



***Subject Matter Program,  
Mathematics for Teaching Major  
MLA Pathways  
Information & Four-Year Planner***



**UCLA** Teacher Education Program



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## Subject Matter Program

Applicants for a California Preliminary Single Subject Teaching Credential in Mathematics must verify their “subject matter competence” to teach mathematics in one of two ways: 1) complete a CA-approved “Subject Matter Program” and obtain verification of completion from a university with an approved program\* or 2) achieve a passing score on the three-part California Subject Matter Examination for Teachers (CSET).

The UCLA Mathematics Department is one of three UC campuses with a CA-approved subject matter program in mathematics. The courses comprising the program are listed below. Students who complete all four years of the UCLA CalTeach-Math and/or the Mathematics for Teaching major will automatically complete the department’s CA-approved subject matter program. At the end of their senior year, students may request a letter from the Mathematics Department’s Undergraduate Office (6356 MS) verifying their completion of these courses and thus their subject matter competence for the CA Single Subject Teaching Credential in Mathematics.

### 22 Courses

<input type="checkbox"/> Math 31A	<input type="checkbox"/> PIC 10A	<input type="checkbox"/> Math 105A
<input type="checkbox"/> Math 31B	<input type="checkbox"/> Physics 1A or 5A	<input type="checkbox"/> Math 105B
<input type="checkbox"/> Math 32A	<input type="checkbox"/> Math 115A	<input type="checkbox"/> Math 105C
<input type="checkbox"/> Math 32B	<input type="checkbox"/> Math 106	<input type="checkbox"/> Math 170A or Math 170E or Stats 100A
<input type="checkbox"/> Math 33A	<input type="checkbox"/> Math 110A or 117	
<input type="checkbox"/> Math 33B	<input type="checkbox"/> Math 120A or 123	<input type="checkbox"/> Math 170B or Math 170S or Stats 100B
<input type="checkbox"/> Math 61	<input type="checkbox"/> Math 131A	
<input type="checkbox"/> 1 from Mathematics 131B-136 1 from Mathematics 142-167		
<input type="checkbox"/> 1 from Physics 1A or 6A		
<input type="checkbox"/> 1 from Chemistry 20AB, Physics 1BC, Physics 6BC, or PIC 10B-97		

\*Please Note: In order to receive a 100% CSET waiver from UCLA, students must have "C-" or better in the following courses and an upper division GPA of 2.0 or higher: Mathematics 131A, Mathematics 123 or Mathematics 120A, Mathematics 117 or Mathematics 110A, Mathematics 105A, Mathematics 105B, and Mathematics 105C.

## Mathematics for Teaching Major

The Mathematics for Teaching major is designed for students planning to teach mathematics at a secondary school. It provides broad exposure to mathematical knowledge for teaching, an introduction to an array of professional issues in mathematics teaching and a substantial foundation for potential teacher leaders. Completing the major fulfills the requirements for the Subject Matter Waiver.

### Preparation for the Major (11 courses total):

<input type="checkbox"/> Math 31A Pre-requisite: Math 1 or Pass the Math Diagnostics Test	<input type="checkbox"/> Physics 1A or 5A Pre-requisite: Math 31A and Math 31B Co-requisite: Math 32A	<input type="checkbox"/> PIC 10A
<input type="checkbox"/> Math 31B Pre-requisite: Math 31A	<input type="checkbox"/> Math 32A Pre-requisite: Math 31A	<input type="checkbox"/> Math 33A Pre-requisite: Math 31B or 32A
<input type="checkbox"/> Math 61 Pre-requisite: Math 31B	<input type="checkbox"/> Math 32B Pre-requisite: Math 31B and 32A	<input type="checkbox"/> Math 33B Pre-requisite: Math 31B
Two additional courses: (Only check two of the following):		
<input type="checkbox"/> Chemistry 20A	<input type="checkbox"/> PIC 10B	<input type="checkbox"/> Physics 1B or 5B
<input type="checkbox"/> Chemistry 20B	<input type="checkbox"/> PIC 10C	<input type="checkbox"/> Physics 1C or 5C

To be able to declare the major, you must keep an overall 2.5 GPA for the MATH series (31AB, 32AB, 33AB, & 61) and a 2.0 GPA on non-math requisites (PIC, Physics, Chemistry).

### The Major (13 courses total):

<input type="checkbox"/> Math 115A	<input type="checkbox"/> Math 170A or Stats 100A	<input type="checkbox"/> Analysis: One course from Math 131B – 136
<input type="checkbox"/> Math 106	<input type="checkbox"/> Stats 100B	<input type="checkbox"/> Applied Mathematics: One course from Math 142 – 167
<input type="checkbox"/> Math 110A or 117	<input type="checkbox"/> Math 105A	<input type="checkbox"/> One course from Math 110B – 191H or 100C
<input type="checkbox"/> Math 120A or 123	<input type="checkbox"/> Math 105B	
<input type="checkbox"/> Math 131A	<input type="checkbox"/> Math 105C	

Students must pass Math 115A and Math 131A with a C- or better.

In order to fulfill the Subject Matter Preparation Program, you must maintain at least a 2.0 GPA on upper division courses and have a C- or better on Math 110A or 117, Math 120A or 123, Math 131A, Math 105A, Math 105B, and Math 105C.

## Math for LA Credential Pathways:

### *Integrated Pathway*

- Work on your CA Teaching Credential during your junior and senior years.
- Earn your CA Teaching Credential upon graduation
- Begin teaching full time with a full-time salary after graduation

### *Joint Math/Ed Pathway*

- Earn your CA Teaching Credential by the summer after graduation
- Begin teaching full time with a full-time salary at the end of that summer
- Complete a Master's in Education by the following June

### *Traditional Pathway:*

<i>Freshman Year</i>	<i>Sophomore Year</i>	<i>Junior Year</i>	<i>Senior Year</i>	Finish B.S.	<i>Grad School Year 1</i>	<i>Grad School Year 2</i>
Math 73	Math 74	Math 103 ABC	Math 105 ABC		Credential coursework	Masters' coursework

### *Joint Math/Ed Pathway:*

<i>Freshman Year</i>	<i>Sophomore Year</i>	<i>Junior Year</i>	<i>Senior Year</i>		<i>Grad School Year 1</i>
Math 73	Math 74	Math 103 ABC	Math 105 ABC Credential Coursework	Summer Term Credential Coursework	Masters' coursework

### *Integrated Pathway:*

<i>Freshman Year</i>	<i>Sophomore Year</i>	<i>Junior Year</i>	<i>Senior Year</i>
Math 73	Math 74	Math 103 ABC Credential Coursework	Math 105 ABC Credential Coursework

## CA Teaching Credential Requirements

<i>California Credential Requirement</i>	<i>Alternative at UCLA</i>
<b>Subject Matter Competence</b> Candidates for a CA Single Subject Credential in Mathematics must demonstrate “subject matter competence” by achieving a passing score on California’s three-part Subject Examination for Teachers in Mathematics (CSET) or by completing a CA-approved Subject Matter Preparation Program.	<b>Subject Matter Preparation Program</b> The UCLA Math Department has a <a href="#">CA-approved Subject Matter Preparation Program</a> in Mathematics. Upon completion of this program, students request a letter of completion from the UCLA Mathematics Department which verifies their “Subject Matter Competence.” Note: Completing the Math for Teaching Major fulfills the requirements of the Subject Matter Preparation Program.
<b>Pedagogical Competence</b> Candidates typically complete a year of coursework in a post-baccalaureate CA-approved teacher credentialing program.	<b>UCLA’s Math For LA</b> A fast track program to complete some or all of the coursework for a CA Secondary Teaching Credential in Mathematics as an undergraduate.
<b>Clinical Competence</b> Candidates must complete 600 hours of supervised clinical practice.	<b>Take and Pass:</b> Math 73SL, Math 74SL, and Math 103ABC to begin accruing these hours as soon as possible. Later, enroll in Math 105ABC and other education coursework as part of <a href="#">Math For LA</a> to complete your 600 hours.
<b>US Constitution Test</b> Test based on the United States Constitution and the California State Government	<b>Take and pass one class from:</b> Hist 13A/B/C – History of the US and its Colonial Origins Hist 143A/B – Constitutional History of the United States Pol Sci 40 – Intro to American Politics
<b>California Basic Skills Requirement</b> Obtain a <a href="#">qualifying score</a> on the CBEST, AP Exams, the SAT, the ACT, the CSU EAP Exam, or CSU Placement exams.	<b>None</b>
<b>Fingerprinting</b> California education code requires that all individuals who seek to obtain California credentials receive fingerprint clearance from the California Department of Justice and the Federal Bureau of Investigation	<b>None</b>



## INTEGRATED PATHWAY

*to be completed concurrently with your undergraduate degree*

### Junior Year

☐ Education 170C  
Fall Quarter

☐ Education 170D  
Winter Quarter

☐ Education 170E  
Spring Quarter

☐ Education 130/406  
Fall Quarter

☐ Education 127/407  
Winter Quarter or Summer Session A

### Junior Summer

☐ Education 409

☐ Education 425

### Senior Year

☐ Math 105A  
Fall Quarter

☐ Math 105B  
Winter Quarter

☐ Math 105C  
Spring Quarter

☐ Education 330A  
Fall Quarter

☐ Education 330B  
Winter Quarter

☐ Education 330C  
Spring Quarter

☐ Education 360A  
Fall Quarter

☐ Education 360B  
Winter Quarter

☐ Education 360C  
Spring Quarter

☐ Education 405A  
Fall Quarter

☐ Education 405B  
Winter Quarter

☐ Education 405C  
Spring Quarter



## JOINT MATH/ED PATHWAY

*to be completed concurrently with your undergraduate degree*

### Optional (Highly Recommended) for Junior Year

- |  |  |
|--|--|
| <input type="checkbox"/> Education 127/407<br>Summer Session A or Spring Quarter | <input type="checkbox"/> Education 130/406<br>Fall Quarter |
|--|--|

### Senior Year (Novice)

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Math 105A<br>Fall Quarter      | <input type="checkbox"/> Math 105B<br>Winter Quarter      | <input type="checkbox"/> Math 105C<br>Spring Quarter      |
| <input type="checkbox"/> Education 330A<br>Fall Quarter | <input type="checkbox"/> Education 330B<br>Winter Quarter | <input type="checkbox"/> Education 330C<br>Spring Quarter |
| <input type="checkbox"/> Education 360A<br>Fall Quarter | <input type="checkbox"/> Education 360B<br>Winter Quarter | <input type="checkbox"/> Education 360C<br>Spring Quarter |
| <input type="checkbox"/> Education 405A<br>Fall Quarter | <input type="checkbox"/> Education 405B<br>Winter Quarter | <input type="checkbox"/> Education 405C<br>Spring Quarter |
|   |   | <input type="checkbox"/> Education 305<br>Spring Quarter  |
|   |   | <input type="checkbox"/> Education 466<br>Winter Quarter  |

### Graduate Summer

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Education 409 | <input type="checkbox"/> Education 425 | <input type="checkbox"/> Education 330C (if needed) |
|--|--|---|

### Graduate Year (Resident)

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Education 498A<br>Fall Quarter | <input type="checkbox"/> Education 498B<br>Winter Quarter | <input type="checkbox"/> Education 498C<br>Spring Quarter |
| <input type="checkbox"/> Education 490A<br>Fall Quarter | <input type="checkbox"/> Education 491<br>Winter Quarter  | <input type="checkbox"/> Education 481<br>Spring Quarter  |



## General Education Requirements

UCLA College of Letters of Sciences

To better help you plan out your courses, here is the list of the General Education Requirements for UCLA College Letters of Sciences.

<i>Foundations of the Arts and Humanities</i> One course from each of the following:	15 UNITS MINIMUM <input type="checkbox"/> Literary and Cultural Analysis: _____ <input type="checkbox"/> Philosophic and Linguistic Analysis: _____ <input type="checkbox"/> Visual and Performance Arts Analysis and Practice: _____
<i>Foundations of Society and Culture</i> One course from each of the following:  Third course from either subgroup:	15 UNITS MINIMUM <input type="checkbox"/> Historical Analysis: _____ <input type="checkbox"/> Social Analysis: _____ <input type="checkbox"/> Historical Analysis or Social Analysis: _____
<i>Foundations of Scientific Inquiry:</i> Two courses from each of the following: (One with a laboratory)	18 UNITS MINIMUM <input type="checkbox"/> Life Sciences: _____ <input type="checkbox"/> Life Sciences w/ Lab: _____ <input type="checkbox"/> Physical Sciences: _____ <input type="checkbox"/> Physical Sciences w/ Lab: _____
<i>Writing I:</i>	<input type="checkbox"/> Writing I Requirement: _____
<i>Writing II:</i>	<input type="checkbox"/> Writing II Requirement: _____ A Writing II course also approved for GE credit may be applied toward the relevant GE foundation area.
<i>Diversity:</i>	<input type="checkbox"/> Diversity Requirement: _____ A Diversity course also approved for GE credit may be applied toward the relevant GE foundation area.

Note: Chemistry 20A and 20B fulfills the Physical Sciences requirement.  
 Physics 1A, 5A, 1B, 5B fulfill the Physical Sciences w/ Lab requirement.  
 Hist 13A/B/C, Hist 143A/B, Pol Sci 40 (courses that satisfy the U.S. Constitution requirement for the CA Teaching Credential) fulfill the Historical Analysis Requirement.

## PLANNER

This planner is designed to help students pursuing the Mathematics for Teaching major and Math for LA Credential Pathways plan out their courses.

### Freshmen

<i>Summer (FSP Students)</i>	
Course	Grade

<i>Fall Quarter</i>	
Course	Grade

<i>Winter Quarter</i>	
Course	Grade

<i>Spring Quarter</i>	
Course	Grade

We *encourage*\* freshmen pre-math majors interested in teaching mathematics as a profession to:

- take the Math 73SL seminar
- complete Math 31A, 31B, 32A, 61 and Pic 10A
- start working on completing three of:  
Physics 1A or 5A, 1B or 5B, 1C or 5C, Chem 20A, Chem 20B, Pic 10B – 97
- fulfill the U.S. Constitution requirement for the CA Teaching Credential by taking one of the following general ed courses: Hist 13A/B/C, Hist 143 A/B, Pol Sci 40

\* Note: Fulfilling the list above is encouraged. If you are not able to complete it, that does not mean that you are not on track. If you have any questions, refer to the contact page to set up an appointment and discuss how to plan your courses.

## Sophomore

<i>Summer</i>	
Course	Grade

<i>Fall Quarter</i>	
Course	Grade

<i>Winter Quarter</i>	
Course	Grade

<i>Spring Quarter</i>	
Course	Grade

We *encourage*\* sophomore pre-math majors interested in teaching mathematics as a profession to:

- take the Math 74 SL seminar
- complete Math 32B, 33A, 33B, and 115A
- finish completing three of:  
Physics 1A or 5A, 1B or 5B, 1C or 5C, Chem 20A, Chem 20B, Pic 10B – 97
- complete the California Basic Skills Requirement required for a CA Teaching Credential (refer to page 6)

If you are interested in the Math For LA: Integrated Pathway, applications are due **before the Fall of the applicant's third year**. Visit the [Curtis Center website](#) for additional information and to apply to the pathway.

\* Note: Fulfilling the list above is encouraged. If you are not able to complete it, that does not mean that you are not on track. If you have any questions, refer to the contact page to set up an appointment and discuss how to plan your courses.



## Information & Four-Year Planner

### Junior

<i>Summer</i>	
Course	Grade

<i>Fall Quarter</i>	
Course	Grade

<i>Winter Quarter</i>	
Course	Grade

<i>Spring Quarter</i>	
Course	Grade

We *encourage*\* junior math majors considering teaching mathematics as a profession to:

- complete Math 117 or 110A, 123 or 120A, and 131A
- complete three or four more of your particular math major's upper division coursework
- (for Math for LA Pathway applicants) complete Education 127 and Education 130

If you are interested in the Math for LA: Joint Math Education Pathway, applications are due in **December of the applicant's third year**. Visit the [Curtis Center website](#) for additional information and to apply to the pathway.

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\* Note: Fulfilling the list above is encouraged. If you are not able to complete it, that does not mean that you are not on track. If you have any questions, refer to the contact page to set up an appointment and discuss how to plan your courses.

**Senior**

<i>Summer</i>	
Course	Grade

<i>Fall Quarter</i>	
Course	Grade

<i>Winter Quarter</i>	
Course	Grade

<i>Spring Quarter</i>	
Course	Grade

We *encourage*\* seniors planning to teach mathematics as a profession to:

- complete Math 105ABC
- complete your particular math major's upper division coursework

\* Note: Fulfilling the list above is encouraged. If you are not able to complete it, that does not mean that you are not on track. If you have any questions, refer to the contact page to set up an appointment and discuss how to plan your courses.

## CONTACTS

**For additional information about the UCLA Math Department's math teacher preparation programs:**

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**For academic peer counseling, general information about the UCLA Math Department's mathematics teacher preparation programs, or general questions about MLA pathways requirements and applications:**

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**For information about earning a CA teaching credential and a Master's in Education at UCLA:**

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