# Department of Secondary Education
## Single Subject Credential Program
### Knowledge Base of Policies Standards, Theorists, and Theories

<table>
<thead>
<tr>
<th>Program-Wide</th>
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<tbody>
<tr>
<td>1. <strong>Professional Education Standards:</strong> The CTC Single Subject Credential Program Standards provide the framework for program design and evaluation</td>
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<td>2. <strong>Teaching Performance Expectations:</strong> Coursework is also aligned with the California Standards for the Teaching Profession and Teaching Performance Expectations. Based on research and grounded in practice, expectations focus on understanding and organizing subject matter for student learning; developing as a professional educator; creating and maintaining environments for student learning; planning and organizing instruction; engaging and supporting all students in learning; and assessing student learning.</td>
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<td>3. <strong>Professional Organizations:</strong> Each subject area program is informed by the professional standards of the associated national organizations. These organizations are listed at <a href="http://ed.fullerton.edu/SecEd/Professional_Resources.htm">http://ed.fullerton.edu/SecEd/Professional_Resources.htm</a></td>
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<td>4. <strong>Content Standards and Frameworks:</strong> The philosophy of the California Frameworks for K-12 Schools and content identified in California K-12 Content Standards are the foundation for teacher preparation.</td>
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<td>5. <strong>Professional Development Schools:</strong> Reflecting the complex contexts of the secondary classroom and focus on modeling a learning community where learning is interactive and dynamic, SECTEP candidates on the traditional track are divided into &quot;Professional Development Districts,&quot; modeled after the PDS advocated by Linda Darling-Hammond and the Holmes Group to improve both the quality of teaching and student learning. Four major strategies are emphasized: 1) preparing prospective teachers; 2) providing professional growth opportunities for secondary school educators and 3) university faculty; 4) and enhancing learning opportunities for secondary students. This comprehensive structure of collaboration and cooperation between multiple levels of educators provides for a dynamic and interactive learning environment that effectively prepares teachers for a rapidly changing and complex society.</td>
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<td>6. <strong>Adult Learning Theory:</strong> Our program is structured to take advantage of specific motivations for adult learning, including the need for social relationships (thus we structure our program via cohorts), the need to improve social welfare (thus we emphasize social justice); the need for personal advancement; and the need for cognitive interest (thus we make our courses as interesting as possible and allow candidates to make decisions about specific aspects of their assignments and learning).</td>
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<td>7. <strong>Online Learning Environments:</strong> Our courses are delivered both face-to-face and WEB-based. Palloff and Pratt (1999) have developed a practical, hands-on guide to help faculty create virtual classroom environments that facilitate student interaction. Ideas in the text serve as foundational concepts for online instruction by our faculty.</td>
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### EDSC 304 PERSONAL PROFICIENCY IN EDUCATIONAL TECHNOLOGY FOR SECONDARY TEACHERS

| 8. **Grant Wiggins and Jay McTighe** theorize backward design as a process for effective curriculum planning. They maintain that in order to develop student understanding and engage and focus student inquiry, teachers should build their units around the questions that gave rise to the content knowledge. Good projects are designed by starting with the goals, determining what students need to know, and then defining how to assess understanding. Wiggins and McTighe also identify ways to assess student projects and performances (Wiggins, 1998). |
| 9. **Benjamin Bloom** theorized a six-level description of thinking, which was recently revised by Lorin Anderson. Their list of cognitive processes is organized from the most simple to the most complex. |
| - Bloom, B. S. & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of
EDSC 310 THE TEACHING EXPERIENCE

10. **Robert J. Marzano** identifies effective practices for enhancing student learning. His research identifies school-level factors as guaranteed and viable curriculum; challenging goals and effective feedback; parental and community involvement; safe and orderly environment; and collegiality and professionalism. Teacher-level factors include instructional strategies, classroom management, and classroom curriculum design. Student level factors are home environment, learned intelligence or background knowledge, and motivation.

11. **Robert J. Marzano, Debra J. Pickering, Jane E. Pollack** present nine categories of instructional strategies that have a strong effect on increasing student achievement: identifying similarities and differences; setting objectives and providing feedback, generating and testing hypotheses; using questions, cues, and advance organizers; cooperative learning; summarizing and note-taking; reinforcing effort and providing recognition; homework and practice; and nonlinguistic representations.

EDSC 320 ADOLESCENCE AND EDUCATION

12. **Lawrence Kohlberg** was predominantly known for his theory of moral development. He based his theory of moral development on the work of Jean Piaget and John Dewey. All three of these researchers believed that people develop not only physically, but also psychologically in a progressive manner. His theorized three stages of moral development—pre-conventional, conventional, and post conventional—and identified strategies for teaching students at each level.

13. **Jean Piaget**'s theory of development is based on four stages; adolescent's cognitive development is based on adolescents developing a different way of understanding the world. This expansion advances them into the next stage. It is not how much an individual knows, but how she/he conceives of that information that determines the level of adolescent development. Piaget’s theory is based on stages, the ages specific to these stages need to be thought of as approximate, therefore, adolescents can be functioning anywhere from the concrete operational to the formal operational stage.

14. **Carol Gilligan** postulated that women are taught to be nurturers and care for others. She was an integral part of a group that formed a new psychology for women. While many feminists were adamant that differences between males and females do not exist, Gilligan argued that women have differing moral and psychological propensities than men. She postulated that men think in terms of justice and rules while women use a groups think and focus on caring and nurturing.

EDSC 330 DEVELOPING LITERACY IN SECONDARY SCHOOLS

15. **Stephen Krashen** explores the research surrounding the role of school and public libraries and the research indicating the necessity of a print-rich environment that provides light reading as well as the best in literature to assist in educating children to read with understanding and in second language acquisition. He looks at the research surrounding reading incentive/rewards programs and specifically at the research on AR (Accelerated Reader) and other electronic reading products. Krashen summarizes the most recent and valuable research on how good reading takes place. He identifies the kind of teaching which has been proven to help produce confident and creative writers. The importance of the relationship between reading and writing is carefully traced as well. The insights in this monograph are powerful basics for writers and for those seeking success in teaching language arts at all levels.

16. **Gay Ivey and Karen Broaddus** note that reading attitudes tend to turn downward in middle school. Middle school is the time when teachers really begin to expect students to read dense, expository text. This type of reading clashes with what students have enjoyed reading previously, so often times the type of reading that interests middle school students and the kind of reading typically assigned to them in school no longer match.
**EDSC 340 TEACHING DIVERSE STUDENT POPULATIONS IN SECONDARY SCHOOLS**

17. **Christine Sleeter** created a much-needed framework for multicultural education. By contrasting key curricular assumptions with those of multicultural education, she reveals the aspects they share as well as the conceptual and political differences between them. Sleeter makes a strong case for what teachers can do to “un-standardize” knowledge in their own classrooms, while working toward high standards of academic achievement.

18. **Sonia Nieto** focuses on multicultural and bilingual education, curriculum reform, teacher education, Puerto Rican children’s literature, and on the education of Latinos, immigrants, and other culturally and linguistically diverse student populations. She examines how personal, social, political, cultural, and educational factors affect the success or failure of students in today’s classroom. Social justice is firmly embedded in this view of multicultural education, and teachers are encouraged to work for social change in their classrooms, schools, and communities.

**EDSC 410 TEACHING ENGLISH LEARNERS IN SECONDARY SCHOOLS**

19. **Stephen Krashen** revolutionized second language learning by identifying the crucial role of "comprehensible input" (i.e., linking language that is a "little beyond" their current level of competence with clues to its meaning that make the language input understandable/comprehensible) in instruction. He also emphasizes the importance of teaching students in a low anxiety environment (i.e., low affective filter) for optimum language input. **Implications for content teachers:** Increasing comprehensibility by incorporating different types of clues to the meaning of the language used in class (both oral and written) is helpful for English learners (ELs).

20. **Cummins** makes the distinction between two types of language proficiency: social or “surface” skills of listening and speaking (i.e., Basic Interpersonal Communication Skills--BICS) and academic language (i.e., Cognitive Academic Language Proficiency--CALP). **Implications for content teachers:** Teachers should not assume that non-native speakers who have attained a high degree of fluency and accuracy in everyday conversational English have the corresponding academic language proficiency. Cummins also believes that a language learner acquires a set of skills and concepts/knowledge that can be drawn upon when working in another language (i.e., Common Underlying Proficiency (CUP)). CUP provides the base for the development of both the first language and the second language. Any development of CUP that takes place in one language will have a beneficial effect on the other language(s); implying that instruction in primary language (L1) will benefit the student in acquiring competency in second language (L2). **Implications for content teachers:** It is important that students be encouraged to continue their native language development. As Cummins stated, “conceptual knowledge developed in one language helps to make input in the other language comprehensible.”

21. **Vygotsky’s** theoretical framework is that social interaction profoundly influences cognitive development. Another aspect of Vygotsky’s theory is the idea that the potential for cognitive development depends upon the “zone of proximal development” (ZPD): a level of development attained when children engage in social behavior. Full development of the ZPD depends upon full social interaction. The range of skill that can be developed with adult guidance or peer collaboration exceeds what can be attained alone. Increasing social interaction in classrooms will facilitate language learning as well as concept attainment in content classrooms.

22. **Other language learning approach/methods** such as “Cognitive Academic Language Learning Approach” (developed by Chamot and O’Malley), “Sheltered Instruction Observation Protocol (developed by Jana Echevarria), “Specially Designed Academic Instruction in English” and other teaching strategies are explored in the course to provide our pre-service and in-service teachers a guide to adapting instruction for English Learners.
23. **Gary Borich** is an internationally known authority on effective teaching, assessment and evaluation. Dr. Gary Borich is Professor of Educational Psychology at the University of Texas at Austin. He has written many books related to teacher training. In his book, *Effective Teaching Methods*, Borich presents effective teaching practices and positive prescriptions for increasing student achievement which are derived from recent 25-year period of classroom research.


24. **Lee and Marlene Canter** developed an assertive classroom management discipline system in order to aid teachers who wanted to, but were unable to get rid of unwanted behaviors in the classroom. They ascribed this dilemma to a lack of behavior management preparation on the part of the teachers. They believed that no student should ever thwart a teacher from teaching or interfere with another student’s learning. It is a comprehensible, resolute, and approachable way of generating a system of expectations for the classroom.


25. **Abraham Maslow** work, his hierarchy of needs proposed that some needs take precedence over others. His model places men’s and women’s physiological needs as its base, while the highest level is transcendence. Maslow also emphasized that each lower need must be met before moving to the next level.


26. **Benjamin Bloom** created classification method for the cognitive, affective, and the psychomotor components of intellectual behavior. Bloom found that most test questions posed to students requires them to recall information. This exercise in thinking takes place at the lowest level of his taxonomy. Bloom documented six levels within the cognitive domain, from undemanding recall/recognition of facts, working up toward more complex and abstract levels, to the highest order of evaluation.


27. **Susan Cahan** and **Zoya Kocur** provide an introduction to multicultural theory is accessible and practical for students whose focus is visual art.


28. **Dissanayake** provides a species oriented, anthropological view of art and art education.


29. Broadly cultural and scholarly; Discipline Based Art Education at arms length, **Elliot Eisner** describes “artistry in teaching,” and the unique contributions the arts make to individual understanding and experience of the world.

- Eisner, Elliot (2001) *Art and the creation of mind*. New Haven: Yale University Press. This is the textbook for the ART 449S course.

30. **Kerry Freedman** presents an approach of postmodern Visual Studies that is broadly researched-based and includes pedagogic practice.


31. **Maxine Greene** is the grand dame of educational philosophy, connecting a cultural view of visual arts with pedagogy and progressivism of Dewey. “It is difficult to accept a call for excellent teaching and ‘teaching for America’s future’ that pays no heed to the awakenings the arts make possible. And the arts, of forms, may awaken teachers-to-be from the ‘aesthetic’.”

prominent educators in the field of business education for learning processes and teaching business subjects.


33. **Lawrence Erickson** is known as the father of modern keyboarding.

34. Scholars have also put together a collection of effective teaching methods by chapter by well-known effective business educators across the country.

**ENGLISH/LANGUAGE ARTS CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

35. **Louise Rosenblatt** introduced the theory of Transactional Reading which maintains that both reader and text are essential to the making of meaning. The reader is active, drawing on a reservoir of past experience to interpret texts. The implications of Rosenblatt’s theory range from ideas about instruction, selecting texts, and involving students in the reading of literature.

36. **Jim Burke** is an expert on the changing pedagogy of the language arts classroom. From his experiences as a classroom English teacher at Burlingame High School, he has written the most thorough explanation of teaching practices in The English Teacher’s Companion. In this text, he covers such topics as basic reading and writing, the uses and misuses of grammar instruction, lesson planning, assessment, and aligning curriculum to standards. In addition to pedagogy, Burke covers the theories of some of the most significant researchers in writing and literature and the implications that their work has to the classroom.

**FOREIGN LANGUAGES CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

37. **Noam Chomsky** provided a critique of the behaviorist view of language acquisition, sets the groundwork for the transition to an innate language acquisition device as being the key for language acquisition (rather than all merely external stimulus/response).

38. **Mark Baker** examines the elements that human languages across the world have in common and the common rules that hold for many languages.

39. **Steven Pinker** provides a strong analysis of whether we have an innately (biologically programmed) ability to use language in our brains.

40. **Alice Omaggio Hadley** provides a critical overview of various theories of second language acquisition and presents the essentials of using a contextualized/communicative approach in language teaching.

41. **Stephen Krashen** provides the foundation of his “natural approach” or Monitor Theory which clarifies the difference between acquisition (similar to how we learn first language) learning (conscious application of grammatical rules), suggests that we need to have “comprehensible input” just beyond the learning level, and calls for attention to be given to affective issues in the classroom environment.

**FOUNDATIONAL LEVEL MATHEMATICS CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

42. **Jeremy Kilpatrick, Jane Swafford, and Bradford Findell** compiled findings from current research of how K-8 students develop mathematical proficiency and produced a framework for the teaching of mathematics. Their work makes explicit the idea that learning mathematics is more than developing rote skills; mathematical proficiency involves procedural fluency, adaptive reasoning, strategic competence, conceptual understanding, and a productive disposition.

43. **Richard Skemp** was an educational psychologist whose research supported the idea that learners develop cognitive schema that organize their understanding of a subject (and how it relates to other subjects). In particular, he articulated a distinction between an instrumental understanding of mathematics (with which one can carry out rote operations as long as they are structurally similar to what was learned—a cognitively limiting schema) and a relational understanding of mathematics (with which one can flexibly connect ideas within and between content areas—a cognitively rich schema).
Associates.

44. **Ed Silver, Margaret Schwan Smith, and Marjorie A. Henningsen** maintain that all students should have opportunities to develop understandings of important mathematical concepts and build their confidence in applying mathematics to contextualized problems. Data from their multi-year study of the cognitive demand of mathematical tasks given to students in urban middle school classrooms led the researchers to develop a powerful framework that helps teachers understand how to identify, design, and implement higher level mathematical tasks (thereby supporting more conceptual learning).


**MATHEMATICS CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

45. **Elizabeth Fennema** developed a survey that measures attitudes towards mathematics. She also developed an instrument that measures a teacher’s approach to a child centered classroom or Cognitively Guided Instruction. This work as well as her work with gender differences and teachers trying to change their craft has had a major impact on the field of mathematics education.


46. **Henry Pollak**, former head of Research and Development at AT&T's Bell Labs, is a world renowned mathematical modeler. As he describes it, the mathematical modeling process is much more than problem solving and offers numerous entry points for students of all abilities. Using real world problems to learn mathematics demonstrates the efficacy of mathematics. This pedagogical approach encourages teachers to investigate various methods of presenting a topic in order to reach all students.


**MUSIC CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

47. **Robert A. Duke** outlines the basic challenges for music teachers: 1) Understand the basic workings of human beings- mind, behavior, and learning. 2) Understand the mechanisms by which the environment-physical, emotional, and intellectual experiences- may affect the workings of the individual. 3) Master the machinery that creates change in human thinking and behavior. The teacher must structure experiences in the classroom that create opportunities for students to perform successfully, both as persons and musicians.


48. **Edwin E. Gordon**, a music learning theorist, describes how audiation (hearing and comprehending music without the physical sound being present) occurs when students are exposed to familiar or unfamiliar musical patterns. The three music-learning sequences are skill learning, tonal content learning, and rhythm content learning. Discrimination learning (aural/oral, verbal association, partial synthesis, symbolic association, composite synthesis) is most fundamental, followed by inference learning (generalization, creativity/improvisation, theoretical understanding).


**PHYSICAL EDUCATION CONTENT-SPECIFIC METHODOLOGIES 442, 449E, 449S, 449I**

49. **Muska Mosston and Sara Ashworth** have applied a universal theory about teaching that applies to all teaching events. Their application is based on the axiom that teaching is a chain of decision making and all teaching can be analyzed from the perspective of who makes which decision and why


50. **Judith Placek and Mary O'Sullivan** integrate physical education within the broader context of kinesiology (internal integration) and within the context of core subject area (external integration).

51. **John D. Bransford** maintains that “one of the hallmarks of the new science of learning is its emphasis on learning with understanding. Intuitively, understanding is good, but it has been difficult to study from a scientific perspective. At the same time, students often have limited opportunities to understand or make sense of topics because many curricula have emphasized memory rather than understanding. An emphasis on understanding leads to one of the primary characteristics of the new science of learning: its focus on the processes of knowing.

52. **Piaget** was interested in development, and after a few studies of biological organisms, he turned his interest to the development of knowledge. He had worked as a scientist for well over sixty years, when he wrote in his Foreword to an important English collection of his writings: “My central aim has always been the search for the mechanisms of biological adaptation and the analysis and epistemological interpretation of that higher form of adaptation which manifests itself as scientific thought.” (Piaget, 1977, p.XI)

53. **Vygotsky** explained the mechanisms of social influence and maintained that human learning presupposes a special social nature by which children grow into the intellectual life of those around them.

54. **Lee Shulman** maintained that pedagogical content knowledge is based on the manner in which teachers relate their pedagogical knowledge (what they know about teaching) to their subject matter knowledge (what they know about what they teach). According to Shulman, pedagogical content knowledge embodies the aspects of content most germane to its teachability. Within the category of pedagogical content knowledge include, for the most regularly taught topics in one’s subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations - in a word, the ways of representing and formulating the subject that make it comprehensible to others.

### Social Studies Content-Specific Methodologies 442, 449E, 449S, 449I

55. The concept of Social Studies – as opposed to pure history and social science – dates back to Harold Rugg in 1920 in the very first issues of *The Social Studies* and the beginnings of the National Council for the Social Studies. Rugg insisted that K-12 students needed to be involved in their lessons rather than just memorize the facts and dates of history.

56. **Shirley Engle** followed Rugg in focusing on student decision making as the center of Social Studies instruction.

57. As a student of Engle’s, **Ron Pahl** has followed these two mentors and expanded their principles to the practical application of teaching of World History with his recent set of three volumes *Breaking Away from the Textbook—Creative Ways to Teach World History*.

### Theater Content-Specific Methodologies 442, 449E, 449S, 449I

58. **Viola Spolin** established improvisation as the center of actor training. Her work is used extensively in the classroom to introduce principles of scenic structure and character development, reduce inhibitions, and encourage creativity and spontaneity.

59. **Barbara Salisbury Wills** is best known as the author of the elementary school theatre arts texts used in Texas public schools. Her work emphasizes the development of playmaking skills while expanding the imagination. Exercises are designed as an aid to all subjects in the curriculum and stress both teacher and student assessment.

60. **Sally Dorothy Bailey** provides an excellent overview of physical and cognitive disabilities and suggests how special needs students might best be integrated into the theatre classroom. The recommended adaptations present an effective means of instruction for all students regardless of functioning level or...
ability.