School of Education

Richard Arum, Dean
3200 Education Building
General Information: 949-824-5118
Fax: 949-824-9103
http://education.uci.edu
gseinfo@uci.edu

Overview
The School of Education is a unique interdisciplinary academic unit committed to promoting educational success in and out of school for ethnically and economically diverse learners from preschool through college through collective research, teaching, and service activities. The multidisciplinary faculty includes scholars in psychology, sociology, economics, linguistics, language and literacy, policy, race and ethnicity, and the achievement gap. Their research addresses core issues in contemporary education: (1) equity of opportunity for ethnically, linguistically, and economically diverse learners; (2) teaching and learning in science and math; (3) language and literacy development; (4) early childhood education and development; (5) out-of-school learning; and (6) effective interfaces between technology and education.

The School integrates the themes of Learning, Cognition, and Development; Educational Policy and Social Context; and Language, Literacy, and Technology across its programs, including the minor in Education, the B.A. in Education Sciences, the Ph.D. in Education, the Master of Arts in Teaching, and the Teacher Credential program. Scholarly work arises from the common belief that education environments, both in and out of school, are the sites of change in the quality of life and the availability of productive life choices for learners of all ages.

Degrees

<table>
<thead>
<tr>
<th>Education</th>
<th>M.A., Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Sciences</td>
<td>B.A.</td>
</tr>
<tr>
<td>Elementary and Secondary</td>
<td>M.A.T.</td>
</tr>
</tbody>
</table>

Honors

Graduation with Honors. Honors at graduation, e.g., *cum laude, magna cum laude, summa cum laude*, are awarded to approximately the top 16 percent of the graduating seniors. To be eligible for honors, a general criterion is that students must have completed at least 72 units in residence at the University of California. The student's cumulative record at the end of the final quarter is the basis for consideration for awarding Latin honors. Other important factors are considered via Honors Recognition.

Bachelor of Arts in Education Sciences

The major in Education Sciences provides a foundation for the study of education, focused on four domains. These include (a) human development, learning, and cognition, (b) societal and policy contexts affecting education, (c) media and communication systems for learning, and (d) educational research and evaluation. Students in the major have the option of completing a specialization in: Early Childhood Learning and Development; Children’s Learning and Development; Afterschool and Summer Learning and Development; Digital Media and Learning; English Language Learning; and Educational Research and Evaluation. With advanced planning, students in the major can complete a minor or second major in another discipline.

The B.A. in Education Sciences includes content from applied linguistics, cognitive science, developmental psychology, economics, informatics, media studies, policy analytics, social neuroscience, and sociology. Graduates are prepared for careers in the global knowledge economy, with opportunities to apply learning modalities and technologies in multicultural contexts. Graduates may choose from career opportunities in public education, informatics, higher education, and education software development. Many graduates will pursue advanced degrees leading to instructional credentialing or administrative leadership.

The B.A. in Education Sciences is not a professional degree. However, graduates are well prepared to pursue teacher training (see UC Irvine School of Education M.A.T. program). Students interested in teaching elementary grades will benefit from completing the major with a specialization in Early Childhood Learning and Development, or Children’s Learning and Development. Students interested in teaching middle or high school are encouraged to meet with a Student Affairs Officer to combine the major with a minor or second major, aiming for proficiency in the subject they plan to teach. All students in the Education Sciences major are required to complete a minimum of 40 fieldwork hours in an educational setting.

Admission

Freshmen: Preference will be given to those who rank the highest using the selection criteria as stated in the Undergraduate Admissions section of the Catalogue.

Transfer students: Preference will be given to Junior-level applicants with the highest grades overall (minimum cumulative GPA of 3.0). It is suggested that prospective transfer students work toward completing coursework to fulfill the UCI general education requirements or IGETC.
Change of Major. Students who wish to change their major to Education Sciences should contact the Education Student Affairs Office for information about change-of-major requirements, procedures, and policies. Information is also available at the UCI Change of Major Criteria website (http://www.changeofmajor.uci.edu).

Requirements for the B.A. in Education Sciences (Specializations also listed)
All students must meet the University Requirements.
Grade Requirement. A minimum grade average of at least C (2.0) is required (1) overall, (2) in all of the courses required for the major program, and (3) in the upper-division courses required for the major program. All courses for the major must be taken for a letter grade unless the grade option for the course is pass/no pass only.

Overlap Restrictions
Double Majors. In fulfilling degree requirements for multiple majors, a maximum of two courses may overlap between two majors.

Major and Minor Requirements. Students may not receive both the major in Education Sciences and the minor in Educational Studies. In fulfilling requirements for a minor, a maximum of two courses may overlap between a major in Education Sciences and a minor from another department.

Major Requirements
Students must complete twelve courses (48 units) and a practicum as specified below:

Lower-Division requirements (20 units total).
A. Five Lower-Division courses (20 units):
   EDUC 10   Educational Research Design
   EDUC 15   Statistics for Education Research
   EDUC 30   21st Century Literacies
   EDUC 40   Theories of Development and Learning Applied to Education
   EDUC 50   Origins, Purposes, and Central Issues in K-12 Education

Upper-Division Requirements (28 units total).
B. Select one development course (4 units):
   EDUC 106   Introduction to Early Childhood Education
   EDUC 107   Child Development in Education
   EDUC 108   Adolescent Development and Education
   EDUC 185   Social Development in Education
C. Select one learning course (4 units):
   EDUC 128   Exceptional Learners
   EDUC 160   Foundations of Out-of-School Learning
   EDUC 173   Cognition and Learning in Educational Settings
   EDUC 176   Psychology of Learning, Abilities, and Intelligence
D. Select one educational policy and social context course (4 units):
   EDUC 124   Multicultural Education in K-12 Schools
   EDUC 126   Ethics and Education
   EDUC 145   Theories and Pedagogies of Race in Education
   EDUC 149   Family, School, and Community in Early Childhood
   EDUC 150   Changing the High School Experience
   EDUC 175   Foundations of Education
E. Select one communications and media course (4 units):
   EDUC 104E   Multimedia and the Arts in the Multicultural Classroom
   EDUC 125   Children, Schools, and Cinema
   EDUC 130   Children's Learning and Media
   EDUC 131   Educational Technology
   EDUC 134   Teaching English Internationally
   EDUC 151   Language and Literacy
F. Three additional elective Education courses (12 units). At least 8 units must be upper-division (numbered 100-199). The additional electives do not include the following professional education courses: EDUC 109, EDUC 143AW, EDUC 143BW, EDUC 148, EDUC 158. A maximum of 8 units for any repeatable Education course (e.g., EDUC 198, EDUC 199) may be used to satisfy this elective requirement.
G. Practicum Requirement (40 hours total):

A minimum of 40 hours of field experience or research in an education setting, satisfied in one or two ways.

1. Complete 40 hours of field experience or research completed in conjunction with one or more approved UCI courses that include a practicum. Consult the Education Student Affairs Office or School of Education website for Undergraduate Academic Programs for a current list of approved practicum courses.

or

2. Submit a petition to the Education Student Affairs Office for approval of verifiable hours from courses that are not on the approved practicum course list or hours from educational fieldwork that is not linked to a UCI course (e.g., tutoring experience, instructional experience in a summer program for children, etc.).

1 The following course is an approved alternative for EDUC 10: SOCECOL 10
2 The following statistics courses are approved alternatives for EDUC 15: SOCECOL 13, STATS 7, ANTHRO 10B, POL SCI 10B, PSYCH 10B, SOC SCI 10B, or SOCIOL 10B.
3 8 units of non-Education courses may be used to satisfy the major's elective requirement if the courses are also required for a student's selected specialization.

Specializations

Six optional specializations are offered to students who are completing a B.A. in Education Sciences. Specializations usually include a blend of lower and upper-division courses that also satisfy requirements for the major. In most cases where students select only Education courses to fulfill specialization requirements, they will be able to satisfy requirements for the major and requirements for a specialization concurrently, without exceeding the twelve courses (48 units) needed for the major.

Students in the major may complete more than one specialization; however, a particular course may satisfy requirements for no more than two specializations, and no more than two courses may overlap between two specializations. Students in the major are limited to two specializations.

Except where noted otherwise in specialization requirements, students may petition to apply up to 4 units of EDUC 198 or EDUC 199 courses or up to 4 units for courses from other departments to meet any of the specialization requirements when they address the topic of the specialization.

Specialization in Early Childhood Learning and Development

Select four courses (16 units) and a practicum as specified below:

Lower-Division Requirements (4 units total)
A. One lower-division course:
   EDUC 40 Theories of Development and Learning Applied to Education

Upper-Division Requirements (12 units total)
B. Three upper-division courses:
   EDUC 106 Introduction to Early Childhood Education
   EDUC 107 Child Development in Education
   EDUC 149 Family, School, and Community in Early Childhood

C. Practicum Requirement (40 hours total):
A minimum of 40 hours of field experience in an early childhood setting (pre-K) can be satisfied by taking EDUC 193 or otherwise completing verifiable fieldwork. The 40 hours of fieldwork for this specialization will concurrently satisfy the required 40-hour practicum for the major.

Students should consult the Education Student Affairs Office for information about courses that satisfy state requirements for Child Development Permits needed to teach in an early childhood setting.

Specialization in Afterschool and Summer Learning and Development

Select six courses (24 units) and a practicum as specified below:

Upper-Division Requirements (24 units total)
A. One foundations course (4 units):
   EDUC 160 Foundations of Out-of-School Learning

B. Select one development and learning course (4 units) from:
   EDUC 107 Child Development in Education
   EDUC 108 Adolescent Development and Education
   EDUC 124 Multicultural Education in K-12 Schools
   EDUC 128 Exceptional Learners

C. Select one course (4 units) from one of the following curricula themes:
   Literacy
   EDUC 132 Reading and Writing Enrichment for After-School Programs
EDUC 138  Children's Literature in the Elementary Classroom

Math

Science
EDUC 161  Discovering Science in Out-of-School Hours

Tutoring
EDUC 100  Educational Strategies for Tutoring and Teacher Aiding

D. Select one course (4 units) from one of the following curricula themes

Arts
EDUC 104D  Preparation for Teaching Fine Arts in K-12 Schools
EDUC 137  Art in the Elementary School

Educational Technology
EDUC 131  Educational Technology

Sports and Fitness
EDUC 190  Principles and Practices of K–6 After School Sports and Fitness

Program Evaluation
EDUC 157  Educational Research and Evaluation

E. Select one additional course from a different curricula theme not previously used to satisfy requirement C or D (4 units).

F. A capstone course (4 units):
EDUC 191  Advanced Fieldwork in After-School Education

G. Practicum Requirement (70 hours total):
A minimum of 70 hours of field experience in an out-of-school setting is satisfied by taking EDUC 160 (includes 20 hours of fieldwork at a site approved by the course instructor) and EDUC 191 (includes 50 hours of fieldwork at a site approved by the course instructor). The 70 hours of fieldwork for this specialization will concurrently satisfy the required 40-hour practicum for the major.

Specialization in Children’s Learning and Development
Select six courses (24 units) and a practicum as specified below:

Lower-Division Requirements (4 units total)
A. One lower-division course:
EDUC 40  Theories of Development and Learning Applied to Education

Upper-Division Requirements (20 units total)
B. Three upper-division courses:
EDUC 107  Child Development in Education
EDUC 124  Multicultural Education in K-12 Schools
EDUC 173  Cognition and Learning in Educational Settings

C. Select two additional upper-division courses (8 units) from:
EDUC 122A  Foundations of Elementary School Mathematics I
EDUC 122B  Foundations of Elementary School Mathematics II
EDUC 122C  Foundations of Elementary School Mathematics III
EDUC 128  Exceptional Learners
EDUC 130  Children's Learning and Media
EDUC 132  Reading and Writing Enrichment for After-School Programs
EDUC 137  Art in the Elementary School
EDUC 138  Children's Literature in the Elementary Classroom
EDUC 151  Language and Literacy
EDUC 161  Discovering Science in Out-of-School Hours
EDUC 190  Principles and Practices of K–6 After School Sports and Fitness

D. Practicum Requirement (40 hours total):
A minimum of 40 hours of field experience in a children's education setting (e.g., ages 5 through 12) can be satisfied in one of two ways. The 40 hours of fieldwork for this specialization will concurrently satisfy the required 40-hour practicum for the major.
1. Complete 40 hours of relevant field experience in conjunction with one or more approved UCI courses that include a practicum in a children's education setting. Consult the Education Student Affairs Office or School of Education website for Undergraduate Academic Programs for a current list of approved UCI courses.

or

2. Submit a petition to the Education Student Affairs Office for approval of verifiable hours from courses that are not on the approved practicum course list or hours from educational fieldwork that is not linked to a UCI course (e.g., tutoring experience, instructional experience in a summer program for children, etc.).

Students should consult the Education Student Affairs Office for information about several courses that offer an early start on requirements for the UCI post-baccalaureate Multiple Subject (elementary) Teaching Credential Program.

**Specialization in Digital Media and Learning**

Select four courses (16 units) as specified below:

**Lower-Division and Upper-Division Requirements (16 units total)**

A. Select four courses (16 units) from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 30</td>
<td>21st Century Literacies</td>
</tr>
<tr>
<td>EDUC 104E</td>
<td>Multimedia and the Arts in the Multicultural Classroom</td>
</tr>
<tr>
<td>EDUC 130</td>
<td>Children's Learning and Media</td>
</tr>
<tr>
<td>EDUC 131</td>
<td>Educational Technology</td>
</tr>
<tr>
<td>I&amp;C SCI 3</td>
<td>Internet Technologies and their Social Impact</td>
</tr>
<tr>
<td>I&amp;C SCI 4</td>
<td>Human Factors for the Web</td>
</tr>
<tr>
<td>I&amp;C SCI 60</td>
<td>Computer Games and Society</td>
</tr>
<tr>
<td>I&amp;C SCI 161</td>
<td>Game Engine Lab</td>
</tr>
</tbody>
</table>

A maximum of 8 units can be for I&C SCI courses.

**Specialization in English Language Learning**

Select five courses (20 units) and a practicum as follows:

**Lower-Division Requirements (4 units total)**

A. One lower-division course (4 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 30</td>
<td>21st Century Literacies</td>
</tr>
</tbody>
</table>

**Upper-Division Requirements (8 units total)**

B. Two upper-division courses (8 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 134</td>
<td>Teaching English Internationally</td>
</tr>
<tr>
<td>EDUC 151</td>
<td>Language and Literacy</td>
</tr>
</tbody>
</table>

**Additional Lower-Division and Upper Division Elective Requirement (8 units total)**

C. Select two additional courses (8 units) from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 132</td>
<td>Reading and Writing Enrichment for After-School Programs</td>
</tr>
<tr>
<td>EDUC 138</td>
<td>Children's Literature in the Elementary Classroom</td>
</tr>
<tr>
<td>EDUC 151</td>
<td>Language and Literacy</td>
</tr>
<tr>
<td>EDUC 179W</td>
<td>Advanced Composition for Teachers</td>
</tr>
<tr>
<td>LINGUIS 3</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>LINGUIS 10</td>
<td>Introduction to Phonology</td>
</tr>
<tr>
<td>LINGUIS 20</td>
<td>Introduction to Syntax</td>
</tr>
<tr>
<td>LINGUIS 51</td>
<td>Acquisition of Language</td>
</tr>
<tr>
<td>LINGUIS 68</td>
<td>Introduction to Language and Culture</td>
</tr>
<tr>
<td>LINGUIS 99</td>
<td>Special Topics in Linguistics</td>
</tr>
<tr>
<td>LINGUIS 111</td>
<td>Intermediate Phonology</td>
</tr>
<tr>
<td>LINGUIS 112</td>
<td>Advanced Phonology</td>
</tr>
<tr>
<td>LINGUIS 119</td>
<td>Special Topics in Phonetics/Phonology</td>
</tr>
<tr>
<td>LINGUIS 121</td>
<td>Intermediate Syntax</td>
</tr>
<tr>
<td>LINGUIS 155</td>
<td>Psychology of Language</td>
</tr>
</tbody>
</table>

A maximum of 8 units can be for Linguistics courses.

D. Practicum Requirement (40 hours total): A minimum of 40 hours of field experience in an English language learning setting can be satisfied in one of two ways. The 40 hours of fieldwork for this specialization will concurrently satisfy the required 40-hour practicum for the major.
A minimum of 40 hours of field experience in an English language learning setting can be satisfied in one of two ways. The 40 hours of fieldwork for this specialization will concurrently satisfy the required 40-hour practicum for the major.

1. Complete 40 hours of relevant field experience in conjunction with one or more approved UCI courses that include a practicum in an English language learning setting. Consult the Education Student Affairs Office or School of Education website for Undergraduate Academic Programs for a current list of approved UCI courses.

or

2. Submit a petition to the Education Student Affairs Office for approval of verifiable hours from courses that are not on the approved practicum course list or hours from educational fieldwork that is not linked to a UCI course (e.g., tutoring experience, instructional experience in a language learning context, etc.).

Specialization in Research and Evaluation

Select five courses (20 units) as specified below:

Lower-Division Requirements (8 units total)
A. Two lower-division courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 10</td>
<td>Educational Research Design</td>
</tr>
<tr>
<td>EDUC 15</td>
<td>Statistics for Education Research</td>
</tr>
</tbody>
</table>

Upper-Division Requirements (12 units total)
B. Select three upper-division courses from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EDUC 156</td>
<td>Introduction to Field Methods in Education</td>
</tr>
<tr>
<td>EDUC 157</td>
<td>Educational Research and Evaluation</td>
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<tr>
<td>EDUC 159</td>
<td>Experimental Research Methods</td>
</tr>
<tr>
<td>EDUC 198</td>
<td>Directed Research in Education</td>
</tr>
<tr>
<td>STATS 110</td>
<td>Statistical Methods for Data Analysis I</td>
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</tbody>
</table>

1 The following statistics courses are approved alternatives for EDUC 15: SOCECOL 13 or STATS 7. The following course sequences are approved alternatives for EDUC 15 (both courses in the sequence must be completed): ANTHRO 10B; POL SCI 10B; PSYCH 10B; SOC SCI 10B; or SOCIOL 10B.

2 A maximum of 4 units of EDUC 198 may be used to satisfy requirements for this specialization.

Sample Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>Education Elective</td>
<td>Education Elective</td>
<td>Education Elective</td>
</tr>
<tr>
<td>Senior</td>
<td>Education U-D Communications/Media Course</td>
<td>Education U-D Policy/Social Context Course</td>
<td>Education Elective</td>
</tr>
<tr>
<td>Senior</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
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<td>Senior</td>
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</table>

Sample Program

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<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>EDUC 50</td>
<td>EDUC 40</td>
<td>EDUC 30</td>
</tr>
<tr>
<td>Freshman</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
</tr>
<tr>
<td>Freshman</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
</tr>
<tr>
<td>Sophomore</td>
<td>EDUC 10</td>
<td>EDUC 15</td>
<td>Education Elective</td>
</tr>
<tr>
<td>Sophomore</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
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<tr>
<th>Year</th>
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<th>Winter</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>Junior</td>
<td>Education U-D Learning Course</td>
<td>Education U-D Development Course</td>
<td>Education U-D Policy/Social Context Course</td>
</tr>
<tr>
<td>Junior</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
</tr>
<tr>
<td>Junior</td>
<td>General Education/Elective</td>
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<td>General Education/Elective</td>
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<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>Education Elective</td>
<td>Education U-D Communications/Media Course</td>
<td>Education Elective</td>
</tr>
<tr>
<td>Senior</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
<td>General Education/Elective</td>
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<tr>
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</tbody>
</table>
Undergraduate Minor in Education

The minor in Education is designed to facilitate exploration of a broad range of issues in the field of education. Graduates with the Education minor may be employed in schools, government, private industry, and non-profit organizations. Many graduates will pursue advanced training leading to teaching careers or administrative leadership.

Requirements for the Minor in Education

The minor requires completion of a minimum of seven courses (four core courses and three electives) totaling 28 units. At least four courses must be upper-division. Students must also complete a minimum of 40 hours of verifiable field experience or research in an educational setting. No more than two non-Education courses (up to 8 units) from the student’s major area of study may be used to satisfy the minor requirements. A maximum of 8 units may be used to satisfy minor requirements with any repeatable course.

A. Select four core courses (16 units) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 10</td>
<td>Educational Research Design ¹</td>
</tr>
<tr>
<td>EDUC 15</td>
<td>Statistics for Education Research</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>21st Century Literacies ¹</td>
</tr>
<tr>
<td>EDUC 40</td>
<td>Theories of Development and Learning Applied to Education ¹</td>
</tr>
<tr>
<td>EDUC 50</td>
<td>Origins, Purposes, and Central Issues in K-12 Education</td>
</tr>
<tr>
<td>EDUC 107</td>
<td>Child Development in Education</td>
</tr>
<tr>
<td>EDUC 108</td>
<td>Adolescent Development and Education</td>
</tr>
<tr>
<td>EDUC 124</td>
<td>Multicultural Education in K-12 Schools</td>
</tr>
<tr>
<td>EDUC 160</td>
<td>Foundations of Out-of-School Learning</td>
</tr>
<tr>
<td>EDUC 173</td>
<td>Cognition and Learning in Educational Settings</td>
</tr>
<tr>
<td>EDUC 175</td>
<td>Foundations of Education</td>
</tr>
<tr>
<td>EDUC 176</td>
<td>Psychology of Learning, Abilities, and Intelligence</td>
</tr>
</tbody>
</table>

B. Select three elective courses (12 units) from the following:

1. Education courses numbered 1—199. A course selected to satisfy the minor core requirement cannot also be used to satisfy the elective requirement. A maximum of 4 elective units may be taken as research or independent study in EDUC 198.

C. Practicum. A minimum of 40 hours of field experience in an educational setting. Students may complete 40 hours of field experience from a list of approved practicum courses offered by the School of Education, which can include EDUC 198. Students may also petition to receive credit for practicum from other UCI courses.

¹ Course also satisfies university General Education requirements.

Residence Requirement. At least four upper-division courses must be successfully completed at UCI.

GPA Requirement. For certification in the minor, a student must obtain a minimum overall grade point average of at least C (2.0) in all courses required for the minor program. A maximum of 8 units of Pass/No Pass courses may be taken for the minor.

Minor and Major. Students may not receive both the minor in Education and the major in Education Sciences.

Aspiring K-12 Educators. The following courses satisfy core or elective requirements for the minor in Education and may satisfy some requirements for the UCI MAT/Credential program when the students earns a grade of B or better. Aspiring K-12 educators or students interested in a child development permit should consult a counselor in the Education Student Affairs Office about courses that are suited for the UCI MAT/Credential program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 104D</td>
<td>Preparation for Teaching Fine Arts in K-12 Schools ¹</td>
</tr>
<tr>
<td>EDUC 107</td>
<td>Child Development in Education (combined with EDUC 124) ¹</td>
</tr>
<tr>
<td>EDUC 108</td>
<td>Adolescent Development and Education ²</td>
</tr>
<tr>
<td>EDUC 124</td>
<td>Multicultural Education in K-12 Schools ²</td>
</tr>
<tr>
<td>EDUC 128</td>
<td>Exceptional Learners</td>
</tr>
<tr>
<td>EDUC 131</td>
<td>Educational Technology ²</td>
</tr>
<tr>
<td>EDUC 137</td>
<td>Art in the Elementary School ¹</td>
</tr>
<tr>
<td>EDUC 173</td>
<td>Cognition and Learning in Educational Settings</td>
</tr>
<tr>
<td>EDUC 176</td>
<td>Psychology of Learning, Abilities, and Intelligence</td>
</tr>
<tr>
<td>EDUC 190</td>
<td>Principles and Practices of K–6 After School Sports and Fitness ¹</td>
</tr>
<tr>
<td>POL SCI 21A</td>
<td>Introduction to American Government ³</td>
</tr>
</tbody>
</table>

¹ May satisfy a requirement for aspiring multiple subject educators.
School of Education

May satisfy a requirement for aspiring single subject educators.

Satisfies U.S. Constitution California Teaching Credential Requirement.

Undergraduate Programs for Future Teachers Offered by Other Departments. Undergraduates who are completing a minor in Education and who are considering a teaching career may also be interested in the following programs offered by other departments.

- School of Humanities: English Major with a Specialization in English for Future Teachers; History Major with a Specialization in History for Future Teachers; Spanish Major with an Emphasis in Spanish for Future Teachers
- Francisco J. Ayala School of Biological Sciences: Major in Biological Sciences with Concentration in Biological Sciences Education
- School of Physical Sciences: Chemistry Major with a Concentration in Chemistry Education; Math Major with a Specialization in Mathematics for Education; Physics Major with a Concentration in Physics Education.

Additionally, the School of Education, School of Physical Sciences, and Francisco J. Ayala School of Biological Science jointly sponsor an undergraduate teacher credential program for math and science majors.

On This Page:
- Multiple Subject Teaching Credential
- Single Subject Teaching Credential
- Requirements for the Undergraduate Cal Teach Science and Mathematics Single Subject Credential Program
- Administrative Services Credential

Teaching and Service Credential Programs

The School of Education is authorized by the Commission on Teacher Credentialing to offer teacher and school administrator professional preparation programs for California teaching and service credentials. The School offers programs for multiple and single subject credentials. Also, in partnership with the Francisco J. Ayala School of Biological Sciences and the School of Physical Sciences, the School of Education offers the Cal Teach Science and Mathematics Program, an undergraduate Student Teacher Credential program for aspiring science or mathematics teachers. Additionally, in cooperation with UCI Division of Continuing Education, the School offers Administrative Services Credential programs and a Reading Certificate program.

Multiple Subject Teaching Credential

The Multiple Subject Teacher Credential Program will not be accepting applications for the 2016-17 or 2017-18 academic years. Individuals interested in earning a multiple subject teaching credential are encouraged to apply to the UCI Master of Arts in Teaching/Credential Program.

Single Subject Teaching Credential

The Single Subject Teacher Credential Program will not be accepting applications for the 2016-17 or 2017-18 academic years. Individuals interested in earning a single subject teaching credential are encouraged to apply to the UCI Master of Arts in Teaching/Credential Program.

Requirements for the Undergraduate Cal Teach Science and Mathematics Single Subject Credential Program

The following academic units offer undergraduates an option to earn a bachelor’s degree in mathematics or a science discipline while concurrently satisfying requirements for a Single Subject Teaching Credential: Departments of Chemistry, Earth System Sciences, Mathematics, Physics and Astronomy, and the Francisco J. Ayala School of Biological Sciences. Interested students should consult degree program options described in this Catalogue or talk with a counselor in the School of Physical Sciences Student Affairs Office or the Francisco J. Ayala School of Biological Sciences Student Affairs Office. With careful, early planning, it is possible for students to complete their bachelor’s degree and teacher certification in four years.

Prior to Entry in the Cal Teach Single Subject Credential Program:
- Declare a major and, if applicable, a concentration in secondary education in one of the departments offering a Cal Teach Science and Mathematics credentialing option;
- Complete a Cal Teach Program enrollment form, indicating intent to complete requirements for the Single Subject Teaching Credential for mathematics or one of the science disciplines. This must be done by the end of an undergraduate’s second year at the latest, and prior to enrolling in EDUC 55, which would typically be completed in fall of the third year. Enrollment forms are available in the School of Physical Sciences Student Affairs Office (134 Rowland Hall), the Francisco J. Ayala School of Biological Sciences Student Affairs Office (third floor, Biological Sciences III), and the Cal Teach Science and Mathematics Resource and Advising Center (137 Bison Modular).

Prior to the Start of Student Teaching:
- Pass the California Basic Education Skills Test (CBEST);
- Pass the California Subject Exam for Teachers (CSET) or complete a subject-matter preparation program (available for Mathematics only);
- Hold a current Certificate of Clearance from the State of California;
Hold a current TB test with negative results.

**Course and Fieldwork**

Candidates who enroll in the undergraduate Cal Teach Single Subject Teacher Credential program at UCI are generally required to take the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY SCI 5/BIO SCI 14</td>
<td>California Teach 1: Introduction to Science and Mathematics Teaching</td>
</tr>
<tr>
<td>PHY SCI 105/BIO SCI 101</td>
<td>California Teach 2: Middle School Science and Mathematics Teaching ¹</td>
</tr>
<tr>
<td>CHEM/PHYSICS 193/BIO SCI 108</td>
<td>Research Methods</td>
</tr>
<tr>
<td>MATH 8</td>
<td>Explorations in Functions and Modeling (for Mathematics candidates only)</td>
</tr>
<tr>
<td>LPS 60</td>
<td>The Making of Modern Science</td>
</tr>
<tr>
<td>or MATH 184 &amp; 184L</td>
<td>History of Mathematics and History of Mathematics Lesson Lab</td>
</tr>
<tr>
<td>EDUC 55</td>
<td>Knowing and Learning in Mathematics and Science ¹</td>
</tr>
<tr>
<td>EDUC 109</td>
<td>Reading and Writing in Secondary Mathematics and Science Classrooms ¹</td>
</tr>
<tr>
<td>EDUC 143AW</td>
<td>Classroom Interactions I</td>
</tr>
<tr>
<td>EDUC 143BW</td>
<td>Classroom Interactions II</td>
</tr>
<tr>
<td>EDUC 148</td>
<td>Complex Pedagogical Design ¹</td>
</tr>
<tr>
<td>EDUC 158</td>
<td>Student Teaching Mathematics and Science in Middle/High School ¹</td>
</tr>
</tbody>
</table>

¹ In order to be recommended for the Preliminary Single Subject Credential, a grade of C or better is required in the following Cal Teach teacher credential program courses: PHY SCI 105/BIO SCI 101; EDUC 55, EDUC 109, EDUC 143AW, EDUC 143BW, and EDUC 148. A grade of C or better is required for all sections of EDUC 158 (a repeatable course) that students complete, including all EDUC 158 sections with a student teaching requirement.

Student teaching for Single Subject candidates in the undergraduate Cal Teach program is defined as a minimum of four hours per day, five days per week for at least one full public school semester in an appropriate classroom setting in middle or high school.

Readiness for student teaching shall be determined by, but not be limited to, the candidate’s academic work, professional conduct, and potential for success in teaching. Failure to be advanced to student teaching will be considered good cause for removal and/or a leave of absence from the program.

**Applying for a California Credential**

In addition to fulfilling all of the above requirements, an applicant must:

- Show evidence of a college-level course, or pass an approved examination on the U.S. Constitution;
- Obtain a CPR certificate in Adult, Child, and Infant resuscitation training;
- Pass the Teacher Performance Assessment
- Official UCI transcript must show that bachelor’s degree has been awarded.

If competence has been demonstrated by the conclusion of the student teaching program, and all other CTC and Departmental requirements are met, the undergraduate candidate is eligible for a preliminary credential through UCI.

**Supplementary and Additional Teaching Authorizations.** After acquiring a basic credential, it is possible to add further teaching authorizations. Consult an academic counselor in the School of Education for details.

**Administrative Services Credential**

The School of Education sponsors a program through UCI Division of Continuing Education leading to the Administrative Services Credential. The Preliminary Administrative Services Credential is obtained by completing the approved program of 36 quarter units and a comprehensive examination. This credential also requires a valid basic credential, five years of full-time teaching or services experience, and passage of the CBEST.

The Professional Clear Administrative Services Credential begins when an administrative position is obtained. The UCI Professional Clear Administrative Services program requires the successful completion of two years of full-time school administrative experience, the Preliminary Administrative Services Credential, and six (6) quarter units (Induction and Final Evaluation, Education 398A-B) which provide structured mentoring, self-assessment, and formative/summative evaluation of the candidate. Those interested in these credentials should visit the UCI Division of Continuing Education website (https://ce.uci.edu) or call 949-824-5414.

**Faculty**

Jonathan Alexander, Ph.D. Louisiana State University, *Campus Writing Coordinator and Professor of English; Culture and Theory; Education; Gender and Sexuality Studies* (writing studies, sexuality studies, queer theory, new media studies)
Richard Arum, Ph.D. University of California, Berkeley, Dean of the School of Education and Professor of Education; Sociology

Drew Bailey, Ph.D. University of Missouri, Assistant Professor of Education

Rachel Baker, Ph.D. Stanford University, Assistant Professor of Education

Bruce Baron, M.S. Pepperdine University, Lecturer of Education

Frank D. Bean, Ph.D. Duke University, UCI Distinguished Professor of Sociology; Economics; Education (international migration, demography, Mexican immigration, racial and ethnic relations, economic sociology, family)

Robert J. Beck, Ph.D. University of Chicago, Senate Emeritus of Education

Henry J. Becker, Ph.D. Johns Hopkins University, Professor Emeritus of Education

Liane R. Brouillette, Ph.D. University of Colorado Boulder, Professor of Education (educational policy, arts-based learning)

Chuansheng Chen, Ph.D. University of Michigan, UCI Chancellor's Professor of Psychology and Social Behavior; Education (cross-cultural psychology, adolescent development, cognitive neuroscience, genes and behavior)

Penelope R. Collins, Ph.D. University of Toronto, Associate Professor of Education

Gilberto Q. Conchas, Ph.D. University of Michigan, Professor of Education; Sociology (urban education, sociology of education, comparative race and ethnicity)

AnneMarie M. Conley, Ph.D. University of Michigan, Assistant Professor of Education

Carol McDonald Connor, Ph.D. University of Michigan, Chancellor's Professor of Education (language and literacy development, including writing, learning disabilities and dyslexia, deaf and hard of hearing (DHH))

Kevin Dempsey, M.S. California State University, Fullerton, Lecturer of Education

Greg Duncan, Ph.D. University of Michigan, UCI Distinguished Professor of Education; Economics; Psychology and Social Behavior (economics of education, program evaluation, child development)

Jacquelynne S. Eccles, Ph.D. University of California, Los Angeles, UCI Distinguished Professor of Education; Psychology and Social Behavior (academic motivation and achievement, school and family influences on adolescent development, gender and ethnicity in STEM fields)

Dennis Evans, Ed.D. University of Southern California, Non-Senate Academic Emeritus of Education

George Farkas, Ph.D. Cornell University, Professor of Education; Sociology (social ethnic minority education, cognition, behavior)

Cynthia Feliciano, Ph.D. University of California, Los Angeles, Associate Professor of Sociology; Education (race/ethnicity/minority relations, migration and immigration, education)

David John Frank, Ph.D. Stanford University, Professor of Sociology; Education; Political Science (globalization, sexuality, the natural environment, higher education)

Wendy A. Goldberg, Ph.D. University of Michigan, Associate Professor of Psychology and Social Behavior; Education (developmental psychology, work and family, infant sleep, transition to parenthood, autism)

Shane Goodridge, Ph.D. University of Victoria, Assistant Teaching Professor of Education

Jody Guarino, Ed.D. Azusa Pacific University, Lecturer and Supervisor of Teacher of Education

Susan Guilfoyle, M.S. University of Southern California, Lecturer of Education (reading, language and literacy)

Gillian Hayes, Ph.D. Georgia Institute of Technology, Professor of Informatics; Education (interactive and collaborative technology, human-computer interaction, computer-supported cooperative work, educational technology, ubiquitous computing)

Marie-Charlotte Henderson, M.A. University of California, Irvine, Lecturer of Education

Alan R. Hoffer, Ph.D. University of Michigan, Professor Emeritus of Education

Jeffrey J. Hruby, M.A. California State University, Fullerton, Lecturer of Education

Bradley S. Hughes, Ph.D. University of California, Irvine, Lecturer with Security of Employment of Ecology and Evolutionary Biology; Education

Karajeen Hyde, M.A. Vanguard University, Lecturer of Education (mathematics education)
Constance Iloh, Ph.D. University of Southern California, Assistant Professor of Education

Mizuko Ito, Ph.D. Stanford University, John D. and Catherine T. MacArthur Foundation Chair in Digital Media and Learning and Professor in Residence of Anthropology; Education; Informatics (ethnography, game studies, youth culture, learning sciences, online communities)

Susanne M. Jaeggi, Ph.D. University of Bern, Associate Professor of Education; Cognitive Sciences (working memory, executive functions, cognitive training, lifespan development aging, individual differences)

Susan C. Jarrett, Ph.D. University of Texas at Austin, Professor Emerita of Comparative Literature; Education (histories and theories of rhetoric, ancient Greek rhetoric, writing studies)

Jade Marcus Jenkins, Ph.D. University of North Carolina at Chapel Hill, Assistant Professor of Education

Jeffrey M. Johnston, M.A. University of Southern California, Lecturer in Education

Hosun Kang, Ph.D. Michigan State University, Assistant Professor of Education

Young-Suk Kim, Ed.D. Harvard University, Professor of Education

Kimberly Lakes, Ph.D. University of Wisconsin-Madison, Associate Professor in Residence of Pediatrics; Education

Joshua F. Lawrence, Ed.D. Boston University, Assistant Professor of Education

Glenn S. Levine, Ph.D. University of Texas at Austin, German Language Program Director and Professor of German; Education; Linguistics (applied linguistics, foreign language pedagogy, German-Jewish culture and history, Yiddish language and culture, European culinary history)

Julia R. Lupton, Ph.D. Yale University, Associate Dean for Research and Professor of English; Comparative Literature; Education; Religious Studies (Renaissance literature, literature and psychology)

Virginia Mann, Ph.D. Massachusetts Institute of Technology, Professor of Linguistics; Education (reading ability: phenome awareness, developmental dyslexia, phonological skills, early intervention, precocious readers; speech perception: context effects, cross-linguistic comparisons)

Jack R. McCullough, Ph.D. United States International University, Lecturer with Security of Employment Emeritus of Education

Carol Booth Olson, Ph.D. University of California, Los Angeles, Professor of Education

Emily K. Penner, Ph.D. University of California, Irvine, Assistant Professor of Education

Rita W. Peterson, Ph.D. University of California, Berkeley, Senior Lecturer with Security of Employment Emerita of Education

Stephanie Reich, Ph.D. Vanderbilt University, Associate Professor of Education; Informatics; Psychology and Social Behavior (child development, parenting, peer interactions, media, program evaluation)

Maria F. Rosales Rueda, Ph.D. University of Chicago, Assistant Professor of Education; Economics

Ruben G. Rumbaut, Ph.D. Brandeis University, Distinguished Professor of Sociology; Chicano/Latino Studies; Criminology, Law and Society; Education (international migration, immigration laws, criminalization, incarceration, social inequality and mobility, race and ethnicity)

Judith Haymore Sandholtz, Ph.D. Stanford University, Professor of Education

Rossella Santagata, Ph.D. University of California, Los Angeles, Associate Professor of Education

Robin C. Scarcella, Ph.D. University of Southern California, Professor of Academic English/English as a Second Language; Education

Sabrina E. Schuck, Ph.D. University of California, Riverside, Health Sciences Assistant Clinical Professor of Pediatrics; Education; Psychology and Social Behavior (ADHD, autistic spectrum disorders, disorders of reading and written language, human-animal intervention, non-pharmacological treatment of disruptive behavior, cognitive-behavioral school-based and family-based interventions)

Therese B. Shanahan, Ed.D. University of Southern California, Lecturer in Education

Sandra Simpkins, Ph.D. University of California, Riverside, Associate Professor of Education (organized after-school activities, motivation, family influences, diversity and equity, immigration and culture, STEM)

Jeanne M. Stone, M.A. California State University, Long Beach, Lecturer in Education

Timothy M. Tift, M.A. Pepperdine University, Lecturer with Security of Employment Emeritus of Education

William M. Tomlinson, Ph.D. Massachusetts Institute of Technology, Professor of Informatics; Education (environmental informatics, educational technology, computer graphics/visualization/digital arts)
Deborah Lowe Vandell, Ph.D. Boston University, Professor of Education; Psychology and Social Behavior (longitudinal studies of development, early childhood education, after-school programs, summer learning, child development, adolescent development)

Brad W. Vanpatten, M.A. California State University, Long Beach, Lecturer of Education

Mark J. Warschauer, Ph.D. University of Hawaii at Manoa, Professor of Education; Informatics (language, literacy, technology, STEM)

Di Xu, Ph.D. Columbia University, Assistant Professor of Education

Elizabeth van Es, Ph.D. Northwestern University, Associate Professor of Education