

Teacher Education

In the College of Education

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A Member of the American Association of Colleges for Teacher Education.
Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

Faculty

Emeritus: Ackerly, Alger, Bee, Berg, Burnside, Charles, Cornejo, Curry, Duckworth, Elliott, Erickson, Farnan, Fearn, Garrison, Gast, Gega, Gibson, Goodson, Hill, Hovda, Ingmanson, Kaatz, Kelly, Lapp, Littrell, Lujan, Mason, McCormack, McCoy, Mehaffy, Mikitka-Gomez, Mora, Moreno, Moss, Murphy, Nagel, A., Nagel, T., Nieto, Neumann (IVC), Platz, Ponce (IVC), Reel, Riggs, Rixman, Ross, P., Shaw, Stautland, Strom, Tran, Treadway, Zozakiewicz

Director: Santa Cruz (Interim)

Professors: Bezuk, Chizhik, A., Evans, Gallego, Lamb, Pang, Park, Philipp

Associate Professors: Branch, Cappello, Chizhik, E., Duesbery, Ross, D., Santa Cruz, Vaughn

Assistant Professors: Soto, Sterling Aquino

Lecturers: Bendall, Loh-Hagan, Prime, Rodenberg

Offered by the School of Teacher Education

Master of Arts degree in education.

Master of Arts degree in mathematics education (K-8).

Master of Arts degree in reading education.

Master of Arts in Teaching degree.

Major in liberal studies with the B.A. degree in applied arts and sciences.

Emphasis in education-generalist.

Emphasis in elementary education.

Emphasis in mathematics.

Emphasis in science.

Clear program for a professional clear credential

Induction program for a professional clear credential.

Multiple subject preliminary teaching credential.

Reading and literacy leadership specialist credential.

Single subject preliminary teaching credential.

Linked learning certificate (refer to the *Graduate Bulletin*).

Reading and literacy added authorization (refer to the *Graduate Bulletin*).

The Credentials

Students in California's public schools reflect a wide variety of ethnic, linguistic, and cultural backgrounds. The School of Teacher Education is committed to preparing teachers to ensure the academic success of all students. Candidates from underrepresented groups are strongly encouraged to apply.

The Multiple Subject Credential qualifies graduates to teach in any K-12 self-contained classroom (a classroom where one teacher is responsible for teaching in all subject fields). For most, this means an elementary or middle school setting but does not preclude an alternative school or school-within-a-school (e.g., pregnant teen) setting. The credential programs include a study of educational psychology plus a variety of methods courses in subjects commonly taught in elementary schools.

A variety of program options are available to credential candidates. Daytime commitments are required for student teaching placements. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

The Single Subject Credential qualifies graduates to teach in grades K-12 in a specific subject area. Most candidates prepare to teach in grades 7-12 (usually junior or senior high school) or in a middle school setting (usually grades 6-8). Students in the program follow a sequence of courses which normally takes two semesters to complete.

The first semester of the program emphasizes curriculum theory and development, educational research, and foundations of education and includes a part-time student teaching experience. The second semester focuses on a full-time student teaching experience and accompanying seminar. The program requires a daytime commitment. A three semester program is also available. This program provides more flexibility for students who have additional responsibilities. Coursework in this program is offered in the late afternoon and evenings. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

Multiple Subject (SB 2042) Credential (Elementary Education) (Credential Code: 00200)

Multiple Subject – Preliminary Credential

Persons interested in teaching in the traditional elementary school will typically pursue the Multiple Subject (SB 2042) credential which authorizes teaching service in self-contained classrooms in preschools, grades K-12, and in classes organized primarily for adults (classrooms in which one teacher is responsible for all the subjects commonly taught). Recommendation for this credential requires:

1. A baccalaureate or higher degree.
2. Completion of an approved program of professional education, including student teaching and coursework in reading methods with a grade point average of 3.0 or better.
3. Basic skills competency as demonstrated through passing scores on the California Basic Educational Skills Test (CBEST).
4. Demonstrated subject matter competency by passing the Multiple Subjects examination of the California Subject Examinations for Teachers (CSET). Must have scores taken within five years prior to recommendation.
5. Successful completion of the Performance Assessment for California Teachers (PACT).
6. Passing scores on the Reading Instruction Competence Assessment (RICA).
7. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course. Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement.
8. Knowledge of health education, including substance abuse and nutrition: Teacher Education 280 or approved equivalent.
9. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450 or 500.
10. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
11. Verify current training and certification in cardiopulmonary resuscitation (CPR).

NOTE: Undergraduate students in the Multiple Subject credential program may register for concurrent post-baccalaureate credit in their final semester prior to obtaining a baccalaureate degree as explained in the section of this catalog on "General Regulations."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of a clear credential program or an induction program approved by the California Commission on Teacher Credentialing. For information about the SDSU clear and induction programs; visit the website at http://go.sdsu.edu/education/ste/apply_clear.aspx.

Admission Standards and Qualifications for the Multiple Subject Credential Program

Candidates for the Multiple Subject Credential Program must satisfy the standards and qualifications listed below and submit an online departmental application to the School of Teacher Education. Contact the School of Teacher Education for application dates or find them at http://go.sdsu.edu/education/ste/apply_credentials_new.aspx.

Applications must verify the following:

1. **CBEST Examination.** Students must pass the California Basic Educational Skills Test (CBEST) *prior to admission* to the Multiple Subject credential program. Registration information and materials for the CBEST are available at <http://www.cbest.nesinc.com>. Candidates are urged to take this examination as early as possible. Candidates are required to submit a copy of the individual score reports; uploaded to the online application.
2. **Subject Matter Competency.** Students must submit passing scores on the California Subject Examination for Teachers-Multiple Subjects (CSET-MS) in order to verify subject matter competency in diversified subjects commonly taught in self-contained classrooms. For the traditional, post-baccalaureate program (see below), test scores must be submitted prior to admission to the program. Test scores submitted for verification of subject matter competency are valid for only five years from the date the first subtest was passed and must be valid at the time of recommendation for the credential. Registration information and registration materials are available at <http://www.cset.nesinc.com>.
3. **Prerequisite Courses.** These courses or approved equivalents must be completed with grades of "C," "Cr," or better no more than seven years prior to admission to the Multiple Subject Credential Program. The courses may be in progress at the time of program application. Proof of registration is required to be considered for admission.
 - a. **Education 451. Introduction to Multicultural Education (3)**
 - b. **Teacher Education 280. Health Education for Teachers (1)**
 - c. **Mathematics 210. Number Systems in Elementary Mathematics (3)** In lieu of Mathematics 210, candidates may substitute any calculus course taken at the college or university with a grade of credit, "C," or better.
 - d. **Special Education 450. Classroom Adaptations for Special Populations (2)**

Candidates are required to submit unofficial transcripts from SDSU and official transcripts from all other colleges and universities attended including any current coursework-in-progress to verify completion of or enrollment in these courses.

4. **Grade Point Average.** Candidates must have attained a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate coursework or a minimum 2.67 overall or 2.75 in the last 60 semester (or 90 quarter) units attempted. Candidates are required to submit official transcripts from all colleges and universities attended (with exception of SDSU) to the SDSU Graduate Admissions office for GPA calculations. Official SDSU transcripts are not required as they can be accessed via the SDSU WebPortal at <http://www.sdsu.edu/portal>.
5. **Letters of Recommendation.** Candidates must submit two letters of recommendation from individuals who know the candidate in different capacities (i.e. employer/supervisor, university professor, classroom teacher) and who can comment directly on factors such as the candidate's qualifications for a teaching career in a multicultural setting, work or educational experiences, experience teaching or supervising students or other groups of individuals, personal character, and/or potential for success as a teacher. Letters from family or friends will not be considered. These letters will be collected through our online application system. Students will need the name and e-mail address for those who will be providing a recommendation for them.
6. **TB Clearance.** Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.

7. **California Certificate of Clearance.** This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months or as quick as two weeks depending on one's background. Candidates must be fingerprinted through LiveScan and then submit the application directly to the California Commission on Teacher Credentialing (CCTC). The clearance must be granted on the CCTC website prior to admission to the credential program. Possessors of K-12 California credentials or Emergency Teaching Permits may satisfy this requirement with these valid credentials and will need to be kept current throughout the credential program.
8. **Early Field Experience.** Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a "regular" classroom in public elementary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at http://go.sdsu.edu/education/ste/apply_credential_step_8.aspx.
9. **Personal Narrative.** See department website for current prompts at http://go.sdsu.edu/education/ste/apply_credential_step_9.aspx.
10. **Appeals Process.** Candidates who do not meet all the admission requirements may petition the Multiple Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application.

In addition to the minimum admissions standards identified above, the Multiple Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. Due to the number of applicants, application to the program does not ensure admission. The chancellor's office, Executive Order 1032, establishes standards for admission to teacher credential programs as follows: "The candidate shall have demonstrated personality and character traits that satisfy the standards of the teaching profession. The assessment of the candidates shall be made by the teacher education faculty of the campus, who may also consider information from public school personnel and others. The campus may use tests, observations, and interviews for this assessment."

NOTE: *Appointments for discussion of individual concerns relative to the credential program may be made with the Multiple Subject Credential Program Adviser during the academic year through the School of Teacher Education, EBA-259, 619-594-6320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.*

Post-Baccalaureate Multiple Subject Preparation Program

To qualify for admission, candidates must have completed (1) a baccalaureate or higher degree and (2) the Admission Standards and Qualifications for the Multiple Subject Credential Program listed above. Each student completes student teaching in two different grade levels; one assignment is at the primary level (in grades K-3) and another is at the intermediate level (in grades 4-6). All students enrolled in the traditional Multiple Subject Teacher Preparation Program will take the following courses.

Multiple Subject Required Courses

	<i>Units</i>
TE 902 Classroom Management Skills	1
TE 910A Teaching Mathematics in the Elementary School.....	3
TE 910B Teaching Social Studies in the Elementary School.....	3
TE 910C Teaching Science in the Elementary School	3
TE 923 Psychological Foundations of Education.....	3
TE 930 Teaching Reading and Language Arts in the Elementary School.....	6
TE 960 Basic Student Teaching Seminar (Cr/NC)	2
TE 961 Advanced Student Teaching Seminar (Cr/NC).....	2
TE 965 Basic Student Teaching in Elementary Schools (Cr/NC)	8

TE 966	Advanced Student Teaching in Elementary Schools (Cr/NC)	8
ED 970	Teaching Event Assessment (Cr/NC)	3
DLE 915A	Teaching and Learning in the Content Area: English Language Development/SDAIE	3
	Total Units	<u>45</u>

Single Subject (SB 2042) Credential (Secondary Education) (Credential Code: 00100)

Single Subject – Preliminary Credential

Persons interested in teaching in the traditional secondary school will typically pursue the Single Subject (SB 2042) credential which authorizes teaching service in departmentalized, subject matter classrooms in preschools, grades K-12, and in classes organized primarily for adults (classes where instruction is provided in only one subject). Candidates must verify subject matter competency in one of the following subject fields:

ACCEPTABLE SINGLE SUBJECT CREDENTIAL AREAS AND APPLICABLE MAJORS

- English language arts: Comparative Literature, English
- Mathematics: Mathematics
- Music: Music (**currently accepting applications from SDSU undergraduate majors only**)
- Science: Biology, Chemistry, Physical Science
- Social science: Social Science

Recommendation for this credential requires:

1. A baccalaureate or higher degree.
2. Completion of an approved program of professional education, including student teaching with a grade point average of 3.0 or better and coursework in reading methods.
3. Basic skills competency as demonstrated through passing scores on the California Basic Educational Skills Test (CBEST).
4. Demonstrated subject matter competency through completion of an approved waiver program in one of the California Single Subject areas or through California Subject Examinations for Teachers (CSET) examinations. Candidates should check with the College of Education, Office of Student Services, EBA-259, to clarify the appropriate means for satisfaction of the subject matter competency requirement in their subject matter area(s). Competency must be verified and assessed by a designated departmental adviser regardless of the means of establishing knowledge proficiency.
5. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course or examination. (Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement.)
6. Knowledge of health education, including substance abuse and nutrition: Public Health 101, or Teacher Education 280, and verification of CPR competency.
7. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450 or 500.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
9. Successful completion of a California Commission on Teacher Credentialing (CCTC) approved Teacher Performance Assessment (edTPA).
10. Current certification in adult, child, and infant cardiopulmonary resuscitation (CPR).

NOTE: Undergraduate students in the Single Subject credential program may register for concurrent post-baccalaureate credit in their final semester prior to obtaining a baccalaureate degree as explained in the section of this catalog on "General Regulations."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing.

Admission Standards and Qualifications for the Single Subject Credential Program

Candidates for the Single Subject Credential Program must satisfy the standards and qualifications listed below and submit an online departmental application to the School of Teacher Education. Contact the School of Teacher Education for application dates or find them at http://go.sdsu.edu/education/ste/apply_credentials_new.aspx.

Applications must verify the following:

1. **CBEST Examination.** Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Credential Program. Registration information and materials for the CBEST are available at <http://www.cbest.nesinc.com>. Candidates are urged to take this examination as early as possible. Candidates are required to submit a copy of the individual score reports; uploaded to the online application.
2. **Subject Matter Competency.** Students must verify competency in a specified single subject area through a university assessment process which consists of reviewing coursework for completion of an approved teaching major or its equivalent at San Diego State University or another approved California teacher-training institution, passing scores on the appropriate CSET examinations. Competency will be assessed and verified by subject matter departments at SDSU. Requirements for the various single subject majors are listed with the academic majors in this catalog. Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination. Information and registration materials for all current examinations are available at <http://www.cset.nesinc.com>.
3. **Prerequisite Courses.** These courses or approved equivalents must be completed with grades of "C," "CR," or better no more than seven years prior to admission to the Single Subject Credential Program. The course may be in progress at the time of program application. Proof of registration is required to be considered for admission.
 - a. **Education 451. Introduction to Multicultural Education (3)**
This course provides an introduction to ethnicity, language, and culture in education, particularly the ways in which those factors differentially affect educational outcomes for children. The course assists in preparing teacher applicants to work with students from diverse backgrounds by examining both societal and personal belief systems and the ways that those beliefs are expressed in public school classrooms.
 - b. **Teacher Education 280. Health Education for Teachers (1)**
This course provides topics designated in the Health Framework for California to include how to infuse health topics into the general curriculum.
 - c. **Special Education 450. Classroom Adaptations for Special Populations (2)** This course provides strategies for adapting curriculum, differentiating instruction, meeting social and behavioral needs, and modifying assessments for students with disabilities and/or gifted and talented students in general education classrooms.
4. **Grade Point Average.** Candidates must have attained a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate coursework or a minimum 2.67 overall or 2.75 in the last 60 semester units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial copies of transcripts for SDSU coursework for GPA calculations.
5. **Letters of Recommendation.** Candidates must submit two letters of recommendation from individuals who know the candidate well (but are not related by blood or marriage) and who can comment directly on factors such as the candidate's qualifications for a teaching career in a multicultural setting, work or educational experiences, experience teaching or supervising students or other groups of individuals, personal character, and/or potential for success as a teacher. These letters will be collected through our online application system. Students will need the name and e-mail address for those who will be providing a recommendation for them.

6. **TB Clearance.** Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.
7. **California Certificate of Clearance.** This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A printout from the CCTC website showing the granting of this clearance is required prior to admission; uploaded to the online application.
8. **Early Field Experience.** Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a "regular" classroom in public secondary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at http://go.sdsu.edu/education/ste/apply_credential_step_8.aspx.
9. **Personal Narrative.** See department website for current prompts at http://go.sdsu.edu/education/ste/apply_credential_step_9.aspx.
10. **Appeals Process.** Candidates who do not meet all the admission requirements may petition the Single Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application packets.

In addition to the minimum admissions standards identified above, the Single Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. A personal interview may also be necessary. Due to the number of applicants, application to the program does not ensure admission. The chancellor's office, Executive Order 1032, establishes standards for admission to teacher credential programs as follows: "The candidate shall have demonstrated personality and character traits that satisfy the standards of the teaching profession. The assessment of the candidates shall be made by the teacher education faculty of the campus, who may also consider information from public school personnel and others. The campus may use tests, observations, and interviews for this assessment."

NOTE: *Appointments for discussion of individual concerns relative to the credential program may be made with the Single Subject Credential Program Adviser during the academic year through the School of Teacher Education, EBA-259, 619-594-6320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.*

Single Subject Required Courses

	<i>Units</i>
TE 903 Secondary School Student Teaching Seminar (Cr/NC).....	3-4
TE 914 Teaching and Learning in the Content Area: Major.....	3
TE 922 Behavioral and Psychological Aspects of Teaching	3
TE 933 Teaching of Reading in the Secondary School.....	3
TE 954 Humanistic and Social Aspects of Teaching	3
TE 963 Secondary School Student Teaching I (Cr/NC/RP)	6
TE 964 Secondary School Student Teaching II (Cr/NC/RP)	12
ED 970 Teaching Event Assessment (Cr/NC)	3
DLE 915B Teaching and Learning in the Content Area: English Language Development/SDAIE	3
Total Units	39-40

Information Applicable to Both Multiple Subject and Single Subject Credentials

Departmental admission to either the Multiple Subject or Single Subject credential program does not constitute admission to the university. Candidates who are entering the university for the first time, or who have graduated or who are graduating, and are planning to re-enroll for the credential program must file a separate application for admission to the university during the regular university application period.

Advanced Standing in Teacher Education

A student transferring into San Diego State University to complete requirements for either the Preliminary or Professional Clear Multiple Subject or Single Subject credential must complete a minimum of six units of professional education coursework in residence at SDSU in order to be recommended for certification regardless of the extent of education work completed at other institutions.

Evaluation of Credits

After an interval of five years, courses in education are reevaluated and subject to reduction in credit, in light of new requirements and changes in educational procedures. All courses taken either at this university or elsewhere must be approved by an official adviser in order to be credited toward meeting credential requirements or pattern requirements for a degree.

GPA Requirements For Continuation in Multiple Subject/Single Subject Credential Programs

A grade point average of 3.0 must be maintained each semester to permit a student to continue in the Multiple Subject and Single Subject credential programs.

Supplementary Authorizations

With completion of additional units in certain curriculum areas, both Single and Multiple Subject teachers can be granted supplementary authorizations to teach in generalized areas in middle and junior high schools (e.g., Introductory English). Single subject teaching credential candidates can also be granted supplementary authorizations to teach in specialized areas K-12 (e.g., psychology). Information on requirements for these supplementary authorizations is available through the College of Education, Office of Student Services, EBA-259.

Description of Interdepartmental Major for Elementary Teaching

**Liberal Studies Major
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 49012)**

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.

Refer to the section of the catalog on "Liberal Studies" for an outline of the requirements for this major.

The following coursework is required for acceptance into the education program and may be included in the liberal studies major unless otherwise noted:

- Education 451
- Mathematics 210

General advising for the liberal studies major is available in the School of Teacher Education, EBA 255, 619-594-6131.

Induction Program for a Clear Credential (Multiple and Single Subject)

The induction program offers contracted and non-contracted teachers the opportunity to obtain a professional clear credential. The year-long program provides mentored support reflecting the candidate's instructional context and needs, develops deeper understandings of pedagogy, and advances knowledge and application of current universal access to meet the needs of all students.

Complete online classes available. Field experience in local school setting.

Prerequisite: A valid SB 2042 Preliminary Multiple or Single Subject Credential or equivalent. Clear credential program coursework cannot be taken prior to issuance of the preliminary credential. **Optional:** Signed CL-855 required to verify employment by contracted teachers before seeking approval to complete field experience in their own classrooms.*

Courses Required for the Credential (13-16 units)

	<i>Units</i>
TE 602A Seminar: California Clear Teaching Credential (Cr/NC).....	1
TE 602B Seminar: Formative Assessment	3
TE 969 Clinical Practice for Induction	1-4
DLE 651 Curriculum, Teaching, and Assessment: EL and SDAIE	3
LDT 570 Advanced Teaching with Technologies	3
SPED 600 Classroom Adaptations for Special Populations	2

* For questions regarding the program, contact the Clear Credential Office, clearcredential@mail.sdsu.edu. For details or to apply, http://go.sdsu.edu/education/ste/clear_credential.aspx.

Courses (TE)

Refer to *Courses and Curricula and University Policies* sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

Note to all Multiple Subject and Single Subject credential candidates: All credential courses are listed and described in the Graduate Bulletin under the 900-series courses.

LOWER DIVISION COURSES

TE 170. Child and Adolescent Development from a Cultural Perspective (3) [GE]
(Same course as Child and Family Development 170)

Theories of human development using a cultural/ecological framework applied to case studies and direct observations. Open only to liberal studies majors. Not open to students with credit in Child and Family Development 170, 270, or Psychology 230.

TE 211A. Field Experience in Mathematics (1) Cr/NC

One lecture and 10 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

Guided classroom observations for prospective middle and high school mathematics teachers. Mathematics education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings. (Formerly numbered Teacher Education 211.)

TE 211B. Field Experience in Science (1) Cr/NC

One lecture and 10 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

Guided classroom observations for prospective middle and high school science teachers. Science education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings.

TE 250. Informal Learning and Instruction of Mathematics and Science (3) [GE]
(Same course as Science 250)

Two lectures and two or more hours of activity.
Theories of learning and instruction through the lens of informal mathematics and science activities. Qualitative research skills while working in after school mathematics and science programs. Design and Implementation of informal education in a service-learning environment.

TE 280. Health Education for Teachers (1)

Topics designated in health framework for California; infusing health topics in the K-12 general curriculum. For multiple or single subject candidates. This course is offered only in the fall.

TE 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

TE 303. The Teaching Profession: First Clinical Experience (3-4)
(Offered only at IVC)

Two or three lectures and three hours of laboratory.
Prerequisites: Requires clearance for all legally mandated fingerprint requirements, tuberculosis clearance, and others as required by state and/or school districts.

Social science concepts and theories for the teaching profession; guided student observation and participation in public school classrooms.

TE 362. Fieldwork in Community Settings (1-4)

One lecture and one to six hours of activity.
Prerequisites: Consent of instructor and intent to enroll in teaching credential programs.

Tutoring process and teaching strategies for the content being tutored. Maximum credit six units.

TE 402. Foundations of Education (3)
(Offered only at IVC)

Prerequisite: Admission to multiple or single subject teaching credential program.

Combines disciplines of anthropology, economics, history, philosophy, political science, psychology, and sociology to introduce student to concepts and generalizations informing the teaching and learning process in modern classrooms.

TE 415. Methods and Materials of Instruction (3)
(Offered only at IVC)

Prerequisite: Admission to single subject teaching credential program.

Teaching concerns, instructional planning and materials, classroom management, measurement and evaluation, effective discipline, curriculum, computer literacy, special problems encountered in teaching, career planning, school-community communication processes.

TE 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

TE 499. Special Study (1-3)

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

TE 511. Assessment in Mathematics Education (3)

Techniques to assess and develop students' mathematical understanding. For use by elementary and secondary classroom teachers and mathematics education specialists.

TE 512. Ethnic Identity Development in Education (3)

Prerequisite: Consent of instructor.
Racial and ethnic identity development through curriculum for improving academic achievement of students in K-12 schools. Racial and ethnic socialization of children and identity development of American ethnic groups.

TE 530. Children's/Adolescents' Literature (3)

Survey of children's/adolescents' literature and its incorporation into the classroom curriculum.

TE 596. Topics in Teacher Education (1-3 or 6) RP*

Designed to meet the needs of individuals or groups of teachers who wish to develop or continue the study of some problem. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

* Specified sections.

GRADUATE COURSES
Refer to the *Graduate Bulletin*.