Graduate Degree Programs in Education

Master of Science in Chemistry or Mathematics with a Teaching Credential

In cooperation with the Departments of Chemistry and Mathematics, the School of Education offers coordinated programs for the California Single Subject Teaching Credential and a Master of Science degree in Chemistry or Mathematics. Additional information is available from the School of Education Student Affairs Office and the Graduate Affairs Office in the Departments of Chemistry and Mathematics.

Master of Arts in Social Science with a Teaching Credential

In cooperation with the School of Social Sciences, students enrolled in a graduate program offered by the School may choose to pursue a teaching credential while working toward their degree. After completion of the requirements for an M.A. degree, students may petition to enroll in credential program courses with the School of Education. Credential program requirements, such as the Certificate of Clearance, TB clearance, and the passage of CBEST and CSET, may need to be met prior to the approval of the petition. A detailed description of the program may be obtained from the School of Education Student Affairs Office and the Social Sciences Graduate Office.

Master of Arts in Teaching in Elementary and Secondary Education

The School of Education offers a 15-month Master of Arts degree program in Elementary and Secondary Education. The M.A.T. program is comprised of the one-year UCI teacher credential program with six additional courses, usually taken in the summers before and after the credential program, but also available in the two summers following the credential program. This program provides a rich theoretical and practical framework with a focus on Learning to Learn from Teaching, or continuously studying the impact of one’s teaching on student learning.

Admission to the Program

Selection is based on the graduate admission requirements of the UCI Graduate Division, which include the strength of the undergraduate academic record, GRE scores, statement of purpose, and letters of recommendation.

Submit an application through the Graduate Division.

Evidence of Academic Achievement–Official Transcripts from all post-secondary institutions. Completion of a baccalaureate degree from an accredited institution and a minimum grade point average of 3.0 will support admission to the credential programs. Undergraduates who enroll in courses leading to a credential are not guaranteed admission to the program; admission through the regular graduate admissions process is required.

NOTE: Applicants in the following categories must verify subject matter competence and basic skills (see below) as a condition of admission.

1. If GPA is less than 3.0.
2. If you have not completed a major, a minor, or a significant number of college-level courses in the single subject discipline for which you are applying (e.g., mathematics, English, science).
3. If you are applying for the Spring Start Intern Teacher Program.

Written Recommendations. Three letters of recommendation, including at least one from an academic source, from individuals who are familiar with the applicant’s (1) ability to pursue graduate study, (2) capacity to work with children, and/or (3) demonstrated fitness for the professional environment of teaching.

Prior to the Start of the Program

- Pass the California Basic Educational Skills Test;
- Pass the required California Subject Matter Tests or complete an approved subject-matter preparation program in the content area;
- Hold a current Certificate of Clearance or Substitute Teaching Permit from the State of California;
- Hold a current TB test with negative results.

Program of Study

Summer One – Multiple and Single Subject

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 201</td>
<td>Teachers’ Lives and Policy Environment of Teaching</td>
</tr>
<tr>
<td>EDUC 202</td>
<td>Outcomes of Schooling/Student Assessment</td>
</tr>
<tr>
<td>EDUC 240</td>
<td>Instructional Design and Education Technology</td>
</tr>
</tbody>
</table>
**Graduate Degree Programs in Education**

**Summer Two – Multiple Subject Credential Program**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 203</td>
<td>Advanced Concepts in Learning and Cognition</td>
</tr>
<tr>
<td>EDUC 205</td>
<td>Critical Assessment of Teaching Practice and Learning</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Cognition and Pedagogy in Quantitative Literacy</td>
</tr>
</tbody>
</table>

**Summer Two – Single Subject Credential Program**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 203</td>
<td>Advanced Concepts in Learning and Cognition</td>
</tr>
<tr>
<td>EDUC 205</td>
<td>Critical Assessment of Teaching Practice and Learning</td>
</tr>
<tr>
<td>EDUC 206</td>
<td>Design of Learning Environments for Teachers in Secondary School Subjects</td>
</tr>
</tbody>
</table>

A comprehensive examination is completed by M.A.T. candidates during the second summer. The examination is an action research project embedded in EDUC 205.

A grade of B or better is required in all courses and in student teaching for successful completion of the program.

Student teaching for Multiple Subject candidates (grades K–6) is defined as a full-day, four days per week during the first quarter of student teaching and a full-day, five days per week during the second quarter of student teaching. Assignments will include two levels within the K–6 range in elementary schools.

Student teaching for Single Subject candidates (grades 7–12) in the post-baccalaureate program is defined as a full-day, five days per week for one public school semester in an appropriate classroom setting in a middle or high school.

Readiness for student teaching shall be determined by, but not be limited to, 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:

- Show evidence 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.

**Adding 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.

**Doctor of Philosophy in Education**

The School of Education offers a Ph.D. degree in Education. The program seeks applicants from varied backgrounds and experiences who have the potential to become outstanding scholars and researchers in the field of education. The program currently offers three specializations: (1) Learning, Cognition, and Development; (2) Educational Policy and Social Context; and (3) Language, Literacy, and Technology. Students enrolling in the program choose among the specializations based on their research interests. Course work for the program ordinarily takes two to three years to complete and involves a number of core courses, methodology courses, elective courses, and a directed research sequence. Students should advance to candidacy in their third year. The normative time for completion of the Ph.D. is five years, and the maximum time permitted is seven years. Program length may be shorter for students who enter the program with a prior master’s degree in an area closely related to their doctoral research.

Students are admitted to the program once per year to begin each fall quarter. Applicants must have completed a bachelor’s degree with a grade point average of at least 3.0 and have prior course work or background related to the specialization for which they express interest. Applicants are required to submit a UCI application, transcripts, a statement of purpose, a personal statement, CV or resume, a writing sample, three letters of reference, and general GRE scores completed within the past five years. Students whose primary language is not English and who did not graduate from a U.S. college or university are also required to submit scores from either the TOEFL examination or the Academic Modules of the International English Language Testing System (IELTS).

Financial support will be offered on a competitive basis in the form of teaching or research assistantships. Students who are not citizens of countries where English is the primary or dominant language who wish to apply for a teaching assistantship will be required to fulfill an English proficiency requirement.

Further information regarding the Ph.D. program, courses, and application requirements is available at the School of Education (http://www.education.uci.edu) website.
Master of Arts in Education

The School of Education offers an M.A. degree in Education as an option exclusively for students who are admitted to the Ph.D. in Education program. Separate applications for the M.A. in Education will not be accepted. Further information regarding the requirements for the M.A. in Education for students enrolled in the Ph.D. program is available at the School of Education (http://www.education.uci.edu) website.

Courses

EDUC 10. Educational Research Design. 4 Units.
Designed to help students become intelligent consumers of research and independent researchers, this course provides an introduction to the basic principles of educational research. Topics include research questions, literature reviews, and qualitative and quantitative research designs.

(III)

EDUC 15. Statistics for Education Research. 4 Units.
Provides an introduction to the use of statistics in educational research. Focusing on testing and measurement, the course provides basic tools to read, interpret, and draw conclusions from quantitative educational research.

Prerequisite: EDUC 10.

(Va)

EDUC 30. 21st Century Literacies. 4 Units.
Provides an overview of literacies required for academic and career success in the 21st century. Issues addressed include reading, writing, academic language, research skills, media and technology skills, scientific literacy, critical thinking, communication, collaboration, and creativity.

(III)

EDUC 40. Theories of Development and Learning Applied to Education. 4 Units.
Provides an introductory examination of central theories of human development and learning in their application to contemporary educational settings.

(III)

EDUC 50. Origins, Purposes, and Central Issues in K-12 Education. 4 Units.
An introduction to the role of education in U.S. society and to central issues in K–12 education. Education is studied from four different perspectives: social, historical, philosophical, and political.

EDUC 55. Knowing and Learning in Mathematics and Science. 5 Units.
Multidisciplinary study of knowing and learning in secondary school mathematics and science. Topics include standards for knowing, scientific epistemologies, mental representations, problem solving, expert-novice studies, assessment, and domain-specific thinking, learning, and teaching. Applied analysis of learning through clinical interviews.

Prerequisite: PHY SCI 5 or BIO SCI 14.

(III)

EDUC 100. Educational Strategies for Tutoring and Teacher Aiding. 4 Units.
Placement in a public elementary or secondary school to gain experience as a tutor or teacher aide. Emphasis on cognitive learning and the development of instructional strategies and resources which can be used in effective cross-age and cross-cultural experiences.

Grading Option: Pass/no pass only.

Repeatability: May be taken for credit 3 times.

Same as ENGR 197A.

EDUC 104D. Preparation for Teaching Fine Arts in K-12 Schools. 4 Units.
Arts education, theory, curriculum and methods for university students specializing in studio art, digital arts, dance, music, and/or drama. Includes lesson planning and teaching strategies based on California and national frameworks and content standards, and fieldwork in K–12 settings.

EDUC 104E. Multimedia and the Arts in the Multicultural Classroom. 4 Units.
Multiculturalism and under-represented U.S. minorities and the visual and performing arts: perspectives in artistic perception, creative expression, historical and cultural context, aesthetic valuing, and media literacy in the interpretation and production of multimedia arts products and applications for K-12 classrooms.
GRADUATE DEGREE PROGRAMS IN EDUCATION

EDUC 106. Introduction to Early Childhood Education. 4 Units.
Designed to provide an introductory survey of the nature, needs, and education of young children. Explores questions such as "What should we teach young children?" and "How should we teach?".

EDUC 107. Child Development in Education. 4 Units.
Explores the pathways of normally developing children's growth and change over time. In particular, focuses on how cognitive and social development impact and are driven by educational contexts.

EDUC 108. Adolescent Development and Education. 4 Units.
Explores the physical, cognitive, emotional, and social development of adolescents, with an emphasis on the practical implications of developmental theory and research findings for teachers and other professionals who work with adolescents in middle or high school contexts.

EDUC 109. Reading and Writing in Secondary Mathematics and Science Classrooms. 4 Units.
Emphasis is placed on understanding the literacy processes (listening, speaking, viewing, thinking, reading, and writing) as they relate to middle and high school mathematics and science. Students integrate literacy-related strategies with curriculum-based goals supported in the California State Frameworks.
Corequisite: EDUC 158.

EDUC 122A. Foundations of Elementary School Mathematics I. 4 Units.
Provides understanding of fundamental mathematics necessary to teach for conceptual understanding and higher-level reasoning and problem solving. Conceptual understanding of place value, fractions, proportionality, geometry, algebra, functions, probability, statistics, and measurement. Instructional applications of these concepts in grades K-8 teaching.

EDUC 122B. Foundations of Elementary School Mathematics II. 4 Units.
Provides understanding of fundamental mathematics necessary to teach for conceptual understanding and higher-level reasoning and problem solving. Conceptual understanding of place value, fractions, proportionality, geometry, algebra, functions, probability, statistics, and measurement. Instructional applications of these concepts in grades K-8 teaching.
Prerequisite: EDUC 122A.

EDUC 122C. Foundations of Elementary School Mathematics III. 4 Units.
Provides understanding of fundamental mathematics necessary to teach for conceptual understanding and higher-level reasoning and problem solving. Conceptual understanding of place value, fractions, proportionality, geometry, algebra, functions, probability, statistics, and measurement. Instructional applications of these concepts in grades K-8 teaching.
Prerequisite: EDUC 122B.

EDUC 124. Multicultural Education in K-12 Schools. 4 Units.
Provides a theoretical and empirical overview of educational issues affecting low-income immigrant and U.S.-born minority student populations in an increasingly diverse and changing society.
Same as CHC/LAT 183.

(VII)

EDUC 125. Children, Schools, and Cinema. 4 Units.
Through popular films, analyzes aspects of school dynamics and interaction of schools with students, teachers, and public. Melding educational studies and film studies provides deeper understanding of methods used to transmit information and attitudes about schools to the lay public.

EDUC 126. Ethics and Education. 4 Units.
Ethics in education and how ethicists frame moral problems. Presents major ethical themes that affect education. Analysis of models for dealing with ethical goals and developing morality for K–12 students. Models for solving ethical dilemmas within an educational context.
Prerequisite: EDUC 50.

EDUC 128. Exceptional Learners. 4 Units.
An introductory survey of the nature, needs, and education of K–12 children with exceptionalities. Covers the categories and characteristics of exceptionalities, relevant state and federal legislation, and the role of general education teachers in special education.

EDUC 130. Children's Learning and Media. 4 Units.
Examines how popular media may impact how young people learn, develop, and communicate by looking at research related to the impacts of a wide range of popular media including television, video games, digital environments, mobile devices, and other multimedia.
EDUC 131. Educational Technology. 4 Units.
Provides an overview of the types and uses of educational technology to support and enhance the K–12 learning experience. Familiarizes students with lesson planning, instructional design, learning theory, and integrating technology into the curriculum.

EDUC 132. Reading and Writing Enrichment for After-School Programs. 4 Units.
Examines literacy development and the implementation of research-based practices to enrich learners’ reading and writing skills in after-school programs. A minimum of 20 hours of after-school program fieldwork is required in order to design and implement literacy enrichment activities.

EDUC 134. Teaching English Internationally. 4 Units.
Covers methods of teaching English as a foreign language, basic language knowledge for English teachers, the social context of English language teaching around the world, and essential information about securing international employment as an English teacher.

EDUC 137. Art in the Elementary School. 4 Units.
Theory and practice in art education for the elementary school classroom. Includes content and pedagogy for future teachers and others interested in the relationship between child development and the production of visual art. Materials fee.

EDUC 138. Children’s Literature in the Elementary Classroom. 4 Units.
Explores the wealth of children’s literature that can be integrated into the elementary classroom. Surveys traditional literature, fiction, nonfiction, and poetry that make curriculum accessible to all students. Focuses on literary elements for both reading and creating text.

EDUC 141A. Jumpstart I: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Same as PSYCH 141J.

Restriction: Psychology majors and School of Education students have first consideration for enrollment.

EDUC 141B. Jumpstart I: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Same as PSYCH 141K.

Restriction: Psychology majors and School of Education students have first consideration for enrollment.

EDUC 141C. Jumpstart I: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lecture, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Same as PSYCH 141L.

Restriction: Psychology majors and School of Education students have first consideration for enrollment.

EDUC 141D. Jumpstart II: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Prerequisite: (PSYCH 141J and PSYCH 141K and PSYCH 141L) or (EDUC 141A and EDUC 141B and EDUC 141C).

Same as PSYCH 141M.

EDUC 141E. Jumpstart II: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Prerequisite: (PSYCH 141J and PSYCH 141K and PSYCH 141L) or (EDUC 141A and EDUC 141B and EDUC 141C).

Same as PSYCH 141N.

EDUC 141F. Jumpstart II: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Prerequisite: (PSYCH 141J and PSYCH 141K and PSYCH 141L) or (EDUC 141A and EDUC 141B and EDUC 141C).

Same as PSYCH 141O.
EDUC 141G. Jumpstart III: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.
Prerequisite: (PSYCH 141M and PSYCH 141N and PSYCH 141O) or (EDUC 141D and EDUC 141E and EDUC 141F).
Same as PSYCH 141P.

EDUC 141H. Jumpstart III: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.
Prerequisite: (PSYCH 141M and PSYCH 141N and PSYCH 141O) or (EDUC 141D and EDUC 141E and EDUC 141F).
Same as PSYCH 141Q.

EDUC 141I. Jumpstart III: Early Language, Literacy, and Social Development. 4 Units.
An experiential course integrated with lecture material in the field of child development and education. Students are expected to attend lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.
Prerequisite: (PSYCH 141M and PSYCH 141N and PSYCH 141O) or (EDUC 141D and EDUC 141E and EDUC 141F).
Same as PSYCH 141R.

EDUC 143AW. Classroom Interactions I. 4 Units.
Focuses on research-based instructional strategies for enhancing the learning of secondary mathematics and science. Students learn about adolescent and second-language development to assist them in developing analyzing, teaching, and critiquing lessons for secondary classrooms.
Prerequisite: (PHY SCI 105 or BIO SCI 101) and EDUC 55. Satisfactory completion of the Lower-Division Writing requirement.
(lb)

EDUC 143BW. Classroom Interactions II. 4 Units.
Focuses on equity and multicultural education research, special education, and research-based instructional and assessment strategies to assist students in designing, teaching, and assessing lessons that meet the needs of all secondary mathematics and science students.
Prerequisite: (PHY SCI 105 or BIO SCI 101) and EDUC 55 and EDUC 143AW. Satisfactory completion of the Lower-Division Writing requirement.
(lb, VII)

EDUC 145. Theories and Pedagogies of Race in Education. 4 Units.
Introduces theoretical frameworks to examine the role of race in American education. Emphasis is placed on introducing students to different race and ethnicity paradigms.

EDUC 148. Complex Pedagogical Design. 6 Units.
In this Cal Teach capstone course, students design lesson plans and complex instructional units, using approaches such as mathematics and science integration, problem-based instruction, project-based learning, technology, representations, scientific and mathematical analysis/modeling, authentic assessment, contextualization, and designing equitable learning environments.
Prerequisite: (PHY SCI 105 or BIO SCI 101) and EDUC 55 and EDUC 143AW and EDUC 143BW.

EDUC 149. Family, School, and Community in Early Childhood. 4 Units.
Focuses on the many socializing aspects of young children’s social worlds. Through the use of ecological perspectives, explores the role of families, schools, and communities on children’s social development, especially in early childhood.

EDUC 150. Changing the High School Experience. 4 Units.
Analysis of problems in high school education (e.g., student disengagement and underachievement of disadvantaged) and proposals for changing curriculum, instruction, and school organization. Students suggest own reforms and analyze effective/ineffective school practices.
Prerequisite: Recommended: 1 unit of EDUC 199.
EDUC 151. Language and Literacy. 4 Units.
Addresses the linguistic principles and processes that underlie oral and written language proficiency. Emphasis is on how to use phonology, morphology, orthography, semantics, syntax, and pragmatics to support literacy and oral language development for K-12 students.

Same as PSY BEH 192V.

Restriction: Psychology and Social Behavior, Social Ecology, Education, and Psychology majors have first consideration for enrollment.

EDUC 153A. Urban Youth and the Development of Literacy through the Arts I. 4 Units.
Brings together research and practice on innovative instructional strategies for developing urban-student literacy through visual, communicative, and performing arts. UCI students are involved in an intervention at a local school.

EDUC 153B. Urban Youth and the Development of Literacy through the Arts II. 4 Units.
Building on knowledge gained in Education 153A, focuses on practices for developing urban-student literacy. Students are required to complete 40 hours of fieldwork, participating in an actual intervention at a local school.

Prerequisite: EDUC 153A.

EDUC 155. Special Topics in Educational Issues and Asian Americans. 4 Units.
Critical analysis of a variety of historical and contemporary educational issues facing Asian Americans. May be repeated for credit as topics vary.

Repeatability: Unlimited as topics vary.

EDUC 156. Introduction to Field Methods in Education. 4 Units.
Introduces students to methods for studying human behavior in context. It prepares students for conducting applied educational research, including designing needs assessments; conducting observations, interviews and focus groups; organizing and analyzing data; and synthesizing and presenting research findings.

Prerequisite: EDUC 10.

EDUC 157. Educational Research and Evaluation. 4 Units.
Covers qualitative and quantitative research methods relevant for the evaluation of educational programs. Students will have the opportunity to plan, execute, and write-up a small evaluation project.

Prerequisite: EDUC 10 and EDUC 15.

EDUC 158. Student Teaching Mathematics and Science in Middle/High School. 6 Units.
Student teaching includes orientation, seminars, preparation, and assumption of secondary school classroom instructional responsibilities in accordance with State credentialing requirements and in conjunction with the public school calendar. Five days/week and a minimum four hours/day over two quarters.

Prerequisite: (PHY SCI 105 or BIO SCI 101) and EDUC 55 and EDUC 143AW and EDUC 143BW and EDUC 148.

EDUC 159. Experimental Research Methods. 4 Units.
Designed to help students to develop the ability to think critically about research, and to develop an understanding of how to design and conduct experiments. The overall goal is to prepare students to independently plan and implement a research study.

Prerequisite: EDUC 10 and EDUC 15.

EDUC 160. Foundations of Out-of-School Learning. 4 Units.
Provides an overview of child and adolescent learning through participation in out-of-school activities and settings. Recognizes the importance of matching out-of-school experiences with the interests, needs, and development level of students. Observation-based fieldwork included.

Repeatability: May be taken for credit 2 times.

Restriction: May be taken a second time if student is a candidate for Certificate in After-School Education, and the first time was prior to Fall 2008.

EDUC 160L. After-school Programs Fieldwork. 1-2 Units.
Supervised fieldwork at an after-school program. Fieldwork is under the direction of an Education faculty member and an after-school program supervisor.

Grading Option: Pass/no pass only.

Repeatability: May be taken for credit for 4 units.
EDUC 161. Discovering Science in Out-of-School Hours. 4 Units.
Examines the design principles and teaching techniques that science museums and other out-of-school science programs use to motivate children and youth to learn science through discovery. Includes field experience at a science learning center or after-school program. Materials fee.

EDUC 170B. Teaching & Learning Secondary History-Social Studies. 4 Units.
How adolescents understand history and social issues. Pioneering research on their reasoning about history, politics, and related areas. Examination of typical practices in history and social studies teaching. Improving students’ learning through historiographic investigation and information technology resources.

EDUC 172A. Issues and Controversies in Secondary Mathematics. 4 Units.
Examines different perspectives on what mathematical competencies should be emphasized in secondary schools, and how they should be taught. Particular attention to problem solving, algebra and geometry, and issues of equity. Introduction to research on mathematical cognition and teacher beliefs.

EDUC 172B. Teaching and Learning Secondary Mathematics. 4 Units.
How children and adolescents learn to understand mathematics. Research on mathematical cognition, particularly on mathematical problem solving and the learning of algebra, geometry, and calculus. Examination of several innovative instructional programs derived from research on mathematics learning.

EDUC 173. Cognition and Learning in Educational Settings. 4 Units.
Foundational concepts in cognition and development as applied to student learning. Primary topics include historical behaviorism, basic cognitive structure and processes, complex cognition, cognitive development, and motivation.

Same as PSY BEH 192T.
Restriction: Psychology and Social Behavior, Social Ecology, Education, and Psychology majors have first consideration for enrollment.

EDUC 175. Foundations of Education. 4 Units.
Foundational questions of education are viewed from newly emerging developmental perspectives which treat cognition as embodied action and learning as cultural recapitulation. Historical, sociological, psychological, and philosophical implications of views toward aspects of teaching, learning, curriculum, and pedagogy are considered.

EDUC 176. Psychology of Learning, Abilities, and Intelligence. 4 Units.
Overview of classic positions on the mind, human abilities, and intelligence, especially as related to academic achievement. Contrasting views: psychometric versus information processing; experimental versus correlational research.

Prerequisite: PSYCH 7A or PSY BEH 9.

Same as PSY BEH 192U.
Restriction: Psychology and Social Behavior, Social Ecology, and Education majors have first consideration for enrollment.

EDUC 177. Exploring Geography and Social Issues in K-12 Education. 4 Units.
Examines how natural environment has shaped human culture and how human cultures shape natural environment. Uses geography as lens to develop student understanding of social issues, their causes, and consequences.

EDUC 179W. Advanced Composition for Teachers. 4 Units.
Principles of formal composition and problems of teaching. Selecting handbooks and ancillary reading, marking papers, making assignments, and conducting workshops and tutorials.

Prerequisite: Satisfactory completion of the Lower-Division Writing requirement.

Same as WRITING 179W.
Restriction: Upper-division students only.

(Ib)

EDUC 180. Interdisciplinary Topics in Education. 4 Units.
Analysis of issues in education from interdisciplinary perspectives. Topics covered vary with interests of instructor.

Repeatability: Unlimited as topics vary.

EDUC 181A. Principles and Practices of Coaching Sports I. 4 Units.
Focuses on foundational theories and instructional practices in coaching sports from fourth grade to the collegiate level. Prepares students for the coach’s mandatory state certification examination for high school sports in California.
EDUC 182. Latina/Latino Access and Persistence in Higher Education. 4 Units.
Introduction to how social, political, and economic forces impact on Latina/Latino racial/ethnic minorities with regard to their access and persistence in the U.S. higher education system. Investigates historical perspectives and theoretical underpinnings of college access and retention research.

Same as CHC/LAT 182.

EDUC 183. College Advising for High School Students. 4 Units.
Provides a brief introduction to college-access issues and in-depth understanding in the field of college advising. Students learn how to help high school students develop higher education plans and guide them through the college application process.

Same as CHC/LAT 184.

EDUC 185. Social Development in Education. 4 Units.
Examination of contextual, psychosocial, and biological factors contributing to the social development of children and adolescents. Theoretical perspectives, empirical findings, and methodological issues are emphasized. Implications of the scientific evidence for practical and policy decision-making surrounding development are discussed.

EDUC 190. Principles and Practices of K–6 After School Sports and Fitness. 4 Units.
Focuses on foundational theories and instructional practices in after-school sports and fitness for K–6 students. Includes a 20-hour field experience in an after-school setting.

EDUC 191. Advanced Fieldwork in After-School Education. 4 Units.
Capstone fieldwork experience for students seeking to earn the Department of Education-sponsored Certificate in After-School Education. Students are required to complete 50 or more hours of fieldwork and related assignments at an instructor-approved after-school program.

Prerequisite: EDUC 160.

EDUC 193. Directed Studies in Early Childhood Education. 2-4 Units.
Advanced study of early childhood education under the direction of a faculty member, coupled with a community-based practicum.

Repeatability: May be repeated for credit unlimited times.

EDUC 198. Directed Research in Education. 2-8 Units.
Individually or in small groups, students are exposed to or participate in work related to a faculty member’s research. Students also attend a weekly seminar and complete a research paper or comparable project. Prerequisite: sophomore, junior, or senior standing.

Repeatability: May be taken for credit for 12 units.

Restriction: Sophomore only or Juniors only or Seniors only.

EDUC 199. Individual Study. 1-4 Units.
Intensified advanced study in areas in which a student has considerable background, under the direction of a faculty member who will guide and evaluate the study.

EDUC 201. Teachers’ Lives and Policy Environment of Teaching. 4 Units.
Examines research and public perceptions about school-based educational processes, the influence of institutional structures and educational policy on the lives of teachers, and the challenges of school reform at the local and classroom level.

Restriction: Master of Arts in Teaching Program majors only.

EDUC 202. Outcomes of Schooling/Student Assessment. 4 Units.
Focuses on establishment of learning goals and assessment tools that are valid for all students, inform educational decisions, and promote educational success. Provides critical examination of different forms of assessment used in K–12 schools, including developmental assessments and appropriate interventions.

Restriction: Master of Arts in Teaching Program majors only.

EDUC 203. Advanced Concepts in Learning and Cognition. 4 Units.
Theories of cognition and their application to thinking and learning in school settings. Topics include memory, information processing, knowledge representation, problem solving, meta-cognition, and intelligence.

Prerequisite: EDUC 173.

Restriction: Master of Arts in Teaching Program majors only.
EDUC 205. Critical Assessment of Teaching Practice and Learning. 4 Units.
Student articulates a problem in instructional practice and uses research on cognition, assessment, and other tools to understand the problem. Capstone course emphasizes practices of teacher inquiry, reflection, and professional collaboration. Student's written analyses are evaluated as program's Comprehensive Examination.

Restriction: Master of Arts in Teaching Program students only.

EDUC 206. Design of Learning Environments for Teachers in Secondary School Subjects. 4 Units.
Research on comprehension, conceptual understanding, reasoning, critical thinking, and problem solving with applications to pedagogy in secondary school subjects. Required for M.A.T. single subject students, unless substitution of Education 207 is authorized.

EDUC 207. Cognition and Pedagogy in Quantitative Literacy. 4 Units.
Reviews research on cognition in elementary mathematics, including numeracy, fractions, probability, proportionality, measurement, geometry, algebra. Emphasizes instructional approaches consistent with this research knowledge. Required for M.A.T. multiple subjects students, unless substitution of Education 206 is authorized by the Department.

EDUC 208. Reading Development . 4 Units.
Course will focus on the language and literacy development of typically-developing native English-speaking students in the U.S. Students will learn about seminal and recent research in the field of reading development.

Restriction: Graduate students only.

EDUC 209. Vocabulary Learning and Academic Language. 4 Units.
Examines linguistic, developmental, psychometric, and neurological perspectives on word learning and semantics, paying particular attention to the relation between language development and reading, and features of academic language in content-specific texts.

Restriction: Graduate students only.

EDUC 210. Language, Literacy, and Discourse. 4 Units.
Introduces students to the interdisciplinary study of language, literacy, and discourse across historical and educational contexts. Addresses theories of how people learn, interact, and make meaning through a variety of semiotic resources, including oral communication, print, and digital media.

Restriction: Graduate students only.

EDUC 211. Writing Theory and Practice. 4 Units.
Offers an overview of histories, theories, and research in the field of composition studies from 1950 to the present. Addresses the influences of theory and research on teaching practice at K–12 and college levels.

Restriction: Graduate students only.

EDUC 212. Literacy and Technology. 4 Units.
Examines theoretical, historical, and contemporary relationships of technology and literacy. Topics include online communication, multimodality, video games, the use of technology for literacy instruction in schools, and research approaches for investigating literacy development with technology.

Restriction: Graduate students only.

EDUC 216. Language Learning with Digital Media. 4 Units.
Examines the use of new technologies in second and foreign language teaching. Considers historical and theoretical perspectives, current research, and future directions. Topics include online interaction, computer-assisted testing, corpora and concordancing, second language reading and writing, and affect and identity.

Restriction: Graduate students only.

EDUC 218. Special Topics in Language, Literacy, and Technology. 4 Units.
Advanced seminar designed to engage students in highly interactive examination of current issues in language, literacy, and technology. Topics and content will vary by quarter, depending upon research interests of the faculty and students.

Repeatability: May be taken for credit 10 times as topics vary.

Restriction: Graduate students only.

EDUC 220. Developing Adolescent Literacy. 4 Units.
Examines how adolescents leverage vocabulary knowledge, word-reading skills, background understanding, and knowledge of content-specific text features to master an increasing range of texts both independently and for subject-area learning.

Restriction: Graduate students only.
EDUC 222. Research Epistemologies and Methodologies. 4 Units.
Introduction to epistemological underpinnings of educational research and to a range of research methodologies in education. Includes examination of quantitative and qualitative studies through reading and analyzing contemporary research. Critique of selected research studies pertinent to educational practice and policy.

Restriction: Ed.D. Program students only.

EDUC 224. Social Development and Education. 4 Units.
Surveys the theory and empirical evidence concerning human social development from infancy to adolescence. Topics include studying how children conceptualize the social world, interact with caretakers, develop social relationships with peers, and how they impact student success.

Restriction: Graduate students only.

EDUC 225. Learning, Development, and Culture. 4 Units.
Explores issues of learning and development through a cultural lens. The interplay between culture and learning and culture and development is analyzed through the discussion of relevant readings from both psychological and anthropological research traditions.

Restriction: Graduate students only.

EDUC 229. Theories of Human Development. 4 Units.
Examines developmental theory as a guide for research and practice in education. The evolution of classical development theories and the emergence of new theoretical models are considered. Theoretical perspectives include ecological systems, life course, psychobiology, attachment, and social-cognitive theories.

Restriction: Graduate students only.

EDUC 235. Psychology of Reading Acquisition. 4 Units.
Surveys theory and empirical evidence concerning acquisition, cognitive processes, and consequences of skilled reading. Explores psychological models of skilled reading, how children acquire reading and writing skills in their home and second languages, cognitive consequences of acquiring literacy skills.

Restriction: Graduate students only.

EDUC 237. Teacher Thinking and Learning. 4 Units.
Recent research on teacher cognition, including what knowledge teachers bring to their work and how it is used in practice. Examines the nature and development of teachers’ knowledge and the relationship between knowledge and practice.

Restriction: Graduate students only.

EDUC 238. Special Topics in Learning, Cognition, and Development. 4 Units.
An advanced seminar designed to engage students in highly interactive examination of current issues in learning, cognition, and development. Topics and content will vary by quarter, depending upon the research interests of the faculty and students.

Restriction: Graduate students only.

EDUC 240. Instructional Design and Education Technology. 4 Units.
Design of high-quality instructional units consistent with current theory and research in cognitive psychology and constructivist-compatible instructional practice and infused with appropriate uses of computer and video technologies. Students design a complete instructional unit using these principles.

Restriction: Master of Arts in Teaching Program students only.

EDUC 251. Educational Policy and Politics. 4 Units.
An in-depth study of topics relevant to educational reform and policy-making. Topics include: the policy-making process, the role of values and interest groups, policy analysis, equality of educational opportunity, systemic reform, implementation, and politics at the school site.

Restriction: Graduate students only.

EDUC 254. College Access and Persistence. 4 Units.
Introduction to how social, political, and economic forces impact college access and persistence in the U.S. higher education system. Investigates historical perspectives and theoretical underpinnings of college access and retention research and the link between K–12 schooling and postsecondary stratification.

Restriction: Graduate students only.
EDUC 255. Immigration and the New Second Generation. 4 Units.
Focuses on Asian, Latino, and Black children of immigrants. Investigates how today's second generation adapts, incorporates into the U.S. social structure, transforms the social and economic landscape. Explores assimilation, immigrant families/communities, language, racial/ethnic identities, gender, education, changing U.S. racial structure.

Restriction: Graduate students only.

EDUC 256. Critical Case Studies in Education. 4 Units.
Examines single and multiple case studies as a method for investigating educational theory, practice, and policy. Explores types of questions that can be answered with case study research and designs, data analysis techniques, format, and style of writing case studies.

Restriction: Graduate students only.

EDUC 257. Social Capital and Student Achievement. 4 Units.
Examines strategies that have proven successful in encouraging both high student achievement and a supportive school culture. Extended case studies are used to probe how interpersonal interactions at the school site can work to stimulate or discourage academic commitment.

Restriction: Graduate students only.

EDUC 258. Special Topics in Educational Policy and Social Context. 4 Units.
An advanced seminar designed to engage students in highly interactive examination of current issues in educational policy and social context. Topics and content will vary by quarter, depending upon the research interests of the faculty and students.

Repeatability: May be taken for credit 10 times.

Restriction: Graduate students only.

EDUC 259. Community Research and Action. 4 Units.
Introduces the theoretical underpinnings and research approaches of the field of Community Psychology. Project-based course focused on research and action in communities, organizations, and other extra-individual units (e.g., schools).

Restriction: Graduate students only.

EDUC 261. Social and Cultural Foundations of Education. 4 Units.
Provides a critical understanding of the social and cultural foundations of education through reproduction theory. Explores the unique ways in which culture and power intersect within schools and schooling systems to reproduce and resist educational inequality.

Restriction: Graduate students only.

EDUC 264. Economic Foundations of Education and Social Policy. 4 Units.
Beginning/intermediate microeconomics course provides students with an introduction to how economists think about household decision-making, markets, benefit-cost analysis, social policy issues in general and education policy in particular.

Restriction: Graduate students only.

EDUC 265. Applied Regression Analysis for Education and Social Research. 4 Units.
Provides students with a working knowledge of multiple regression and the statistical analysis of longitudinal data. Topics include a review of the OLS regression model, event-history methods, and various other techniques for analyzing longitudinal data.

Prerequisite: EDUC 288B.

Restriction: Graduate students only.

EDUC 266. Design of Learning Environments. 4 Units.
Theory and practice of designing innovative learning environments. New models of classroom interaction and technology use for new cognitive and social roles. Design cognition, and social learning theories and research methods for the design and enactment of learning environments.

Restriction: Graduate students only.

EDUC 267. Classroom Research Methods. 4 Units.
Uses students' research problems as the basis for exploring methods—teacher and student observation, interview, case studies, think alouds. Intended for doctoral students with a specific research question and very good grounding in the literature related to their question.

Restriction: Graduate students only.
EDUC 268. Out-of-School Learning and Youth Development. 4 Units.
Examines theory, research, and policy concerning out-of-school time and youth development. Several out-of-school contexts are considered (e.g., unsupervised care, informal leisure activities, and organized activities). A range of developmental outcomes are considered (e.g., achievement, social-emotional competence, and physical health).

Restriction: Graduate students only.

EDUC 274. Studies of Professional and Staff Development. 2-4 Units.
Research and theory of effective strategies for professional and staff development. Topics include: adult learning as related to professional growth of teachers, staff development as vehicle for systemic reform, reforms to enhance teacher professionalization and empowerment.

Restriction: Doctoral students only.

EDUC 278. Experimental Designs in Educational Research. 4 Units.
Designed to enable students to think critically about experimental research, and to develop an understanding of how to design and conduct experiments. The overall goal is to prepare students to independently plan and implement an experimental research study.

Prerequisite: EDUC 222.

Restriction: Graduate students only.

EDUC 278B. Studies of Diversity and Inequality in Education. 4 Units.
Study of relationships between individual diversity, social inequality, and education. How differences in socioeconomic status, race, culture, and gender translate in the educational process and affect educational outcomes. Addresses issues such as educational access, social mobility, and social reproduction.

Restriction: Graduate students only.

EDUC 280. Research Methods. 2-8 Units.
Provides practitioners at advanced degree level with insight and leadership skills for working with increasingly diverse school populations. Content varies with interest of students and instructors. May focus on populations or broader content area such as education reform in California.

Repeatability: May be taken for credit 3 times.

Restriction: Doctoral Degree candidates only.

EDUC 281. Evaluation of Educational Programs. 4 Units.
Alternative approaches to formative and summative evaluation of educational programs. Standards for effective evaluations. Epistemological, political, and practical issues in designing and conducting evaluations. Students critique specific studies relevant to educational administration and policy-making and design an evaluation.

Restriction: Doctoral students only.

EDUC 282. Graduate Seminar in the History of the Philosophy of Education. 4 Units.
Draws upon results in the historical development of the philosophy of education from Plato, Quintilian, Augustine, Locke, Rousseau, to more contemporary thinkers such as Dewey, Freire, Egan, and Rorty.

Repeatability: May be repeated for credit unlimited times.

EDUC 283A. Qualitative Research Methods in Education I. 4 Units.
Introduces students to qualitative research methodologies and methods and explores strengths and challenges of this research tradition. Topics include logistical and ethical issues, reliability, validity and generalizability, and the role of reflexivity. Students will also engage in fieldwork.

Prerequisite: EDUC 222.

Restriction: Graduate students only.

EDUC 283B. Qualitative Research Methods in Education II. 4 Units.
Provides methods for conducting and analyzing qualitative research in educational settings. Topics include data collection, coding, representing qualitative data, and using software for qualitative data analysis.

Prerequisite: EDUC 283A.

Restriction: Graduate students only.
EDUC 285. Theories of Learning Cognition. 4 Units.
Overview of theories applicable to learning in schools and extracurricular contexts. Cognitive, psychometric, behavioral, and neuroscience perspectives are applied to such topics as memory, knowledge structures, problem solving, motivation, self-referent beliefs, expertise, assessment, and cognitive abilities, including intelligence.
Restriction: Graduate students only.

EDUC 286. Discourse Analysis. 4 Units.
Examines the methodological tradition of discourse analysis as it has been applied by researchers in language and literary education for both in and out-of-school settings.
Restriction: Graduate students only.

EDUC 287. Quantitative Data Analysis in Education Research and Evaluation. 4 Units.
Covers statistical aspects of survey-based evaluations and quantitative research in education. Includes sampling, coding open-ended information, data management, scale construction, statistical analysis, and presentation of findings. Students analyze data sets—a district-based evaluation and a national survey—using SPSS.
Prerequisite: EDUC 281.

EDUC 288A. Educational, Social, and Behavioral Statistics. 4 Units.
Designed for graduate students with previous course work in statistics, including experience with statistical software such as SPSS. The emphasis is on regression analysis and the general linear model. Students learn to analyze real data using Stata software.
Prerequisite: Prior coursework in statistics, and experience with statistical software such as SPSS.
Restriction: Graduate students only.

EDUC 288B. Structural Equation Modeling for Educ, Soc & Behavioral Analysis. 4 Units.
Rigorous introduction to structural equation modeling for students with strong prior course work in statistics. Topics include path diagrams, SEM with observed variables, factor analysis, SEM with latent variables. Maximum likelihood estimating, goodness-of-fit measures, nested models, related topics.
Prerequisite: EDUC 288A.
Restriction: Graduate students only.

EDUC 289. Use of Video in Educational Research. 4 Units.
Provides students with conceptual and methodological tools for using video in educational research. Students work with their own video data or with publicly accessible databases.
Restriction: Graduate students only.

EDUC 291. Hierarchical Linear Models for Education Research. 4 Units.
Descriptive and inferential analysis methods for education projects with nested data. Focuses on linear models that account for nesting of children in classrooms or schools or of repeated measures over time on the same individuals.

EDUC 295. Pre-Dissertation Research. 1-12 Units.
Independent study course taken under the direction of a faculty member who guides the student's research. May include guidance on data collection, methodology, human subjects protocol, conference presentation, scholarly publication, program benchmark activities.
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.

EDUC 296A. Professional Writing in Educational Research I. 2 Units.
First of a two-course series designed to extend students’ knowledge of conducting and publishing educational research. Topics include the logic of research and how to effectively communicate research findings, with particular emphasis on proficient scientific writing.

EDUC 296B. Professional Writing in Educational Research II. 2 Units.
Second of a two-course series designed to extend students’ knowledge of conducting and publishing educational research. Topics include the logic of research and how to effectively communicate research findings, with particular emphasis on proficient scientific writing.
EDUC 298. Independent Study. 1-8 Units.
Independent research on topics related to education.
Repeatability: May be repeated for credit unlimited times.
Restriction: Graduate students only.

EDUC 299. Dissertation Research. 1-12 Units.
Specifically designed for students researching and writing their dissertations.
Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be repeated for credit unlimited times.
Restriction: Doctoral students only.

EDUC 302. Directed Secondary Field Experiences. 2 Units.
Field work experiences and seminars to provide introduction to the California Teaching Performance Expectations, including guidelines for professional expectations, observation and participation in classrooms, instructional planning, classroom management, and formative experiences and preparation for the State-mandated Teaching Performance Assessment.
Restriction: Teacher Credential Program student only.

EDUC 303. Learning to Learn from Teaching in Elementary Schools. 3 Units.
Preparation for elementary school teaching that provides analytic tools for observing and reflecting on instruction, examining how student thinking is demonstrated, understanding components of and relationships between the teaching and learning process and planning effective instruction including innovative teaching practices.
Restriction: Teacher Credential Program students only.

EDUC 304. Student Teaching in the Elementary Schools. 4-12 Units.
Student teaching seminars prepare candidates for assumption of classroom instructional responsibilities in accordance with State credentialing requirements. Four full days a week of student teaching in public school elementary classrooms in winter quarter and five full days in spring quarter.
Repeatability: May be taken for credit 2 times.
Restriction: Teacher Credential Program students only.

EDUC 305. Learning to Learn from Teaching in Secondary Schools. 4 Units.
Analytic tools for (1) observing and reflecting on observed instruction; (2) examining student thinking and the relationship between teaching and learning; (3) understanding particular components of the teaching/learning process; and (4) planning effective instruction including innovative teaching practices.
Restriction: Teacher Credential Program students only.

EDUC 306. Supervised Teaching in Bilingual Education, Elementary. 4-12 Units.
Student teaching experiences in bilingual public school classrooms to include orientation, regular seminars, and preparation for bilingual classroom instructional responsibilities in accordance with State credentialing requirements and in conjunction with the public school calendar.
Repeatability: May be repeated for credit unlimited times.
Restriction: Teacher Credential Program students only.

EDUC 307. Student Teaching in Intermediate/Secondary School. 2-16 Units.
Student teaching includes orientation, seminars, and preparation for and assumption of secondary school classroom instructional responsibilities in accordance with State credentialing requirements and in conjunction with public school calendar. Five full days a week in both winter and spring quarters.
Repeatability: May be taken for credit for 20 units.
Restriction: Teacher Credential Program students only.
EDUC 308. Performance Assessment for California Teachers, Multiple Subjects. 1 Unit.
Preparation and technical support for multiple subjects teacher candidates to complete State-required Teaching Performance Assessment for the California preliminary credential. Includes assistance in planning, teaching/videotaping, assessment and reflection, and document production.

Grading Option: Satisfactory/unsatisfactory only.
Repeatability: May be taken for credit 2 times.
Restriction: Teacher Credential Program students only.

EDUC 309. Supervised Teaching in Bilingual Education, Secondary. 4-12 Units.
Student teaching experiences in bilingual public school classrooms to include orientation, regular seminars, and preparation for bilingual classroom instructional responsibilities in accordance with State credentialing requirements and in conjunction with the public school calendar.

Repeatability: May be repeated for credit unlimited times.
Restriction: Teaching Credential Program students only.

EDUC 310. Performance Assessment for California Teachers. 1 Unit.
Preparation and technical support for teacher candidates to complete the required Teaching Performance Assessment for California credential licensure. Structured support for planning, videotaping, and document production occurs in meetings scheduled to coincide with the timeline for the project.

Repeatability: May be taken for credit 2 times.
Restriction: Teacher Credential Program students only.

EDUC 315. Learning to Learn from Teaching Practice. 4 Units.
Secondary curriculum and methodology, including instructional planning, teaching strategies, classroom management, evaluation, cultural and linguistic considerations and interpersonal skills. Application of these to fieldwork experience in preparation for teaching responsibilities assumed in secondary schools.

Restriction: Teacher Credential Program students only.

EDUC 317. Intern Teaching in the Secondary School: Single Subject Instruction. 4-16 Units.
A paid intern practicum (usually one year) cosponsored by an employing school district and the UCI Department of Education.

Repeatability: May be taken for credit for 36 units.
Restriction: Teacher Credential Program students only.

EDUC 319. Direct Field Experiences. 4 Units.
Observation, participation, and teaching in diverse public school classrooms. Application of theory and pedagogy in field work classrooms.

Restriction: Teacher Credential Program students only.

EDUC 321. Curriculum and Methods for Elementary School Social Studies. 3 Units.
Description, scope, sequence, and methods of teaching social studies and inquiry in grades K-8. Includes utilization of California State Framework for Teaching History/Social Science and addresses current aspects and trends in multicultural education.

Restriction: Teacher Credential Program Students only.

EDUC 322A. Curriculum and Methods for Elementary School Mathematics I. 4 Units.
Scope, sequence, and methods of teaching mathematics at all levels of elementary school. Presented through lectures, discussions, demonstrations, and exploration of a variety of materials. Covers how to plan lessons, motivate students, diagnose difficulties, and evaluate learning in mathematics.

Restriction: Teacher Credential Program students only.

EDUC 322B. Curriculum and Methods for Elementary School Mathematics II. 4 Units.
Part two of a course addressing pedagogical methods for elementary mathematics. Lectures, discussions, and exploration of instructional strategies and materials will support preservice teacher development in the critical areas of planning, instruction, and assessment for conceptual understanding in mathematics.

Restriction: Teacher Credential Program students only.
EDUC 323. Curriculum and Methods for Elementary School Science. 4 Units.
Prospective elementary teachers learn how to teach science in grades K-8. Covers States science requirements, a variety of teaching methods, criteria for selecting science curriculum materials, and how to plan science lessons, units, experiments, projects, and demonstrations.

Same as ECO EVO 323.

EDUC 324. Curriculum and Methods for Elementary School Language Arts Integrated with Social Studies. 4 Units.
An integrated approach to language arts and social studies instruction at the K–6 level based on California State English/Language Arts and Social Studies Frameworks and Standards. Focus on teaching content through literature and writing and providing access for all learners.

Restriction: Teacher Credential Program students only.

EDUC 325. Teaching the Visual and Performing Arts in Elementary School. 2 Units.
Introduction to the issues and practices, including student diversity, academic literacy, and interdisciplinary content, involved in integrating the California visual and performing arts curriculum framework and academic content standards with developmentally appropriate teaching strategies for the elementary classroom.

Repeatability: May be taken for credit 2 times.

Restriction: Teacher Credential Program students only.

EDUC 326. Curriculum and Methods for Elementary School Reading. 4 Units.
Teaching an integrated reading/language arts program in the elementary classroom. Implementing theories, principles, and methods which are research and reality-based. Creating a child-centered, language-rich program to meet needs of children in multicultural/multilingual settings.

Restriction: Teacher Credential Program students only.

EDUC 329. Theories and Methods of English Language Development Applied to Elementary Students. 4 Units.
Theories and methods of English language development and instruction of English language learners, with focus on elementary students. Includes language acquisition theory, language and content, assessment strategies, and preparation of curricula and instruction for grades K–6 English language learners.

Restriction: Teacher Credential Program students only.

EDUC 331. Instructional Technology: Resources for the Multiple Subject Classroom. 3 Units.
Issues and techniques in uses of computer-based and media technologies in the multiple subject classroom: social implications and professional responsibilities; productivity tools to enhance student thinking skills; and strategies for instruction and management.

Restriction: Teacher Credential Program majors only.


Grading Option: Satisfactory/unsatisfactory only.

EDUC 334. Literacy and Technology in the Secondary Classroom. 2 Units.
A view of literacy expanded beyond typological print, students learn: (1) strategies for incorporating, (2) tools for evaluating and selecting, and (3) learning theories for understanding how information and communication technologies and online resources contribute to general and disciplinary literacy.

Prerequisite: Limited to students accepted into the Teacher Credential Program

Restriction: Teacher Credential Program students only.

EDUC 336. Methods of Teaching Languages other than English in Secondary Schools. 4 Units.
Prepares future teachers of foreign language or primary/home language. Emphasizes hands-on, practical strategies for communication-based instruction and authentic assessment, in reading, writing, listening, speaking, and culture.

Restriction: Teacher Credential Program students only.

EDUC 337. Methods of Teaching Social Science in the Secondary School. 4 Units.
Theories, strategies, and methodologies related to the teaching of history and social science in the secondary school. Emphasis on the planning, delivery, and assessment of lessons reflecting an understanding of the History-Social Science Framework for California.

Restriction: Teacher Credential Program students only.
EDUC 338. Methods of Teaching English in the Secondary School. 2-4 Units.
Introduction to teaching reading, writing, and speaking skills in secondary school. Emphasis upon integrative approach to teaching literature, composition, and grammar consistent with the California State Framework. Practice in the design of lesson plans that are both integrated and cumulative.
Repeatability: May be taken for credit 2 times.
Restriction: Teacher Credential Program students only.

EDUC 339. Methods of Teaching Visual & Performing Arts in Secondary Schools. 4 Units.
Theory, curriculum, and strategies for teaching visual and performing arts in the secondary school. Emphasis on the planning, delivery, and assessment of lessons consistent with California State Framework and content standards.
Restriction: Teacher Credential program or M.A.T. program students only.

EDUC 340. Methods of Teaching Mathematics in Secondary School. 2-4 Units.
Theories, strategies, and methodologies related to the teaching of mathematics in the secondary school. Emphasis on the planning, delivery, and assessment of lessons reflecting an understanding of the Mathematics Framework for California and the recommendations of professional organizations.
Repeatability: May be taken for credit for 4 units.
Restriction: Teacher Credential Program students only.

EDUC 341. Teaching Science in Secondary School. 4 Units.
Prospective secondary science teachers learn how to teach science in grades 7-12. Covers State science requirements, a variety of teaching methods, criteria for selecting science curricular materials, and how to plan science lessons, units, experiments, projects, and demonstrations.
Same as ECO EVO 341.
Restriction: Teacher Credential Program students only.

EDUC 342. Applied Instructional Strategies in Secondary Schools. 4 Units.
Application of pedagogy and research to practice teaching experiences in the secondary schools. A continuation of the methodology course series with an emphasis on the needs of students with culturally diverse backgrounds.
Repeatability: May be taken for credit 2 times.
Overlaps with EDUC 342A, EDUC 342B.
Restriction: Teacher Credential Program students only. EDUC 342 and EDUC 342A-B may not both be taken for credit.

EDUC 342A. Applied Instructional Strategies in Secondary. 2 Units.
Application of pedagogy and research to practice teaching experiences in the secondary schools. A continuation of the methodology course series with an emphasis on the needs of students with culturally diverse backgrounds. Conducted in a five-week format.
Repeatability: May be taken for credit 2 times.
Overlaps with EDUC 342.
Restriction: Teacher Credential Program students only. EDUC 342 and EDUC 342A-B may not both be taken for credit.

EDUC 342B. Applied Instructional Strategies in Secondary. 2 Units.
Application of pedagogy and research to practice teaching experiences in the secondary schools. A continuation of the methodology course series with an emphasis on the needs of students with culturally diverse backgrounds. Conducted in a five-week format.
Repeatability: May be taken for credit 2 times.
Overlaps with EDUC 342.
Restriction: Teacher Credential Program students only. EDUC 342 and EDUC 342A-B may not both be taken for credit.
EDUC 344. Applied Instructional Strategies in Secondary School Sciences. 4 Units.
Application of pedagogy and research to practice science teaching experiences in the secondary schools. A continuation of the Education 340 series with an emphasis on the needs of students with culturally diverse backgrounds.

Repeatability: May be taken for credit 2 times.

Same as ECO EVO 344.

Restriction: Teacher Credential Program students only.

EDUC 345. Child Development and Educational Equity. 4 Units.
Explores theories of child development applied to teaching and learning in elementary schools. Attention is given to role of cultural norms in defining goals for child development and for educational practices and in creating equal learning opportunities for all children.

Restriction: Teacher Credential Program students only.

EDUC 346. Reading and Writing in Middle School and High School Classrooms. 4 Units.
Emphasis is placed upon understanding the literacy processes (listening, speaking, viewing, reading, and writing) as they relate to all Single Subject areas. Teachers are guided to integrate literacy-related strategies with curriculum-based goals supported in the California State Frameworks.

Restriction: Teacher Credential Program students only.

EDUC 347. Culture, Diversity, and Educational Equity. 4 Units.
Survey of the history of and social theories about the origins and consequences of U.S. racial, gender, and social inequality and the effects of poverty and racism on the educational opportunities and outcomes of minority groups in the United States.

Prerequisite: Limited to students accepted into the Teacher Credential Program.

EDUC 347A. Culture, Diversity, and Educational Equity. 2 Units.
Survey of the history of and social theories about the origins and consequences of U.S. racial, gender, and social inequality and the effects of poverty and racism on the educational opportunities and outcomes of minority groups in the United States.

Restriction: Teacher Credential Program students only.

EDUC 347B. Culture, Diversity, and Educational Equity. 2 Units.
Survey of the history of and social theories about the origins and consequences of U.S. racial, gender, and social inequality and the effects of poverty and racism on the educational opportunities and outcomes of minority groups in the United States.

Restriction: Teacher Credential Program students only.

EDUC 348. Theory and Methods of Instruction of Special Populations in General Classroom. 2 Units.
Knowledge, skills, and strategies to teach special populations in the general education classroom. Categories of disability and exceptionality. Legislation pertaining to the education of special populations. Role of general education teacher in special education process. Differentiated instruction and inclusive environments.

Restriction: Teacher Credential Program students only.

EDUC 349. Theories and Methods of English Language Development Applied to Secondary Students. 4 Units.
Theories and methods of English language development and instruction of English language learners, with focus on secondary students. Includes language acquisition theory, language and content, assessment strategies, and preparation of curricula and instruction for grades 7–12 English language learners.

Restriction: Teacher Credential Program students and M.A.T. students only.

EDUC 350. Adolescent Development in Education. 4 Units.
Secondary teachers must understand adolescent physical, cognitive, emotional, and social development, particularly how educators can promote healthy adjustment in their students. Focuses on why and how changes occur in each of these areas as children grow older.

Restriction: Teacher Credential Program students only.

EDUC 351. Instructional Technology: Resources for the Single Subject Classroom. 3 Units.
Issues and techniques in uses of computer based and media technologies in the single subject classroom: social implications and professional responsibilities; productivity tools to enhance student thinking skills; and strategies for instruction and management.

Restriction: Teacher Credential Program majors only.
EDUC 352. Creating a Supportive and Healthy Environment for Student Learning in the Secondary Classr. 2 Units.
Creation of healthy environments for student learning in secondary classrooms. Personal, family, school, community, environmental factors. Academic, physical, emotional, social well-being of students. Legal responsibilities of teachers related to student health, safety. Communication with family and use of community resources.

Restriction: Teaching Credential Program students only.

EDUC 398. Special Topics. 3 Units.
Meets induction and program planning requirements for students enrolled in Professional Administrative Services Credential. Also serves as final course in program, wherein the candidate, the University instructor, and a representative of the involved school district assess and evaluate candidate competency.

Repeatability: May be taken for credit 2 times.

Restriction: Professional Administrative Services Credential students only.

EDUC 399. University Teaching. 1-4 Units.
Limited to teaching assistants.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.