
3C

Action

Professional Services Committee

Program Approval and Initial Institutional Approval

Executive Summary: This agenda item presents five single subject matter programs for Commission approval.

Recommended Action: That the Commission approve the five single subject matter programs described in this agenda item.

Presenter: Helen Hawley, Consultant
Professional Services Division

Strategic Plan Goal: 1

Promote educational excellence through the preparation and certification of professional educators.

- ◆ Sustain high quality standards for the preparation and performance of professional educators and for the accreditation of credential programs.

March 2008

Program Approval and Initial Institutional Approval

Introduction

This agenda item presents five single subject matter programs submitted by institutions of higher education for single subject matter program approval.

Background

The Commission regularly receives recommendations for program approval from single subject matter review panels. These panels of subject matter experts review all program documentation and make an informed determination as to whether the program meets the standards common to all subject matter programs and the content specific subject matter standards. The content specific subject matter standards are closely aligned to the K-12 academic content standards. These subject matter programs are usually undergraduate courses of study completed before candidates begin teacher preparation programs. However, they may be completed concurrently with teacher preparation programs.

Subject Matter Program Review Procedures

Following are the general procedures for the review of subject matter programs:

1. Technical Assistance – After the Commission adopts a set of new program standards, Commission staff members provide technical assistance to prospective program sponsors wishing to submit responses to the new standards. Technical assistance materials are provided on the Commission’s website. Staff members train, assign, and coordinate review team work.
2. Preconditions Review – After the program proposal is received, Commission staff review the sponsor’s response to the preconditions. The preconditions are based on both state laws and Commission policies, and address minimum unit and content area requirements. If the preconditions response is incomplete, the sponsor is requested to provide specific information necessary for compliance with the preconditions.
3. Program Review –The program sponsor’s responses to the Commission’s subject matter program standards are reviewed by a team of two or more subject matter educators to determine if the program meets the program standards, including the subject matter requirements (SMRs). The SMRs are the content knowledge required to be covered in the program and are aligned to the K-12 content standards that the candidate will be expected to know. The reviewers are trained in the alignment of the standards and subject matter requirements and in the review process before they are assigned proposals to review. Reviewers are instructed to find explicit evidence that programs not only align with K-12 content standards but also introduce their candidates to those standards within the

context of their subject matter studies. The team must reach consensus that each standard is met based upon evidence provided in the document. If the program does not meet the standards, the sponsor is given an explanation of the findings. The sponsor may then submit the additional information requested. Once reviewers determine that the program proposal provides a convincing and adequate body of evidence to meet the Commission's adopted subject matter program standards, the program is recommended to the Commission for approval.

4. After subject matter program approval is granted by the Commission, the institution may accept candidates in the approved subject matter program. Graduates of a Commission approved single subject matter preparation program meet the Commission's subject matter requirement and are not required to take the subject matter examination (CSET).

This report presents five single subject matter programs which have been deemed to have met all of the appropriate *Standards of Quality and Effectiveness for Single Subject Matter Preparation Programs* (www.ctc.ca.gov/educator-prep/STDS-subject-matter.html) by the appropriate review panel and are recommended to the Commission for approval. These five are:

California State University, Fullerton:	Physical Education
California State University, Sacramento:	Art
California State Polytechnic University, Pomona:	Social Science
California State University, East Bay:	Social Science
San Diego State University:	Science
	Biology
	Chemistry
	Geosciences
	Physics

Summary Information on the Single Subject Matter Programs

California State University, Fullerton: Physical Education

The California State University, Fullerton Physical Education Subject Matter Preparation Program (SMPP) is based on the *Physical Education Model Content Standards for Public Schools* and the *Physical Education Framework for California Public Schools*. The program philosophy has as its overall aim to help all children and youth develop into physically educated individuals. In this mechanized and increasingly sedentary society, the physically educated person would have the skills, knowledge, attitudes, and commitment necessary to participate throughout life in appropriate, life sustaining, physical activities. The schools help to nurture and develop these characteristics. CSU Fullerton's Physical Education SMPP shares this responsibility in its efforts to recruit, educate and train a cadre of future Physical Education teachers to provide leadership and direct services to prepare the physically educated citizens of the future.

Candidates are required to take foundational and core coursework in kinesiology that gives the background knowledge necessary to apply important concepts, ideas, and methods relevant to the physical education curriculum. The core concepts include developmental sequences or progressions, developmental stages, closed and open skills, whole versus part practice, fitness principles, strategies for developing and maintaining lifetime fitness habits, force generation and application, psycho-sociological antecedents and consequences of regular physical activity participation. Candidates are required to meet a performance competency level for physical activities in addition to written exams that assess knowledge of skill progressions, rules, and training or performance strategies. Foundations, core and elective courses require a written, oral, performance-based, knowledge-based, classroom-based, laboratory-based, and field-based assignments and assessments, including formal research papers, group work, and presentations.

The SMPP candidate outcomes for physical education at CSU Fullerton are based on the seven domains discussed in the *Physical Education Single Subject Matter Standards for the Single Subject Teaching Credential* (adopted by the Commission, May 2004). Each outcome below describes what candidates should know and be able to do as a result of their completion of the approved SMPP-PE document.

1. Candidates demonstrate an understanding of the philosophical, historical, and legal/ethical foundations of physical education; of issues that affect the field; of the professional responsibilities of physical educators; and of the past and present philosophies of physical education and their impact on contemporary programs.
2. Candidates demonstrate an understanding of human growth and development processes, as well as how these processes interact with and influence motor learning.
3. Candidates are prepared to provide all students with a developmentally appropriate, safe, and effective physical education program.
4. Candidates understand, explain, and analyze motion according to scientific principles and apply that knowledge instructing body mechanics in safe and efficient ways. In doing so, candidates modify instruction based on individual differences, including disabilities. Candidates recognize and can explain changes in body systems resulting from practice, development, and response to exercise.
5. Candidates demonstrate an understanding of the sociology and psychology of human movement to ensure that they are prepared to promote all students' motivation for physical activity and their development of positive, responsible personal and social behaviors that encourage lifelong physical activity.
6. Candidates demonstrate an understanding of the movement concepts and forms contained in *Physical Education Model Content Standards for California Public Schools (K-12)* (2006). These include but are not limited to aquatics; dance; fitness activities; fundamental and creative movement skills; individual, dual, and team sports; nontraditional activities and games; outdoor education activities; and gymnastics.
7. Candidates can integrate and apply movement concepts to a broad range of physical education activities and environments.
8. Candidates demonstrate an understanding of assessment principles and procedures in order to be able to evaluate the effectiveness of physical education strategies and activities in promoting student achievement.

9. Candidates, by selection, adaptation, and/or development of appropriate assessment instruments and strategies, can determine whether individuals, including those with diverse backgrounds, varying abilities, and special needs, have progressed and achieved specified goals in physical education.
10. Candidates demonstrate an understanding of the integration of themes and concepts in physical education and the interrelationships between physical education and other subject areas in order to create effective learning environments and experiences that provide students with opportunities to achieve the standards contained in the *Physical Education Model Content Standards for California Public Schools (K-12)* (2006).

California State University, Sacramento: Art

The Single Subject Matter Program in Art at CSU Sacramento provides prospective teachers course work that is designed around the state-adopted academic content standards and curriculum frameworks in Art. The program prepares prospective art teachers with a strong foundation and understanding in interrelated core areas of Art History and Cultural Contexts, Art Studio, and Art Education. These areas are enhanced with additional course options in art history, studio art, aesthetics, human development and field experiences.

The program requires candidates to explore, on a personal level, a basic understanding of the visual arts. Through these experiences, a student gains knowledge of the nuances within the visual arts. This enables students to begin the development of a personal aesthetic within particular mediums while learning how to communicate and demonstrate the language, skills, and ideas invested within the visual arts to others. Imperatives within the program are doing (learning to create art), critically thinking about, talking about, and assessing visual art within the context of a global community. Specifically, the extended outcomes of the 4-year program for candidates for the Single Subject Teaching Credentials are:

1. To demonstrate proficiency as an artist with comprehensive conceptual skills.
2. To demonstrate mastery in a variety of art media and apply their skills effectively to structure meaningful art experiences.
3. To process sensory information through elements and principles unique to art.
4. To produce works of art by using technical, problem solving, and critical analysis skills in two-dimensional and three-dimensional art studio areas.
5. To understand the historical and cultural origins and meanings of art works and apply comprehensive knowledge of art criticism; art heritage of cultures from around the world, past and present.
6. To understanding aesthetic models through diversity of global cultural perspectives.
7. To relate what is learned in art to other subject areas and to careers (connections, relationships, and applications).
8. To understand diversity and equity issues.
9. To understand technology and how it relates to creative visual processes and classroom practices.
10. To be familiar with careers available in the field of visual arts.

The Art Education Program utilizes a variety of standard assessment practices such as art making, field experiences, course examinations and research assignments. At the same time the

program also requires the successful completion of capstone coursework and the submission of a professional portfolio that serves as an end-of-term summative assessment of work selected from this and prior courses for evaluation. Prospective teachers are informed early that they will be required to summarize and analyze the K-12 standards in the capstone course. In the capstone course prospective teachers also assess their preparation against California's Visual Art Curriculum Framework and develop curriculum materials based on the content standards and frameworks.

California State Polytechnic University, Pomona: Social Science

The History/Social Science subject matter program provides prospective teachers with the specific knowledge of major areas taught in the secondary schools, as identified in the *History-Social Science Content Standards for California Public Schools* and the *California History-Social Science Framework*. The History/Social Science subject matter program provides candidates with an understanding of human diversity and culture, as well as specific knowledge about past decisions and events and their historical context. The program seeks to develop analytical skills, judgment, clear thinking, and fluent expression in candidates. Candidates develop the understanding and knowledge base needed to function effectively as teachers in a society that is both humanistic and technological. Candidates are equipped to teach historical knowledge, cultural understanding, democratic and civic values, and study and critical thinking skills as directed by the California Framework.

The program requires candidates to use new research techniques and to develop historical and critical modes of analysis. The curriculum has been designed to be multi-cultural and multi-ethnic to meet the needs of Cal Poly's ethnically diverse student population, including the context in which schools function in the United States. Candidates are required to learn and use technology throughout the program, and they are exposed to high-level interactive and critical thinking activities throughout the curriculum.

Upon completion of the program, candidates will have a general understanding of past historical events, individuals, and major theories explaining historical changes in their global contexts. Following the examples provided by their instructors and as a result of the lessons and challenges that their instructors present in and beyond the classroom, candidates:

1. Gain familiarity with a range of historical subjects that span distinct eras.
2. Recognize how different individuals, groups, organizations, societies, cultures, countries, and nations have interacted in the past and how those interactions have affected history.
3. Gain familiarity with the aims and achievements of different schools of historical thought, practice, and analysis.
4. Develop an appreciation of themselves and of others through the study of the past in local, regional, national, and global contexts.
5. Learn to evaluate and draw information from the narratives of past events that participants and observers produced.
6. Recognize differences in the methods and techniques of historians and learn how to compare and critique them.
7. Argue historically and critically in discussions, presentations, and assignments.

8. Practice the methods of historical research, including the development of research topics, the gathering and evaluation of evidence, and the presentation of research findings to a wider audience.
9. Develop content knowledge in the areas identified by the Board of Education of the State of California as essential for secondary school teachers.
10. Gain exposure to distinct, varied, and effective teaching methods.
11. Apply their knowledge of historical subjects to the practical task of creating lessons for other students.
12. Observe history teachers and develop an appreciation of effective teaching methods in secondary school classroom settings.

California State University, East Bay: Social Science

The essential qualities of the California State University, East Bay's Social Science subject matter program are embodied in the guiding principles and ultimate objectives of the program. The coursework that comprises the program develops historical understanding of the content and mastery of the skills addressed in the *History-Social Science Content Standards for California Public Schools* for grades 6-12. The program accomplishes those objectives in a manner that proceeds logically, challenges students, and encourages them to become lifelong learners. Ever conscious of the ultimate goal—teachers ready to walk into California classrooms with a firm mastery of the material which they are expected to teach—the CSU East Bay Social Science Program was developed through extensive consultation between faculty members of the Political Science, Geography, and Economics Departments and the faculty and dean of the CSU East Bay School of Education, and other social science educators, including high school teachers.

The program coursework requires candidates to acquire perspectives, engage with ideas, examine data, weigh points of view, and reach conclusions about social science issues through intellectual inquiry, historical research and analytical interpretation. The expected learning outcomes of the Social Science Program at CSU East Bay are as follows:

1. Students will acquire an in-depth understanding of subject matter and methodology of History and the Social Sciences and understand the basic themes and issues of the history of the United States and Europe and other regions of the world (Africa, Asia, and Latin America).
2. Students will acquire a mastery of the basic principles of historical analysis and discourse. They will have a mastery of the research methodology appropriate to historical study. They will be able to locate and retrieve and evaluate information.
3. Students will gain an understanding of the methodology of other Social Sciences in the Program and be able to interpret data and concepts drawn from these disciplines (economics, geography, and political Science) and integrate them with historical understanding in the analysis and solution of problems.
4. Students will be able to communicate the results of their studies in appropriate written form.
5. They will be able to give oral presentations.
6. Furthermore, prospective teachers will be able to demonstrate specific content knowledge as outlined in the *California History-Social Science Framework* and the *History-Social Science Content Standards for California Public Schools*.

San Diego State University: Science (Biology, Chemistry, Geosciences, and Physics)

The San Diego State Subject Matter Preparation Program prepares candidates with an operational knowledge of (1) the various science disciplines linked by a strong understanding of how they interconnect, and (2) the nature of science, including the essential role of observation and inference along with conceptual models that explain scientific ideas. Candidates are prepared to think critically, analyze evidence and write results clearly to convey ideas and conclusions about science.

The program is based on the philosophy that to become effective science teachers, teacher candidates must possess knowledge and understanding that is considerably deeper than what they will teach. They must appreciate and experience science as a way of knowing, must wrestle with issues and situations that affect people's everyday lives, and must participate in the debates surrounding the scientific moral, ethical, technological, and environmental problems that affect society. These goals are consistent with the content of the state-adopted *Science Content Standards for California Public Schools* and the *Science Framework for California Public Schools*. The purpose of the program is to produce high quality teacher candidates for secondary school science who are knowledgeable in the standards, frameworks, methods and movements in science education. To this end, candidates study biology, chemistry, earth and space science, and physics plus the history of science and technology in the core courses; complete specialized science and math courses and research in one of the concentration subject areas; and complete a carefully structured, introduction to teaching course with guided activities and 30 hours of field experience in secondary classrooms. Candidates achieve the following outcomes:

1. They develop a deep conceptual knowledge of the various disciplines, especially their area of concentration, linked by a strong understanding of how the disciplines interconnect.
2. They understand the nature of science as a discipline, including the essential role of observation and inference plus the importance of conceptual models to explain scientific ideas. They know how to use scientific equipment and chemicals safely and effectively and how to use computers to obtain and analyze data.
3. They are able to think critically, analyze evidence, and write clearly. They communicate scientific ideas well both in writing and speaking. They use scientific terminology correctly so that they can develop their own students' command of the academic language of science.
4. They know how to observe, interview, and tutor youth effectively in classroom settings that include students from many different cultures and ethnic groups.

Collectively, the core, concentration, and assessments reflect the following elements: critical thinking, reading and research, and guided instruction in lecture-based courses; activity-based instruction, collaboration, experiment design, use of scientific equipment and technology, and awareness of safety issues in laboratories and field trips; application of concepts to society in many courses; and integration of the various discipline in both the special history of science and technology course and the field experience course. Candidates demonstrate their abilities to use their knowledge, skills, and abilities during their field work with both middle school and high school youths and during their formative and summative assessments.

Recommendations

Based upon a determination by a review panel that the following entities have met all relevant standards and requirements, staff recommends Commission approval of the following:

Single Subject Matter Programs

California State University, Fullerton:	Physical Education
California State University, Sacramento:	Art
California State Polytechnic University, Pomona:	Social Science
California State University, East Bay:	Social Science
San Diego State University:	Science
	Biology
	Chemistry
	Geosciences
	Physics