergraduate profile is available at: <a href="http://bap.ucsb.edu/IR/08-09/cp2008.pdf">bap.ucsb.edu/IR/08-09/cp2008.pdf</a></p>  |
| <p><b>Other important elements of your program</b></p> | <p><b>1. Hiring of three Cal Teach Santa Barbara LPSOEs in the departments of education, mathematics, and chemistry.</b><br/> At present, we have hired two of three lecturers specific to Cal Teach Santa Barbara – one in Education and one in Chemistry. A third lecturer is expected to be hired in Mathematics next academic year. The purpose of hiring lecturers across departments is to facilitate communication, recruitment, and innovation.</p> <p><b>2. Working with other programs on campus to recruit undergraduates into Cal Teach from under-represented groups and from high needs disciplines.</b><br/> We work with other programs on campus to actively recruit undergraduates from underrepresented groups and from needs disciplines such as chemistry and physics into Cal Teach. We attempt to have a higher percentage of undergraduates from underrepresented groups in our CaT 1 and 2 courses than the overall campus.</p> |
| <p><b>Website</b></p>                                  | <p><a href="https://secureweb.education.ucsb.edu/Undergrad-Studies/Science-Math-Initiative/science-math-initiative-main.htm">https://secureweb.education.ucsb.edu/Undergrad-Studies/Science-Math-Initiative/science-math-initiative-main.htm</a></p>   |