Graduate Degree Programs in Education

Master of Arts in Teaching in Elementary and Secondary Education
The School of Education offers a 14-month Master of Arts program in Elementary and Secondary Education. The M.A.T. with Single Subject Credential prepares candidates to teach mathematics, social science, English language arts, sciences, art, or world languages at the middle or high school level. The M.A.T. with Multiple Subject Credential prepares students to teach all grade levels and content areas within the elementary school curriculum. The M.A.T. 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 (http://www.grad.uci.edu/admissions).

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).

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.

Requirements
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
Multiple Subject Credential
Summer One – First Session
EDUC 374 Learning and Child Development
EDUC 241 Children’s Sense Making in Science
EDUC 230 The History and Culture of Schooling in the United States

Summer One – Second Session
EDUC 202 Outcomes of Schooling/Student Assessment
EDUC 364 Instructional Design and Education Technology for the Elementary Classroom
EDUC 323A Curriculum Methods in Elementary Science
EDUC 347 Culture, Diversity, and Educational Equity

Fall Quarter
EDUC 301 Directed Elementary Field Experiences in Diverse Schools
EDUC 320 Teaching Physical and Health Education in Elementary School
EDUC 322A Curriculum and Methods for Elementary School Mathematics I
EDUC 323B Curriculum Methods in Elementary Science
EDUC 326 Curriculum and Methods for Elementary School Reading
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 362</td>
<td>Curriculum and Methods for Elementary Language Arts and English Language Development</td>
</tr>
<tr>
<td></td>
<td><strong>Winter Quarter</strong></td>
</tr>
<tr>
<td>EDUC 304</td>
<td>Student Teaching in the Elementary Schools</td>
</tr>
<tr>
<td>EDUC 306</td>
<td>Supervised Teaching in Bilingual Education, Elementary</td>
</tr>
<tr>
<td>EDUC 348A</td>
<td>Educational Equity and the Exceptional Learner I</td>
</tr>
<tr>
<td>EDUC 322B</td>
<td>Curriculum and Methods for Elementary School Mathematics II</td>
</tr>
<tr>
<td>EDUC 325</td>
<td>Teaching the Visual and Performing Arts in Elementary School</td>
</tr>
<tr>
<td>EDUC 246</td>
<td>Teaching Investigations: Identifying Dilemmas of Practice</td>
</tr>
<tr>
<td></td>
<td><strong>Spring Quarter</strong></td>
</tr>
<tr>
<td>EDUC 304</td>
<td>Student Teaching in the Elementary Schools</td>
</tr>
<tr>
<td>EDUC 306</td>
<td>Supervised Teaching in Bilingual Education, Elementary</td>
</tr>
<tr>
<td>EDUC 359</td>
<td>Curriculum and Methods for Elementary Social Science and Information Literacy</td>
</tr>
<tr>
<td>EDUC 348B</td>
<td>Educational Equity and the Exceptional Learner II</td>
</tr>
<tr>
<td>EDUC 247</td>
<td>Teaching Investigations: Exploring Dilemmas of Practice</td>
</tr>
<tr>
<td></td>
<td><strong>Summer Two</strong></td>
</tr>
<tr>
<td>EDUC 248</td>
<td>Understanding Teacher Agency</td>
</tr>
<tr>
<td>EDUC 243</td>
<td>The Policy Environment of Teaching</td>
</tr>
<tr>
<td></td>
<td><strong>Single Subject Credential</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Summer One - First Session</strong></td>
</tr>
<tr>
<td>EDUC 245</td>
<td>Learning Inside and Outside of School</td>
</tr>
<tr>
<td>EDUC 361</td>
<td>The Adolescent Learner</td>
</tr>
<tr>
<td>EDUC 230</td>
<td>The History and Culture of Schooling in the United States</td>
</tr>
<tr>
<td></td>
<td><strong>Summer One - Second Session</strong></td>
</tr>
<tr>
<td>EDUC 243</td>
<td>The Policy Environment of Teaching</td>
</tr>
<tr>
<td>EDUC 202</td>
<td>Outcomes of Schooling/Student Assessment</td>
</tr>
<tr>
<td>EDUC 358</td>
<td>Media and Information Literacy in the Secondary Classroom</td>
</tr>
<tr>
<td></td>
<td><strong>Fall Quarter</strong></td>
</tr>
<tr>
<td>EDUC 302</td>
<td>Directed Secondary Field Experiences</td>
</tr>
<tr>
<td>EDUC 305</td>
<td>Learning to Learn from Teaching in Secondary Schools</td>
</tr>
<tr>
<td>EDUC 336</td>
<td>Methods of Teaching Languages other than English in Secondary Schools</td>
</tr>
<tr>
<td>EDUC 337</td>
<td>Methods of Teaching Social Science in the Secondary School</td>
</tr>
<tr>
<td>EDUC 338</td>
<td>Methods of Teaching English in the Secondary School</td>
</tr>
<tr>
<td>EDUC 339</td>
<td>Methods of Teaching Visual Arts in Secondary Schools</td>
</tr>
<tr>
<td>EDUC 340</td>
<td>Methods of Teaching Mathematics in Secondary School</td>
</tr>
<tr>
<td>EDUC 341</td>
<td>Teaching Science in Secondary School</td>
</tr>
<tr>
<td>EDUC 346</td>
<td>Reading and Writing in Middle School and High School Classrooms</td>
</tr>
<tr>
<td>EDUC 347</td>
<td>Culture, Diversity, and Educational Equity</td>
</tr>
<tr>
<td>EDUC 348A</td>
<td>Educational Equity and the Exceptional Learner I</td>
</tr>
<tr>
<td></td>
<td><strong>Winter Quarter</strong></td>
</tr>
<tr>
<td>EDUC 307</td>
<td>Student Teaching in Intermediate/Secondary School</td>
</tr>
<tr>
<td>EDUC 342A</td>
<td>Applied Instructional Strategies in Secondary Schools</td>
</tr>
</tbody>
</table>
EDUC 349  Theories and Methods of English Language Development Applied to Secondary Students
EDUC 246  Teaching Investigations: Identifying Dilemmas of Practice

Spring Quarter
EDUC 307  Student Teaching in Intermediate/Secondary School
EDUC 342B  Applied Instructional Strategies in Secondary Schools
EDUC 247  Teaching Investigations: Exploring Dilemmas of Practice
EDUC 348B  Educational Equity and the Exceptional Learner II

Summer Two
EDUC 248  Understanding Teacher Agency
EDUC 206  Design of Learning Environments for Teachers in Secondary School Subjects

A comprehensive examination is completed by M.A.T. candidates during the second summer. The examination is an action research project embedded in EDUC 248 Understanding Teacher Agency.

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 grade 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;
- Pass the Teaching Performance Assessment

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 Student Affairs office (http://advise.education.uci.edu/contact-us.html) for details.

Doctor of Philosophy in Education
The School of Education offers a Ph.D. 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 areas: (1) Human Development in Context; (2) Educational Policy and Social Context; and (3) Teaching, Learning, and Educational Improvement. Students enrolling in the program choose among these areas 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. Before advancing, students are required to have successfully completed their first-year research poster project, second year research paper, and 12 courses as specified by the area requirements. Students should advance to candidacy in the fall quarter of their fourth year. The normative time for completion of the Ph.D. is five years, and the maximum time permitted is seven years.

Admissions
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 area 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. Applicants who are not citizens of countries where English is the primary or dominant language as approved by the UCI Graduate Division 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 in the form of teaching or research assistantships.
Course Requirements
Students take a minimum of 12 4-unit courses, including five required research methods courses, five area courses, and one core course from each of the other two areas.

Required Methods Courses
A. Complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 222</td>
<td>Research Epistemologies and Methodologies</td>
</tr>
<tr>
<td>EDUC 265</td>
<td>Applied Regression Analysis for Education and Social Research</td>
</tr>
<tr>
<td>EDUC 283A</td>
<td>Qualitative Research Methods in Education I</td>
</tr>
<tr>
<td>EDUC 283B</td>
<td>Qualitative Research Methods in Education II</td>
</tr>
<tr>
<td>EDUC 288A</td>
<td>Educational, Social, and Behavioral Statistics</td>
</tr>
</tbody>
</table>

Additional Research Methods Courses (not required but strongly encouraged)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 210</td>
<td>Language, Literacy, and Discourse</td>
</tr>
<tr>
<td>EDUC 221</td>
<td>Longitudinal and Advanced Structural Equation Modeling</td>
</tr>
<tr>
<td>EDUC 234</td>
<td>Measurement and Psychometrics</td>
</tr>
<tr>
<td>EDUC 259</td>
<td>Community Research and Action</td>
</tr>
<tr>
<td>EDUC 266</td>
<td>Design-Based Implementation Research</td>
</tr>
<tr>
<td>EDUC 267</td>
<td>Classroom Research Methods</td>
</tr>
<tr>
<td>EDUC 279</td>
<td>Advanced Qualitative Methods</td>
</tr>
<tr>
<td>EDUC 280</td>
<td>Research Methods: Hierarchical Linear Modeling</td>
</tr>
<tr>
<td>EDUC 284</td>
<td>Mixed Methods in Educational Research</td>
</tr>
<tr>
<td>EDUC 287A</td>
<td>Quantitative Data Analysis in Education Research and Evaluation</td>
</tr>
<tr>
<td>EDUC 287B</td>
<td>Causal Inference: Methods for Program Evaluation and Policy Research</td>
</tr>
<tr>
<td>EDUC 288B</td>
<td>Structural Equation Modeling for Educ, Soc &amp; Behavioral Analysis</td>
</tr>
<tr>
<td>EDUC 289</td>
<td>Use of Video in Educational Research</td>
</tr>
</tbody>
</table>

Other courses in statistics or research methodology offered in the Department of Statistics, the School of Social Ecology, the School of Social Sciences, or elsewhere on campus, with the permission of the instructor.

Area Courses
The area core courses are marked with an asterisk. Students must take these courses in their own area, and one of these courses in each of the other two areas.

Human Development in Context (HDIC)

HDIC students are required to complete EDUC 229A, EDUC 237, EDUC 253, and four courses within the HDIC area.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 208</td>
<td>Reading and Writing Development</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Developing Adolescent Literacy</td>
</tr>
<tr>
<td>EDUC 223</td>
<td>Oral Language Acquisition and Education</td>
</tr>
<tr>
<td>EDUC 225</td>
<td>Learning, Development, and Culture</td>
</tr>
<tr>
<td>EDUC 229A</td>
<td>Theories and Issues in Human Development - Part I</td>
</tr>
<tr>
<td>EDUC 229B</td>
<td>Theories and Issues in Human Development - Part II</td>
</tr>
<tr>
<td>EDUC 232</td>
<td>Mathematics Cognition and Learning</td>
</tr>
<tr>
<td>EDUC 235</td>
<td>Psychology of Reading Acquisition</td>
</tr>
<tr>
<td>EDUC 236</td>
<td>Applied Linguistics and Literacy</td>
</tr>
<tr>
<td>EDUC 238</td>
<td>Special Topics in Human Development in Context</td>
</tr>
<tr>
<td>EDUC 239</td>
<td>Cognitive Neuroscience and Human Development</td>
</tr>
<tr>
<td>EDUC 268</td>
<td>Out-of-School Learning and Development</td>
</tr>
<tr>
<td>EDUC 274</td>
<td>Studies of Professional and Staff Development</td>
</tr>
<tr>
<td>EDUC 285</td>
<td>Theories of Learning Cognition</td>
</tr>
</tbody>
</table>

Educational Policy and Social Context (EPSC)

EPSC students are required to complete EDUC 253, EDUC 229A, EDUC 237, one course in the Economics of Education content area, one course in the Education Policy content area, one course in the Structure and Social Context of Schools content area, and one course within the EPSC area.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 253</td>
<td>Foundations of Educational Policy</td>
</tr>
</tbody>
</table>
### Graduate Degree Programs in Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 249</td>
<td>Special Topics in Microeconomics</td>
</tr>
<tr>
<td>EDUC 264</td>
<td>Economic Foundations of Education and Social Policy</td>
</tr>
</tbody>
</table>

#### Education Policy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 251</td>
<td>Educational Policy and Politics</td>
</tr>
<tr>
<td>EDUC 254</td>
<td>College Access and Persistence</td>
</tr>
<tr>
<td>EDUC 276</td>
<td>Early Childhood Education Policy</td>
</tr>
</tbody>
</table>

#### Structure and Social Context of Schools

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 261</td>
<td>Social and Cultural Foundations of Education</td>
</tr>
<tr>
<td>EDUC 252</td>
<td>Social Organization of Schools and Classrooms</td>
</tr>
<tr>
<td>SOCIOL 237</td>
<td>Educational Inequality</td>
</tr>
<tr>
<td>SOCIOL 279</td>
<td>Special Topics: Social Organizations and Institutions</td>
</tr>
</tbody>
</table>

#### Other Educational Policy and Social Context courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 258</td>
<td>Special Topics in Educational Policy and Social Context</td>
</tr>
</tbody>
</table>

Educational Policy and Social Context does not require its students to take more than the set of quantitative courses required, but it does strongly encourage students to take additional methods courses within or outside the School of Education:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 284</td>
<td>Mixed Methods in Educational Research</td>
</tr>
<tr>
<td>EDUC 287A</td>
<td>Quantitative Data Analysis in Education Research and Evaluation</td>
</tr>
<tr>
<td>EDUC 287B</td>
<td>Causal Inference: Methods for Program Evaluation and Policy Research</td>
</tr>
</tbody>
</table>

#### Teaching, Learning, and Educational Improvement (TLEI)

TLEI students are required to complete EDUC 237, EDUC 229A, EDUC 253, two courses in a single TLEI specialization, two additional TLEI courses (which can be in the same specialization or in a different TLEI specialization).

Specialization courses within TLEI:

##### Digital Learning and Media

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 217</td>
<td>Foundations of Digital Learning</td>
</tr>
<tr>
<td>EDUC 212</td>
<td>Literacy and Technology</td>
</tr>
</tbody>
</table>

##### Language and Literacy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 208</td>
<td>Reading and Writing Development</td>
</tr>
<tr>
<td>EDUC 210</td>
<td>Language, Literacy, and Discourse</td>
</tr>
<tr>
<td>EDUC 211</td>
<td>Writing Theory and Practice</td>
</tr>
<tr>
<td>EDUC 212</td>
<td>Literacy and Technology</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Developing Adolescent Literacy</td>
</tr>
<tr>
<td>EDUC 223</td>
<td>Oral Language Acquisition and Education</td>
</tr>
<tr>
<td>EDUC 235</td>
<td>Psychology of Reading Acquisition</td>
</tr>
<tr>
<td>EDUC 236</td>
<td>Applied Linguistics and Literacy</td>
</tr>
</tbody>
</table>

##### Sociocultural Perspectives on Learning and Educational Improvement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 225</td>
<td>Learning, Development, and Culture</td>
</tr>
<tr>
<td>EDUC 231</td>
<td>Interrogating Race and Education</td>
</tr>
<tr>
<td>EDUC 250</td>
<td>Research Practice Partnerships</td>
</tr>
<tr>
<td>EDUC 255</td>
<td>Immigration and the New Second Generation</td>
</tr>
<tr>
<td>EDUC 266</td>
<td>Design-Based Implementation Research</td>
</tr>
<tr>
<td>EDUC 289</td>
<td>Use of Video in Educational Research</td>
</tr>
</tbody>
</table>

##### STEM Teaching and Learning

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 217</td>
<td>Foundations of Digital Learning</td>
</tr>
<tr>
<td>EDUC 228</td>
<td>Science Education for the 21st-Century Classroom</td>
</tr>
<tr>
<td>EDUC 232</td>
<td>Mathematics Cognition and Learning</td>
</tr>
</tbody>
</table>

##### Teacher Learning and Professional Development

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 226</td>
<td>University Teaching: Concepts and Practices</td>
</tr>
<tr>
<td>EDUC 237</td>
<td>Foundations of Teaching and Learning</td>
</tr>
<tr>
<td>EDUC 274</td>
<td>Studies of Professional and Staff Development</td>
</tr>
</tbody>
</table>

#### Other TLEI courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 218</td>
<td>Special Topics in Teaching, Learning, and Educational Improvement</td>
</tr>
</tbody>
</table>
S/U Research Courses
Students who wish to engage in pre-dissertation or research for credit but not for a letter grade, may enroll in EDUC 295 for 2-4 units (pre-dissertation research) or EDUC 299 for 2-8 units (dissertation research). Both courses may be repeated for credit and both are graded on a Satisfactory/Unsatisfactory basis. As with other S/U courses, EDUC 295 and EDUC 299 may not be used to fulfill course of elective requirements.

Elective Courses
Students are expected and strongly encouraged to take courses beyond the 12 courses required that provide training essential to the student's research interests and professional development throughout their five years of doctoral study. These courses may come from their own area, from the other two areas, from other appropriate classes in the School of Education, from other departments on campus, or from other campuses within the University of California. Elective courses must be graduate-level courses taken for a letter grade. Independent study courses (e.g., EDUC 298) are also acceptable when taken for a letter grade, pending approval and syllabus is provided.

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

Master of Arts in Education
The School of Education offers an M.A. 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 website (http://www.education.uci.edu).

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

Overlaps with SOCECOL 10.

Restriction: Education Sciences Majors have first consideration for enrollment.

(III)

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

Prerequisite: EDUC 10

Overlaps with SOCECOL 13.

Restriction: Education Sciences Majors have first consideration for enrollment.

(Va)

EDUC 25. Introduction to Education: Disciplinary Perspectives. 4 Units.
Provides insights into educational organizations and processes by developing understanding of concepts used by four different disciplines (economics, history, psychology, and sociology) to analyze key issues and phenomenon in the field of education that profoundly influence individual life course outcomes.

Restriction: Education Sciences Majors have first consideration for enrollment.

(III)

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

(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.

Restriction: Education Sciences Majors have first consideration for enrollment.

(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.

Restriction: Education Sciences Majors have first consideration for enrollment.

EDUC 52. Foundations of Bilingual Education and Bilingualism. 4 Units.
Provides a comprehensive overview of current issues in bilingual education and bilingualism. Topics include dimensions of bilingualism, the effects of bilingualism on children’s linguistic and cognitive development, bilingual education programs, literacy, special needs, and assessment.

Same as LSCI 51B, HUMAN 52.

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.

Restriction: Pass/not-pass option only

EDUC 101. Strategies for Tutoring and Teacher Aiding in a Bilingual Classroom. 4 Units.
Placement in a dual immersion school setting to gain experience as a bilingual (Spanish) 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.

Prerequisite: Must be able to communicate in Spanish.

Grading Option: Pass/no pass only.

Restriction: Education Sciences Majors have first consideration for enrollment.

EDUC 104D. The Arts and Human Development. 4 Units.
Students use various arts disciplines (e.g. studio art, music, dance, drama, and media arts) to investigate how visual and performing arts support individual human development. Introduction to pedagogy for integrating the arts in K-12 settings. Materials fee.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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?".

Restriction: Education Sciences Majors have first consideration for enrollment.
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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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

Restriction: Education Sciences Majors have first consideration for enrollment.

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

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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 127A. Moral Education for Youth Development I. 2 Units.
The first of a two-course series that examines research-based theories for how school settings and adult mentors contribute to the moral development of adolescents. Students examine theory in the context of real-world application in four program observations.

Prerequisite: EDUC 126
Restriction: Education Sciences Majors only.

EDUC 127B. Moral Education for Youth Development II. 2 Units.
Continuation of EDUC 127A. Allows students from 127A to experience the role of adults in the moral development of youth. Students receive training to deliver curriculum and apply research-based theories and methods in real-world youth settings.

Prerequisite: EDUC 126 and EDUC 127A
Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Same as IN4MATX 164.
Restriction: Education Sciences Majors only. Informatics Majors only. Informatics Minors only.

EDUC 131. Educational Technology. 4 Units.
Presents 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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

EDUC 140. Courts, Classrooms, and Controversies in Education Policy. 4 Units.
Examines policies and laws defining the K–12 U.S. education system and the politics and controversies surrounding the political decision-making process at the federal, state, and local levels. Discusses original intent versus effects on organization of schools and educational equity.

Restriction: Education Sciences Majors have first consideration for enrollment.
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 LSCI 181A, PSYCH 141J.

Restriction: Department of Education students have first consideration for enrollment. Psychology Majors 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 LSCI 181B, PSYCH 141K.

Restriction: Department of Education students have first consideration for enrollment. Psychology Majors 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 lectures, complete assignments, and commit eight hours per week as mentors of disadvantaged preschool children.

Same as LSCI 181C, PSYCH 141L.

Restriction: Department of Education students have first consideration for enrollment. Psychology Majors 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 LSCI 181D, 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 LSCI 181E, 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 LSCI 181F, 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 LSCI 181G, 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 LSCI 181H, PSYCH 141Q.
EDUC 141. 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 LSCI 181I, PSYCH 141R.

EDUC 142. American History and Education Policy: An Intimate Relationship. 4 Units.
Examines the interplay between history, politics, and policy. Students examine the interactions between sociopolitical development and environmental contexts (e.g. familial, social, school, cultural) and contemplate the power of normative values in the formulation of education policy.
Restriction: Education Sciences Majors have first consideration for enrollment.

EDUC 143. Controversies in the College Landscape. 4 Units.
Explores the fascinating world of postsecondary education. Every week students dive deeper into controversies that make college more than just where students attend class, but rather, one of the most important social institutions shaping our world.
Restriction: Education Sciences Majors have first consideration for enrollment.

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.

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 and EDUC 148. Satisfactory completion of the Lower-Division Writing requirement.

EDUC 144. The American Charter School. 4 Units.
Explores the legitimacy of the charter school as a viable educational reform movement. Critical themes include the role of choice and privatization in public education and charter schools as a vehicle for fulfilling the promise of educational equality.
Restriction: Education Sciences Majors have first consideration for enrollment.

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.
Restriction: Education Sciences Majors have first consideration for enrollment.

EDUC 146. Education, Learning, and Culture. 4 Units.
Exploration of learning and development through a cultural lens, drawing from a range of research traditions and disciplines to broaden understandings of theories that inform teaching and learning in formal and informal settings.
Restriction: Education Sciences Majors only.

EDUC 147. Poverty, Education, and Social Change. 4 Units.
Explores how institutional and demographic changes in the U.S. have shaped disparities in education, the mechanisms through which poverty and social class influence families, and students, and promising programs and interventions to address inequity. Includes community service.
Restriction: Education Sciences Majors have first consideration for enrollment.

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
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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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 PSCI 192V, LSCI 182V.

Restriction: Language Science Majors have first consideration for enrollment. Psychological Science Majors have first consideration for enrollment. Education Majors have first consideration for enrollment. Psychology and Social Behavior Majors have first consideration for enrollment. Psychology Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment.

EDUC 152: Theory and Practice of Reading Interventions for Students At-Risk for Reading Failure. 4 Units.
Examines the research concerning reading failure in young children and interventions used to support them. Topics include reading development and reading intervention. Students critically evaluate the relation between their fieldwork experience and the research and evaluation literature.

Repeatability: May be taken for credit 2 times.

Restriction: Education Sciences Majors only.

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

Restriction: Education Sciences Majors have first consideration for enrollment.

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

Prerequisite: EDUC 10 and EDUC 15

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Corequisite: EDUC 109
Prerequisite: (PHY SCI 105 or BIO SCI 101) and EDUC 55 and EDUC 143AW and EDUC 143BW and EDUC 148

Repeatability: May be taken for credit 2 times.

EDUC 158F: Advanced Fieldwork in Middle/High School Math and Science. 3 Units.
Advanced fieldwork for math and science teacher credential candidates over two quarters, prior to starting a fall student teaching assignment. Requires a minimum of 40 hours per quarter of fieldwork in a K-12 classroom and attendance at weekly seminars.

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

Repeatability: May be taken for credit for 6 units.
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

Restriction: Education Sciences Majors have first consideration for enrollment.

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: Education Sciences Majors have first consideration for enrollment. 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 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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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 PSCI 192T.

Restriction: Psychological Science Majors have first consideration for enrollment. Education Majors have first consideration for enrollment. Psychology and Social Behavior Majors have first consideration for enrollment. Psychology Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment.

EDUC 174. Education and the American Dream: Historical Perspectives on Democracy and Education. 4 Units.
Examines the relationship between public schooling and the promotion of democratic ideals in American society over the past two centuries.

Same as HISTORY 147.

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.

Restriction: Education Sciences Majors only.

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 PSCI 9 or PSCI 11A or PSCI 11B or PSCI 11C

Same as PSCI 192U.

Restriction: Psychological Science Majors have first consideration for enrollment. Education Majors have first consideration for enrollment. Psychology and Social Behavior Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment.

EDUC 179W. Advanced Writing for Education Sciences. 4 Units.
Writing for multiple audiences and purposes about central concepts in education sciences, such as schools as organizations; social structures in education and stratification; individual decision making, government regulation and markets; human development and learning.

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

Restriction: Upper-division students only. Education Sciences Majors have first consideration for enrollment.
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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Restriction: Education Sciences Majors have first consideration for enrollment.

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.

Repeatability: May be taken for credit for 12 units.

Restriction: Sophomores only. Upper-division students 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: Graduate students only. Education-MA/PhD 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: Graduate students only. Education-MA/PhD 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: Graduate students only. Education-MA/PhD 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: Graduate students only. Education-MA/PhD Majors 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 and Writing Development. 4 Units.
Covers major theories and evidence about mechanisms and factors that contribute to development and difficulties with reading and writing skills. These include language, cognition, biological and environmental factors, bilingual and second language acquisition, and educational implications.

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 217. Foundations of Digital Learning. 4 Units.
Students are introduced to historical, constructionist, instructionist, and new literacies perspectives through reading major works in educational technology and discussing how they apply to both teaching and research.

Restriction: Graduate students only.

EDUC 218. Special Topics in Teaching, Learning, and Educational Improvement. 4 Units.
Advanced seminar designed to engage students in highly interactive examination of current issues in teaching and learning. Topics and content 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 221. Longitudinal and Advanced Structural Equation Modeling. 4 Units.
Covers advanced and longitudinal structural equation models. Topics include measurement invariance, growth curve models, measurement models, mixture models, and missing data.

Prerequisite: Recommended: EDUC 288B.
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 223. Oral Language Acquisition and Education. 4 Units.
Learn about research on domains of development in oral language (phonology, vocabulary, grammar, and extended discourse), bilingual development, and second language acquisition with attention to cognitive, biological, and environmental factors. Focus on learning in school settings and educational implications.
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 226. University Teaching: Concepts and Practices. 4 Units.
Prepares doctoral students for course design and instruction at the university level. Addresses topics including the university teaching context, preparing a syllabus, and inclusive teaching and learning.
Restriction: Graduate students only.

EDUC 228. Science Education for the 21st-Century Classroom. 4 Units.
Aims to develop foundational understanding about science education research. Contemporary research from early childhood through high school is introduced. Issues of equity, social justice, pedagogy, professional development, and innovation in and out of school settings are addressed.
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 229A. Theories and Issues in Human Development - Part I. 4 Units.
Examines seminal concepts, issues, and theories that underlie contemporary developmental science. Students develop an understanding of these concepts, and develop their skills in using theory as a guide in their own research and practice.
Restriction: Graduate students only.

EDUC 229B. Theories and Issues in Human Development - Part II. 4 Units.
Examines seminal concepts, issues, and theories that underlie contemporary developmental science. Students develop an understanding of these concepts, and develop their skills in using theory as a guide in their own research and practice.
Restriction: Graduate students only.

EDUC 230. The History and Culture of Schooling in the United States. 4 Units.
Considers the historical, cultural, and structural processes that contextualize American schooling. In particular, examines the roles of race, class, and gender in the context of public education in the United States.
Restriction: Master of Arts in Teaching Degree students only.
EDUC 231. Interrogating Race and Education. 4 Units.
Critically explores how race is a socially constructed concept and how it manifests itself in American society. Attention is given to African American, Asian, and Mexican communities throughout U.S. history, with particular emphasis on educational inequality.
Restriction: Graduate students only.

EDUC 232. Mathematics Cognition and Learning. 4 Units.
Study of mathematical cognition, learning, and development. Combines readings from cognitive and developmental psychology, education, and learning sciences with the purpose of identifying the most useful applications of cognitive theory and methods for educational research and practice.
Restriction: Graduate students only.

EDUC 234. Measurement and Psychometrics. 4 Units.
Focuses on appraisal and development of measures, measurement theory, and its application using a classical test theory approach. Topics include scaling, construction, reliability and validity assessment, and item analysis; as well as cross-cultural and cross-linguistic considerations in test development.
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 236. Applied Linguistics and Literacy. 4 Units.
Examines research in applied linguistics as related to teaching literacy. Overview of language knowledge required to understand development and instruction of literacy. Topics include English language structures, psychological processing of these structures, and methodologies to study language and literacy.
Restriction: Graduate students only.

EDUC 237. Foundations of Teaching and Learning. 4 Units.
Situates learning in relation to teaching, content, and context. Locates the work of teaching and learning as a cultural practice and considers the limitations of existing theories for advancing learning opportunities for historically under-served and under-resourced communities.
Restriction: Graduate students only.

EDUC 238. Special Topics in Human Development in Context. 4 Units.
An advanced seminar designed to engage students in highly interactive examination of current issues in human development. Topics and content vary by quarter, depending upon the research interests of the faculty and students.
Repeatability: May be taken for credit 10 times as topics vary.
Restriction: Graduate students only.

EDUC 239. Cognitive Neuroscience and Human Development. 4 Units.
Focuses on the latest empirical work at the intersection of neuroscience, cognitive psychology, developmental science, and educational practice; explores how educational neuroscience fits within those fields; and discusses the main conceptual and practical challenges facing the field.
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: Graduate students only. Education-MA/PhD Majors only.

EDUC 241. Children’s Sense Making in Science. 2 Units.
Investigates elementary students as individuals who construct understanding of concepts through their interactions with others and the world around them. Observations of children in informal settings to analyze learning in context.
Restriction: Master of Arts in Teaching Degree students only.
EDUC 243. The Policy Environment of Teaching. 2 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 levels.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 245. Learning Inside and Outside of School. 2 Units.
A field-based course focused on observing adolescents in out-of-school contexts to examine adolescent learning and development in a range of contexts, how out-of-school contexts motivate learning and development, and consider the implications for teaching.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 246. Teaching Investigations: Identifying Dilemmas of Practice. 4 Units.
Focuses on identifying problems of teaching practice that arise in student teaching, examining the theoretical foundations that underlie problems of practice, and developing approaches for inquiring into strategies to systematically address instructional challenges.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 247. Teaching Investigations: Exploring Dilemmas of Practice. 4 Units.
Focuses on exploring problems of teaching practice that arise in student teaching, drawing on research to examine the theoretical foundations that underlie problems of practice, and to propose courses of action to address and study educational interventions.

Prerequisite: EDUC 246

Restriction: Master of Arts in Teaching Degree students only.

EDUC 248. Understanding Teacher Agency. 4 Units.
Considers how teachers can become agents of change within their school contexts, through their participation in professional organizations and via social media. Candidates experiment with using different avenues for sharing images of practice and action research.

Prerequisite: EDUC 246

Restriction: Master of Arts in Teaching Degree students only.

EDUC 250. Research Practice Partnerships. 4 Units.
An introduction to research-practice partnerships (RPPs). It examines the distinctive characteristics of this approach to education improvement by discussing examples of established partnerships and inviting students to become familiar with methods and tools to advance RPP work.

Repeatability: May be taken for credit 2 times.

Restriction: Graduate 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 252. Social Organization of Schools and Classrooms. 4 Units.
Examines how schools are organizations with ambiguous goals, faced with challenges around effective leadership and cooperation, part of loosely coupled systems, and subject to coercive, normative, and mimetic pressures from organizational environments, shaping institutional practices and structures.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

EDUC 253. Foundations of Educational Policy. 4 Units.
Reviews disciplinary models that economists and sociologists employ in approaching education-related policy issues, including markets as emergent systems, human capital, social and cultural capital, and rational choice and institutional models of administrators and teachers.

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 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-Based Implementation Research. 4 Units.
Explores design-based implementation research (DBIR) to organize research and improvement efforts in education. Delves deeper into different techniques of partnership development, design, implementation, and improvement science to build a repertoire of practices for students' studies.

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 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 276. Early Childhood Education Policy. 4 Units.
Covers core topics in the field of early education policy. Integrates research from the various perspectives relevant to child policy in a practical way to understand the mechanisms of intervention and to develop policy solutions.

Restriction: Graduate 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 279. Advanced Qualitative Methods. 4 Units.
Further developing qualitative inquiry skills for examining human interaction and studying lived experiences of individuals and communities. Practices and techniques for collecting, working with, and analyzing qualitative data to develop and justify claims.

Prerequisite: EDUC 283A or EDUC 283B

Restriction: Graduate students only.

EDUC 280. Research Methods: Hierarchical Linear Modeling. 2-8 Units.
Research data often have a hierarchical structure, which require multi-level models. Students learn to use HLM; conduct appropriate analyses; and write the methods and results section for a peer-reviewed journal article. Previous coursework in regression is required.

Repeatability: May be taken for credit 3 times.

Restriction: Doctor of Philosophy Degree students only. Graduate 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, Quintillian, 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 284. Mixed Methods in Educational Research. 4 Units.
Provides an overview of mixed methods research for students familiar with both quantitative and qualitative research. Consists of defining mixed methods research, describing its history and foundations, and examining various types of mixed methods designs.

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 287A. Quantitative Data Analysis in Education Research and Evaluation. 4 Units.
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
Restriction: Graduate students only.

EDUC 287B. Causal Inference: Methods for Program Evaluation and Policy Research. 4 Units.
Provides students with a comprehensive overview of how to perform some more advanced statistical methods useful in answering policy questions using observational or experimental data.
Restriction: Graduate students only.

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 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 301. Directed Elementary Field Experiences in Diverse Schools. 2 Units.
Fieldwork 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.
Grading Option: Satisfactory/unsatisfactory only.
Restriction: Master of Arts in Teaching Degree 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: Master of Arts Degree students only.

EDUC 304. Student Teaching in the Elementary Schools. 8-12 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 repeated for credit unlimited times.
Restriction: Master of Arts Degree 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: Master of Arts in Teaching Degree students only.

EDUC 306. Supervised Teaching in Bilingual Education, Elementary. 8-12 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: Master of Arts in Teaching Degree students only.

EDUC 307. Student Teaching in Intermediate/Secondary School. 8-12 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 repeated for credit unlimited times.
Restriction: Master of Arts in Teaching Degree students only.

EDUC 320. Teaching Physical and Health Education in Elementary School. 4 Units.
Methods of teaching physical education for the elementary classroom teacher. Through an interactive environment, students experience the California Physical Education and Health content standards with appropriate pedagogy. Concepts address motor skills, physical fitness, and personal responsibility for lifelong health.
Grading Option: Satisfactory/unsatisfactory only.
Restriction: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree 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 support preservice teacher development in the critical areas of planning, instruction, and assessment for conceptual understanding in mathematics.
Restriction: Master of Arts in Teaching Degree 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 323A. Curriculum Methods in Elementary Science. 2 Units.
Prospective elementary teachers learn how to teach science in grades K-8. Covers state science requirements, a variety of teaching methods, and criteria for selecting science curriculum materials.
Restriction: Master of Arts in Teaching Degree students only.

EDUC 323B. Curriculum Methods in Elementary Science. 2 Units.
Prospective elementary teachers learn how to teach science in grades K-8. Covers state science requirements, a variety of teaching methods, criteria for selecting science curriculum materials, and how to plan science lessons, units, experiments, projects, and demonstrations.
Prerequisite: EDUC 323A
Restriction: Master of Arts in Teaching Degree 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. Materials fee.
Repeatability: May be taken for credit 2 times.
Restriction: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree 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: Graduate students only. Education 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: Graduate students only. Education Majors 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: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree students only.

EDUC 339. Methods of Teaching Visual Arts in Secondary Schools. 4 Units.
Theory, curriculum, and strategies for teaching visual arts in the secondary school. Emphasis on the planning, delivery, and assessment of lessons consistent with California State Framework and content standards.

Restriction: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree 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: Master of Arts in Teaching Degree 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: Teaching Credential Degree students only. EDUC 342 and EDUC 342A-B may not both be taken for credit.
EDUC 342A. Applied Instructional Strategies in Secondary Schools. 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: Master of Arts in Teaching Degree students only. EDUC 342 and EDUC 342A may not both be taken for credit.

EDUC 342B. Applied Instructional Strategies in Secondary Schools. 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: Master of Arts in Teaching Degree students only. EDUC 342 and EDUC 342B may not both be taken for credit.

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: Master of Arts in Teaching Degree 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.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 348. Educational Equity and the Exceptional Learner. 2 Units.
Knowledge, skills, and strategies to teach exceptional learners in the general education classroom. Legislation pertaining to the education of exceptional learners. Role of general education teacher in the special education process. Inclusive curriculum to provide equal access to content.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 348A. Educational Equity and the Exceptional Learner I. 2 Units.
Focuses on knowledge, skills, and strategies needed to teach special populations in general education secondary classrooms. Covers categories and characteristics of disability and exceptionality, state and federal legislation, and the role of general education teachers in the special education process.

Restriction: Graduate students only. Education-MA/PhD Majors only.

EDUC 348B. Educational Equity and the Exceptional Learner II. 2 Units.
Emphasizes the use of differentiated instruction to meet special needs and the creation of a positive, inclusive learning environment that provides access to the core curriculum for special needs students.

Restriction: Graduate students only. Education-MA/PhD Majors 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: Master of Arts in Teaching Degree students only.

EDUC 352. Creating a Supportive & Healthy Environment for Student Learning in Secondary Classrooms. 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: Graduate students only. Education Majors only.
EDUC 358. Media and Information Literacy in the Secondary Classroom. 2 Units.
Focuses on how teachers can help their students to become critical, ethical, and effective users of technological resources in the secondary classroom. Students learn tools for evaluating, selecting, and incorporating appropriate learning technologies into the secondary classroom.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 359. Curriculum and Methods for Elementary Social Science and Information Literacy. 4 Units.
Methods of instruction for Social Science at the K–6 level. Includes integration of the use of technology, development of content literacy, and use of evidence to construct arguments.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 361. The Adolescent Learner . 4 Units.
Issues of adolescent development and learning in family, school, and community contexts from biological, psychological, cognitive, and social perspectives. Focuses on how adolescents learn, what motivates them to learn, and how schools and teachers contribute to adolescents’ growth.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 362. Curriculum and Methods for Elementary Language Arts and English Language Development. 4 Units.
Methods, instructional practices, and assessment strategies for teaching English-Language Arts, with a focus on instructional practices for supporting English Language Learners. Focuses on core language arts topics, including composition of persuasive, expository, and narrative texts; speaking; and listening.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 364. Instructional Design and Education Technology for the Elementary Classroom. 2 Units.
Focuses on how teachers can effectively integrate educational technologies for teaching and learning in the elementary school classroom. Students learn tools for evaluating, selecting, and incorporating appropriate technologies into their classroom activities.

Restriction: Master of Arts in Teaching Degree students only.

EDUC 374. Learning and Child Development . 4 Units.
Issues of child development and learning in family, school, and community contexts from biological, psychological, cognitive, and social perspectives. Focuses on how young children learn and develop, how schools and teachers contribute to children’s growth, and implications for instruction.

Restriction: Master of Arts in Teaching Degree 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.