

UCLA CalTeach-Math Overview

UCLA California Teach – Math is the UCLA Mathematics Department’s effort to train high quality mathematics teachers for local secondary schools. The program offers up to four years of courses, field experiences and professional networking opportunities. In the program, mathematics and mathematics education faculty, and current mathematics teachers will work with students to provide content and pedagogical content knowledge necessary to be a high-quality mathematics teacher. Students who complete all four years of the UCLA CalTeach-Math program will be thoroughly prepared for admission to a California (CA) credential program. Each of UCLA CalTeach-Math’s requirements serves to develop graduates who are:

High quality:

- Knowledge of pre-collegiate mathematics from a deep, extended and pedagogical perspective
- Knowledge of the connections between the undergraduate mathematics curriculum and pre-collegiate mathematics
- Knowledge of current learning theories
- Knowledge of research-based mathematics pedagogy, including assessment
- Beginning exposure to and experience with teaching small groups and whole class lessons utilizing various instructional strategies, including collaborative group and inquiry-based strategies

and Credential program-ready:

- Passed the California Basic Educational Skills Test (CBEST)
- Subject matter competent—completes UCLA Math SMPP or passes the California Subject Examination for Teachers in mathematics (CSET)
- Passed tuberculosis test
- Passed U.S. Constitution test or equivalent
- Passed background check (fingerprinting)

Note: UCLA CalTeach-Math is open to students majoring in other fields who have fulfilled the appropriate prerequisites for the program’s courses.

Our History and Background:

The UCLA Mathematics Department has been preparing undergraduates for careers in mathematics teaching since its inception. Recent data shows that UCLA produces more graduates who go on to earn a CA mathematics teaching credential than any other university in CA. Research shows that over 80% of UCLA mathematics graduates who go on to complete their teaching credential in the UCLA Teacher Education Program are still teaching five years after graduation. This is a stark contrast to the LAUSD average of 62%. Further evidence shows that a significant fraction of UCLA Mathematics Department teacher preparation program graduates become mathematics teacher-leaders increasing their impact on the mathematics education in California.

We encourage you to participate in our program. We offer solid preparation with financial support for a career in teaching, a strong foundation for future leadership in the field, and a cohort of colleagues to support.

UCLA CalTeach - Math for Mathematics Majors

Freshman	Sophomore	Junior	Senior	Post Baccalaureate
Complete lower division preparation for your chosen mathematics major.*		Complete courses required for your chosen mathematics major.		<p>Receive B.S. in Math as well as Subject Matter Competence and partial completion of coursework toward the Ca Single Subject Cred. in Math</p> <p>Enter CA credential program with credit for credential coursework, depending upon articulation agreement with chosen institution.</p>
<p>Complete lower division courses toward verifying Subject Matter Competence* for the CA credential (many of these are also required for the prep for your math major)</p> <ul style="list-style-type: none"> ▪ Calculus: Math 31A, 31B, 32A, 32B 33A, 33B ▪ Programming: PIC 10A ▪ Science: 3 additional courses from Astronomy 2A, Earth & Space Sciences 1, Economics 1, 2, 11, Chemistry 20AB, Physics 6ABC or 8ABC or 1ABC, Philosophy 31, 32 ▪ Linear Algebra: Math 115A recommended 		<p>Complete prerequisites to Math 105 sequence (these are also required for verifying Subject Matter Competence for the CA credential and most math majors):</p> <ul style="list-style-type: none"> ▪ Linear Algebra: Math 115A ▪ Algebra 110A or 117 ▪ Geometry: Math 120A or 123 ▪ Analysis: 131A 	<p>Complete capstone course requirement for verifying Subject Matter Competence and Math Methods course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Mathematics and Pedagogy for Teaching Secondary Mathematics Math 105ABC 	
<p>Complete course to meet U.S. Constitution requirement for CA Credential:</p> <ul style="list-style-type: none"> ▪ 1 from Hist 13A/B/C, Hist 7A/B, Hist 151A/B, Pol Sci 1, Pol Sci 172A/B, Pol Sci 40 		<p>Take and pass CBEST (Required for CA credential and to enroll in CA credential Program)</p>	<p>Attend credential program information meeting and apply to local credential program such as UCLA's TEP, CSUDH, CSUN, CSULA, etc.</p>	
<p>Complete Observation & Participation courses toward CA credential:</p> <ul style="list-style-type: none"> ▪ Classroom Practices in Elementary School Math: Math 71SL ▪ Classroom Practices in Middle School Math: Math 72SL 		<p>Complete Ed Psych course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Educational Psychology: Ed 127 <p>Complete Observation & Participation course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Classroom Practices in Secondary Mathematics: Math 103ABC 	<p>Attend networking and professional events including:</p> <ul style="list-style-type: none"> - Alumni Reunion Strand of the Curtis Center Mathematics and Teaching Conference - CMC South annual fall conference in Palm Springs 	
		<p>Attend networking and professional events including:</p> <ul style="list-style-type: none"> - Alumni Reunion Strand of the Curtis Center Mathematics and Teaching Conference 	<p>Have Undergraduate Office provide letter verifying completion of the coursework necessary to earn subject matter competence for the Ca Single Subject Credential in Mathematics</p>	
		<p>Complete other upper division subject matter program requirements (many of these are also required for your math major):</p> <ul style="list-style-type: none"> ▪ Probability/Statistics: 1 from Mathematics 170A or Statistics 100A or Statistics 110A or Statistics 110B: ▪ Applied Math: 1 from Math 142, 151A, 164, 167 ▪ 3 Math electives from: Math 61, 106-199, Statistics 100B-120B 		

*CA credential applicants can verify Subject Matter Competence for the CA credential by completing the coursework listed on p. 10. Students completing the Mathematics for Teaching major automatically complete the coursework for verifying Subject Matter Competence for the CA Single Subject Teaching Credential in Mathematics.

UCLA CalTeach - Math for Non-Mathematics Majors

Freshman	Sophomore	Junior	Senior	Post Baccalaureate
<p>Complete lower division preparation for your chosen major.</p>		<p>Complete courses required for your chosen major.</p>		
<p>Complete</p> <ul style="list-style-type: none"> ▪ Calculus: Math 31A, 31B, 32A, 32B, 33A, 33B ▪ Physics 6A (or equivalent) 	<p>Complete prerequisites to Math 105 sequence:</p> <ul style="list-style-type: none"> ▪ Linear Algebra: Math 115A ▪ Algebra 110A or 117 ▪ Geometry: Math 120A or 123 ▪ Analysis: 131A 	<p>Complete Math Methods course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Mathematics and Pedagogy for Teaching Secondary Mathematics Math 105ABC 		<p>Receive Bachelor's degree as well as subject matter competence and partial completion of coursework toward the Ca Single Subject Cred. in Math</p>
<p>Complete course to meet U.S. Constitution requirement for CA Credential:</p> <ul style="list-style-type: none"> ▪ 1 from Hist 13A/B/C, Hist 7A/B, Hist 151A/B, Pol Sci 1, Pol Sci 172A/B, Pol Sci 40 	<p>Take and pass CBEST (Required for CA credential and to enroll in CA credential Program)</p>	<p>Attend credential program information meeting and apply to local credential program such as UCLA's TEP, CSUDH, CSUN, CSULA, etc.</p> <p>Attend networking and professional events including:</p> <ul style="list-style-type: none"> - Alumni Reunion Strand of the Curtis Center Mathematics and Teaching Conference - CMC South annual fall conference in Palm Springs 		
<p>Complete Observation & Participation courses toward CA credential:</p> <ul style="list-style-type: none"> ▪ Classroom Practices in Elementary School Math: Math 71SL ▪ Classroom Practices in Middle School Math: Math 72SL 	<p>Complete Ed Psych course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Educational Psychology: Ed 127 	<p>Take and pass CSET exam to earn Subject Matter Competence for the Ca Single Subject Credential in Mathematics</p>		
	<p>Complete Observation & Participation course toward CA credential:</p> <ul style="list-style-type: none"> ▪ Classroom Practices in High School Math: Math 103ABC 			
<p>Enter CA credential program with credit for credential coursework, depending upon articulation agreement with chosen institution.</p>				