4C

Information/Action

Educator Preparation Committee

Proposed Standardized Subject Matter Requirement Domain Language

Executive Summary: This agenda item provides updated standardized Subject Matter Requirement Domain descriptions, following the feedback shared by preparation program faculty and staff to draft descriptions.

Recommended Action: That the Commission review, provide direction, and approve the revised standardized subject matter requirement domains for use in evaluating transcripts to determine if a candidate has demonstrated subject matter competency and to inform the adoption of future subject matter assessments.

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Strategic Plan Goal

Educator Preparation and Advancement

- **Goal 2.** Prospective educators have multiple pathways to explore and access careers in education and advance in the profession.
    D. Increase accessibility of the credentialing process by eliminating unnecessary barriers for prospective educators

Proposed Standardized Subject Matter Requirement Domain Language

Introduction

Education Code section 44259 mandates that all candidates for a teaching credential must demonstrate subject matter competency within the subject areas of the credential they are seeking. Traditionally, teacher candidates demonstrated subject matter knowledge by passing the credential-aligned California Subject Examination for Teachers (CSET) or through completion of a Commission-approved subject matter program that aligns with the CSET. Assembly Bill 130 (Chap. 44, Stats. 2021) established additional options for candidates to demonstrate their subject matter knowledge. These options included (a) completion of an undergraduate degree in a major area that specifically aligns with the Commission-issued credential they are seeking or (b) completion of coursework that aligns with the specified domains of the subject matter requirements (SMR) for the credential being sought. While AB 130 created more options for candidates, the process of reviewing candidates' transcripts to determine alignment with the subject matter domains proved to be challenging and time-consuming for educator preparation programs.

In April, Commission staff presented the findings from a survey of educator preparation programs in which responders shared about the processes currently used to evaluate candidates' transcripts for subject matter competency, the challenges they experienced in conducting those evaluations, and recommendations for improving the process (Item 3C). Based on that feedback, staff drafted standardized domain descriptions for each credential area in an effort to align the format of the descriptions and provide consistency across the credential areas. The Commission directed staff to seek feedback from educator preparation programs on the standardized domain descriptions, make any necessary revisions, and bring the revised descriptions back for final review and possible approval. This agenda item presents an overview of the feedback from programs and the revised descriptions.

Background

The Fisher Act, passed in 1961, paved the way for California's current post-baccalaureate credential structure. The rationale for the legislation was that candidates needed to enter their teaching preparation with deep understanding of their content, knowledge they could develop through an undergraduate degree in the content area for the credential area they sought. Teacher preparation coursework could then build on this foundation to develop candidates' pedagogical knowledge for that content through additional coursework and clinical practice. This structure led to the requirement that candidates demonstrate subject matter competence prior to beginning their teacher preparation.

Prior to the passage of AB 130, candidates were required to either complete an undergraduate preparation program that had been approved by the Commission on Teacher Credentialing as

providing the necessary subject matter preparation or successfully passing the appropriate CSETs for the credential area they were seeking. However, not all California institutions of higher education had Commission-approved undergraduate degree programs, leaving many potential candidates forced to take the CSETs. Concerns with the CSET exams, including a history of low-pass rates of candidates on CSETs for high-need credential areas, led to the passing of AB 130 and the creation of additional options for candidates to demonstrate subject matter competence: an undergraduate degree in a major area that specifically aligns with the Commission-issued credential they are seeking or completion of coursework that aligns with the specified SMR domains for the credential being sought. While the option to have an undergraduate degree that aligns with a Commission credential area has been relatively straightforward for candidates, the option to complete coursework that aligns with the specified SMR domains for the credential area has not.

The existing SMR domains were originally designed by credential area-specific Subject Matter Advisory Panels as specifications for the creation of each credential-specific CSET. As such, the domains are not aligned in scope or format, leading to confusion both among potential candidates and among program faculty and staff conducting evaluations of candidates' completed coursework to determine if subject matter competency has been met.

To provide greater clarity for the process of determining whether or not coursework meets a credential area's domains, Commission staff reviewed existing domain descriptions and sought to standardize the language and scope across credential areas. The standardized domain descriptions were, first, reviewed by the Commission in April. The Commission provided feedback and then directed staff to circulate the standardized descriptions with faculty and staff conducting coursework evaluations for additional feedback.

Feedback Opportunities on Draft Domains

Staff created two opportunities for feedback on the draft standardized domains: a survey shared with all educator preparation programs and two transcript evaluation workshops, which invited individuals responsible for transcript evaluation to try out the updated domains.

Survey

The survey developed to solicit program feedback included five background items (name, email address, educator preparation program, role, and whether or not the responder is currently responsible for evaluating transcripts to determine subject matter competency). After completing these items, responders then had the option to provide general feedback on the updated domains holistically or to provide feedback on the specific domains for one or more credential areas. For the updated domains as a whole and for the domains in each credential area, responders were asked to indicate their overall satisfaction with the updated domains, indicate the usability of the updated domains, detail any challenges they had with the updated domains, and provide any suggestions for improving the domains.

On May 1, 2026, an email was sent to individuals identified within the Commission's Accreditation Data System as educator preparation program leaders inviting them to either respond to the survey themselves or to share the survey link with the individual(s) from their

program who completes transcript evaluations for SMR verification. Additionally, notifications were placed in the Commission's Educator Quality Branch Weekly Update throughout the month of May. Responses were collected from May 1 through May 31, 2026.

A total of 75 individuals from 63 teacher preparation programs representing the California State University system (n=34), private/independent colleges and universities (n=20), local education agencies (n=16), and the University of California (n=5) system responded to the survey. The majority of responders indicated they were program directors (n=31). Responders also indicated that they were credential analysts (n=22) and faculty (n=12). Ten of the responders indicated they held a different role in their preparation program.

Table 1 provides a summary of the responses provided to the two Likert-scale items included for general feedback and for each credential area. The first item asked about responders' overall satisfaction with the standardized language of the domains, with six response options ranging from 1=very unsatisfied to 6=very satisfied. The second item asked about responders' perception of the overall usability of the domain descriptions, with six response options ranging from 1=very unusable to 6=very usable. The table shows the number of respondents and their average response for both the credential-area domains overall and the domains of each specific credential area.

Table 1. Summary of survey responses to items that asked about overall satisfaction with the updated domains *(1=very unsatisfied to 6=very satisfied) and usability of the updated domains (1=very unusable to 6=very usable). Participants had the option to provide feedback on more than one credential area.*

Credential Area	Responders	Overall Satisfaction	Usability
General Feedback on all areas	37	4.2	4.1
Multiple Subject	20	4.0	4.0
Agriculture	1	5	5
Art	0	0	0
Business	0	0	0
Dance	1	5.0	4.0
English	3	5.0	5.0
Health Science	0	0	0
Home Economics	0	0	0
Industrial and Technology Education	0	0	0
Math: Foundational Level	4	4.0	4.3
Math	0	0	0
Music	1	3.0	3.0
Physical Education	11	3.4	3.7
Science: Foundational Level	1	5.0	5.0
Science: Biology	0	0	0
Science: Chemistry	0	0	0
Science: Earth and Space Science	0	0	0

Credential Area	Responders	Overall Satisfaction	Usability
Science: Physics	0	0	0
Social Science	5	4.0	3.8
Theatre	0	0	0
World Language: ASL	0	0	0
World Languages	0	0	0
World Language: ELD	0	0	0

With the exception of individuals who responded to the standardized language for music and physical education, overall, responders indicated that they were at least somewhat satisfied with the standardized domain language and found the standardized domains to be at least somewhat usable.

The individual who provided feedback on the standardized domains for Single Subject music stated that, "There must be coursework in music literacy/acquisition and a range of developmentally appropriate learning activities and teaching strategies/methods. There must be coursework in positive music leadership including conducting." Similarly, two of the individuals who indicated they were unsatisfied with the physical education domains and that the domains were not usable expressed concern that, "A general KNES student is likely to graduate without completing a single pedagogy or methods course" and that "As written, they appear to emphasize primarily content knowledge in physical education, with little or no explicit attention to pedagogical knowledge or pedagogical content knowledge." However, as highlighted above, the purpose of developing subject matter competence through undergraduate preparation is to ensure depth of subject matter knowledge so that the credential preparation can focus on knowledge of pedagogy. The comments provided by all individuals highlight an important distinction between subject matter competency and competency in pedagogical content knowledge. While these two knowledge areas are related when considering the knowledge needed for teaching, they are actually different bodies of knowledge.

Workshops

In addition to the survey, the 98 individuals who responded to the previous survey that sought to learn about current processes for evaluating candidates' transcripts administered in early 2026 were invited to participate in one of two 90-minute virtual workshops. The purpose of these workshops was to allow attendees to try using the standardized domains for transcript review and provide feedback on the process. Forty-seven individuals responded that they were interested in participating.

The workshops were held May 19, 2026, and May 22, 2026. After introductions and an overview of the work, participants met in breakout rooms by the credential area for which they were evaluating transcripts for 40 minutes. The goal was for them to have an opportunity to work together to try out the updated domains. While in the workgroups, participants were asked to capture feedback on a group document. Following the work time, participants

returned to the main session to provide feedback on the domains. Specifically, they were asked to share general feedback, how well the standardized domains supported their ability to evaluate a candidate's transcripts, and suggestions for improving the domains.

Across the two sessions, 36 individuals participated in the workshops. During the Tuesday workshop, three small groups used the standardized Multiple Subject domains to evaluate transcripts. The three other groups used the standardized art domains, math domains, and social science domains, respectively. In the Friday workshop, two of the small groups used the Multiple Subject domains, while another group used the social science domains and a fourth group used the physical education domains.

Overall, participants noted that the standardized domains are more condensed, more manageable, and "more closely aligned to what we see in a catalog." As another group wrote, the standardized domains are "less wordy" and have a "focus on content that could be matched to course descriptions."

The groups for each credential area had specific suggestions for how to make additional improvements to the domains.

Multiple Subject Feedback
The five groups working to evaluate transcripts using the standardized Multiple Subject domains across the two days shared that the "more plain language (makes it easier) for candidates to self-evaluate" and that "having only one main domain over the prior sub-domains makes it easier."

However, they also expressed several concerns and had suggestions for further revising the domains. In particular, the groups noted that there are still 23 different domains to evaluate and that, even with the revisions, the domains are "still not matching what you would see in course descriptions." Multiple groups commented on the amount of content included within the domains and suggested that places where a list of items is provided, the "and" in the list could be shifted to be "and/or." An additional suggestion was that candidates only be required to have coursework that aligns with 75 percent of the content listed.

Finally, groups suggested that content included within some domains is already covered in other domains or other places. For example, the content included within Domain 15: Scientific Practices and Investigation is covered within the three other science domains. Consequently, these domains could be combined. One group noted that, with required literacy revisions as a result of SB 488, the content included within Language Acquisition and Development is now required to be included in Multiple Subject coursework.

Single Subject Feedback
At the Single Subject level, the group using the Single Subject math domains suggested that, in the math domains, trigonometry should be combined with geometry in Domain 3 "as there are rarely geometry only courses and many students start with trigonometry level based on high school courses." The group also suggested calculus should stand alone in Domain 5 to provide a

clear distinction between the content knowledge required for a Foundational Level Math credential and a full Math credential.

The group using the physical education domains expressed concern about the amount of content included within some of the domains, suggesting that multiple courses would be required to meet all content included within Domain 3: The Science of Human Movement and Domain 5: Movement Concepts and Forms.

Participants working with the social science domains questioned whether there should be a minimum number of units for each credential area. A suggested revision was to ensure disciplinary literacy skills is included within the domain language.

Finally, the group working with the art domains expressed concern that there are only four domains and an individual could, theoretically, meet multiple domains with one course, meaning they could demonstrate subject matter competency by taking fewer than four art classes. This concern was shared among others who commented on the significant differences between the number of domains required for Multiple Subjects evaluations and the number of domains for some of the Single Subject credential areas.

Revisions to Domains

Staff considered the feedback provided across the survey responses and the two transcript evaluation workshop sessions and used the feedback to inform revisions to the domains across both the Multiple Subject domains and the Single Subject domains.

Revisions to Multiple Subject Domains

In particular, staff carefully reviewed the Multiple Subject domains to identify any duplication in listed content and combine where appropriate, consolidating the total number of domains from 23 to 18. For example, number sense and mathematical structures are now included within the other math domains. Similarly, addressing scientific practices and investigation are incorporated into the other science domains.

Where possible, “and/or” was added to the Multiple Subject domains when multiple concepts were listed. Overall guidance was also added to state that both lower-division and upper-division coursework could be used to meet a given domain, as well as successful completion of a corresponding Advanced Placement or International Baccalaureate exam.

Revisions to Single Subject Domains

For the Single Subject domains, general guidance was added to state that candidates must have successfully passed a minimum of one upper-division course per domain area to meet that domain, except where otherwise noted, in order to address the concern with the small number of domains for some of the credential areas.

In both the Foundational Math and Math, the suggested revision to remove trigonometry from Domain 5: Trigonometry and Calculus and incorporate it into Domain 3: Geometry for both credential areas was made. Domain 5 for Single Subject Math now focuses on just calculus,

making a clear distinction between the two credential areas. Language was also added to state that successful completion of calculus would satisfy all domains except Domain 4: Probability and Statistics.

Careful review of the Physical Education domains led to the determination that three of the domains actually focused more on physical education pedagogy, addressing concepts such as assessment and evaluation in physical education and integration and application of concepts in physical education. The content from these domains was combined to ensure candidates still enter their preparation with this knowledge. The other domains address motor development and learning, human movement, and movement concepts and forms.

Based on the suggested revisions from those who responded to the survey and participated in the workshops, additional revisions were made to ensure alignment across credential areas. All revised domains are included within Appendix A.

Staff Recommendation
Staff recommend that the Commission approve the revised standardized subject matter requirement domains for use in evaluating transcripts to determine if a candidate has demonstrated subject matter competency and to inform the adoption of future subject matter assessments.

Next Steps
If approved, staff will notify educator preparation programs of the approved updated domains through Program Sponsor Alerts and inclusion within the Education Quality Branch Weekly Update. Additionally, the updated domains will be posted on the Commission's website. Finally, based on the enthusiastic response from program representatives who participated in the Transcript Evaluation Workshops and the request for additional spaces for programs to share their processes, additional workshops will be held in late summer and throughout the 2026-27 academic year. These workshops will provide a space to review the domains and to allow program representatives to try them out with representatives from other programs.

Appendix A

Draft Condensed SMR Domain Descriptions for Transcript Review for Multiple Subject

Coursework to demonstrate meeting the Multiple Subject domains may include lower or upper-division courses, as long as the courses are non-remedial. Coursework in the areas below should collectively reflect breadth and depth of preparation across the content commonly taught in self-contained classroom settings. Coursework must also demonstrate postsecondary study sufficient to support subject matter competence for teaching while engaging students in discipline-specific practices.

All coursework used to meet requirements must be degree-applicable (non-remedial). Courses may be taken pre- or post-degree. Domain subject areas in which Advanced Placement (AP) or International Baccalaureate credit was earned may be used to fulfill a domain (i.e. a candidate may meet the United States History requirement by earning credit on the AP United States History Exam).

Reading, Language, and Literature

Domain 1: Language Structure and Development

Coursework addresses the structure and development of language and includes phonology, morphology, syntax, semantics, and pragmatics, as well as language variation and the development of oral language across contexts.

Domain 2: Reading Comprehension and Analysis

Coursework addresses reading comprehension and analysis and includes strategies for understanding and interpreting literary and informational texts, analysis of text structure and meaning, and the use of evidence to support interpretation.

Domain 3: Writing and Written Expression

Coursework addresses writing and written expression and includes writing processes, rhetorical forms, organization, style, conventions, and the development of written communication for varied purposes and audiences.

History and Social Science

Domain 4: World History

Coursework addresses world history and includes major civilizations, events, and developments across regions and time periods, with attention to historical analysis and multiple perspectives.

Domain 5: United States History

Coursework addresses United States history and includes key events, movements, and developments from the colonial period to the present, with analysis of sources and historical interpretation.

Domain 6: California History

Coursework addresses California history and includes the state's historical development and its relationship to broader national and global contexts.

Domain 7: Principles of American Democracy
Coursework addresses the principles of American democracy and includes constitutional principles, democratic institutions, civic participation, and the structure and function of government.

Domain 8: Geography and Human Systems
Coursework addresses geography and human systems and includes spatial relationships, human-environment interaction, and the use of geographic tools to analyze regions and patterns.

Mathematics
(For Mathematics, demonstration of successful completion of a Geometry course or higher satisfies Domains 9 and 10).
Domain 9: Algebraic Reasoning and Functions
Coursework addresses number sense, algebraic reasoning and functions and includes expressions, equations, functions, and the representation and analysis of quantitative relationships.

Domain 10: Geometry and Measurement
Coursework addresses geometry and measurement and includes properties of shapes, spatial reasoning, measurement systems, and geometric relationships.

Domain 11: Statistics, Data Analysis, and Probability
Coursework addresses statistics, data analysis, and probability and includes data representation, statistical reasoning, and interpretation of variability and chance.

Science
Domain 12: Physical Science
Coursework addresses scientific investigation and inquiry in physical science and includes matter and its properties, motion and forces, energy, and waves.

Domain 13: Life Science
Coursework addresses scientific investigation and inquiry in life science and includes cells, organisms, ecosystems, heredity, and biological evolution.

Domain 14: Earth and Space Science
Coursework addresses scientific investigation and inquiry in earth and space science and includes earth systems, geology, weather and climate, and the solar system.

Visual and Performing Arts
Domain 15: Visual and Performing Arts Content and Practices
Coursework addresses visual and performing arts and includes dance, music, theatre, and/or visual art, as well as creative processes, performance, and/or analysis of artistic works in cultural and historical contexts.

Physical Education

Domain 16: Movement, Fitness, and Physical Development

Coursework addresses physical education and includes movement skills, physical fitness, motor development, and/or the principles of health and physical activity.

Human Development

Domain 17: Child and Adolescent Development

Coursework addresses child and adolescent development and includes cognitive, language, social, emotional, and physical development from birth through adolescence.

Domain 18: Learning and Development in Context

Coursework addresses learning and development in context and includes the influence of family, culture, environment, and individual differences on development.

General Guidelines for All Single Subject Credential Areas

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, except where otherwise noted.

Draft Condensed SMR Domain Descriptions for Single Subject Agriculture

Domain 1: Plant and Soil Science
Coursework addresses plant and soil science and includes soil science, plant nutrition and soil treatments, plant classification, anatomy and physiology, plant genetics, reproduction and propagation, crop production practices, and emerging technologies in plant and soil science.

Domain 2: Ornamental Horticulture
Coursework addresses ornamental horticulture and includes greenhouse and nursery management, landscape design and management, and floriculture and floral design.

Domain 3: Animal Science
Coursework addresses animal science and includes anatomy and physiology of livestock, animal production practices, animal nutrition, animal genetics and reproduction, and animal facilities management.

Domain 4: Environmental Science and Natural Resource Management
Coursework addresses environmental science and natural resource management and includes ecological principles and natural resources, relationships among agriculture, the environment, and society, ecosystem and resource management, and forestry.

Domain 5: Agricultural Business and Economics
Coursework addresses agricultural business and economics and includes agricultural economics, marketing and trade, entrepreneurship and management functions, agricultural business management, and government policies affecting agricultural businesses.

Domain 6: Agricultural Systems Technology
Coursework addresses agricultural systems technology and includes safety principles and practices, shop fabrication, construction, maintenance and operation of power equipment, and land measurement and irrigation systems.

Draft Condensed SMR Domain Descriptions for Single Subject Art

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Creating
Coursework addresses artistic creation and includes visual arts vocabulary, creative and investigative processes, experimentation with art-making approaches, revision and refinement of work over time, safe and effective use of materials and tools, and analysis of the formal and expressive qualities of visual art and design.

Domain 2: Presenting
Coursework addresses presentation of visual art and includes methods and technologies for presenting artwork, presentation spaces, and the historical and cultural contexts associated with visual art presentation.

Domain 3: Responding
Coursework addresses response to and critique of visual art and includes art criticism; aesthetic theories; and analysis, interpretation, and evaluation of processes and works across a wide range of forms, media, purposes, and functions.

Domain 4: Connecting
Coursework addresses connections among visual art and its contexts and includes the personal, societal, cultural, historical, and professional contexts of visual art, including the history, diversity, and global roles of the visual arts in societies past and present.

Draft Condensed SMR Domain Descriptions for Single Subject Business

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Business Management
Coursework addresses business management and includes management functions; organizational theory and behavior; leadership and motivation; ethical and legal conduct; business decision making; management of service, trade, manufacturing, nonprofit, and public organizations; communication in business settings; human resource management; and career paths and employment skills relevant to business occupations.

Domain 2: Accounting and Finance
Coursework addresses accounting and finance and includes financial analysis, accounting concepts and procedures, interpretation and communication of financial data, decision making using accounting data, business finance, and principles of personal financial management.

Domain 3: Marketing
Coursework addresses marketing and includes marketing principles and strategies, customer-oriented analysis, distribution of products and services, customer service, promotion, and the influence of emerging technologies on e-commerce and global trade.

Domain 4: Information Technology
Coursework addresses information technology in business and includes terminology, principles, and procedures related to technology systems, ethics, security, data integrity, communications and networking systems, and basic programming and systems development in business contexts.

Domain 5: Economics
Coursework addresses economics in business and includes microeconomics, macroeconomics, and the ways economic concepts affect business in domestic and international economies.

Draft Condensed SMR Domain Descriptions for Single Subject Dance

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Creating
Coursework addresses dance creation and includes movement vocabulary and problem solving, the relationship between sensory stimuli and movement, choreography and artistic criteria, experimentation and risk taking, revision through feedback, and documentation of dance works.

Domain 2: Performing
Coursework addresses dance performance and includes movement in space, tempo and energy, use of the body in dance, anatomy and healthful practices, performance etiquette, and production elements.

Domain 3: Responding
Coursework addresses response to and evaluation of dance and includes description, analysis, interpretation, and evaluation of dance; recurring movement patterns and relationships; and the ways elements of dance contribute to artistic expression.

Domain 4: Connecting
Coursework addresses the historical, cultural, and personal contexts of dance and includes dance as emotional and intellectual expression, roles and forms of dance in societies past and present, research on movement practices in cultures around the world, relationships among choreography and personal perspective, and familiarity with dance-related careers.

Draft Condensed SMR Domain Descriptions for Single Subject English

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Reading Literature and Informational Texts
Coursework addresses literature and informational texts and includes literary analysis and criticism; informational text analysis; the study of major authors and works from multiple literary traditions, periods, and cultures; and analysis of complex texts through evidence-based interpretation and written response.

Domain 2: Language, Linguistics, and Literacy
Coursework addresses language, linguistics, and literacy and includes the nature and structure of language, language acquisition and development; language variation; the historical and cultural development of English; and literacy development for native speakers and multilingual learners.

Domain 3: Composition and Rhetoric
Coursework addresses composition and rhetoric and includes oral and written communication in varied rhetorical contexts; purpose, audience, organization, style, and conventions of standard written English; research-based writing and argument; revision; speaking; and the appropriate use of contemporary communication technologies.

Domain 4: Communications: Speech, Media, and Creative Performance
Coursework addresses speech, media, and creative performance and includes analysis and evaluation of oral communication, media, and performance; effective public speaking and presentation; communication across cultural contexts; and study or performance-based work in speech, journalism, media, or dramatic expression.

Draft Condensed SMR Domain Descriptions for Single Subject Health Science

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Human Growth and Development
Coursework addresses human growth and development and includes physical and psychosocial growth patterns, developmental stages across the life cycle, and factors affecting growth and development.

Domain 2: Chronic and Communicable Diseases
Coursework addresses chronic and communicable diseases and includes risk factors, characteristics, prevention of chronic and communicable diseases, and related public health considerations.

Domain 3: Nutrition and Fitness
Coursework addresses nutrition and fitness and includes relationships among nutrition, physical activity, and lifelong well-being.

Domain 4: Mental and Emotional Health
Coursework addresses mental and emotional health and includes foundations of mental and emotional well-being, lifelong wellness, and positive adaptation to change.

Domain 5: Alcohol, Tobacco, and Other Drugs
Coursework addresses alcohol, tobacco, and other drugs and includes drug classifications; physical effects of use, misuse, and abuse; and prevention, intervention, and treatment related to addiction and substance abuse.

Domain 6: Family Life and Interpersonal Relationships
Coursework addresses family life and interpersonal relationships and includes family structures, family life education, interpersonal relationships, human sexuality, and reproductive health.

Domain 7: Consumer and Community Health
Coursework addresses consumer and community health and includes the effects of culture, media, technology, and other influences on consumer health; health and safety practices; injury and violence prevention; and emergency preparedness in home, school, and community settings.

Domain 8: Environmental Health
Coursework addresses environmental health and includes factors in natural and human environments that affect health and ways to conserve natural resources and protect the environment.

Draft Condensed SMR Domain Descriptions for Single Subject Home Economics

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Personal, Family, and Child Development
Coursework addresses personal, family, and child development and includes personal, interpersonal, and family relationships; parenting; child development and education; major theories of human and family development; and methods and strategies that support physical, cognitive, emotional, and social development.

Domain 2: Nutrition, Foods, and Hospitality
Coursework addresses nutrition, foods, and hospitality and includes food science, nutritional science, food preparation, hospitality, physiological and biochemical processes related to food and nutrients; health and disease related to nutrition; current research and technologies; meal management; and kitchen design, equipment, safety, sanitation, and emergency procedures.

Domain 3: Fashion and Textiles
Coursework addresses fashion and textiles and includes the history of fashion and current trends; wardrobe management; fibers, fabrics, and finishes; and apparel equipment, materials, maintenance, and construction procedures.

Domain 4: Housing and Interior Design
Coursework addresses housing and interior design and includes elements and principles of design; historical and contemporary interiors and architectural styles; furniture design; materials and technologies used in interior design; and consumer, legal, and governmental aspects of housing.

Domain 5: Consumer Education
Coursework addresses consumer education and includes personal and family resources, consumer rights and responsibilities, economic systems, personal finance, resource management, and the effects of the U.S. and global economies on consumers.

Draft Condensed SMR Domain Descriptions for Single Subject Industrial and Technology Education

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Nature of Technology
Coursework addresses the nature of technology and includes technology as a problem-solving process, the history and evolution of technology, creativity and innovation, the use of core academic concepts in technological design, the social and environmental effects of technology, and technological literacy in a changing global environment.

Domain 2: Power and Energy
Coursework addresses power and energy and includes scientific concepts of power and energy as they apply to mechanical, fluid, thermal, and electrical systems, and generation, transmission, storage, control, and application of power and energy technologies, including transportation technologies.

Domain 3: Information and Communication
Coursework addresses information and communication systems and includes design, analysis, use, and maintenance of communication systems; encoding and transmission of information; graphic communication; and circuits and components used in electronic communication systems.

Domain 4: Project and Product Development
Coursework addresses project and product development and includes design, planning, management, and production in manufacturing and construction systems; engineering design constraints; safe use of processes and resources; systems approaches to production; and quality management and control, including statistical tools.

Draft Condensed SMR Domain Descriptions for Single Subject Mathematics: Foundational Level

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Candidates who demonstrate successful completion of calculus or higher satisfy the requirements for Domains 1-3.

Domain 1: Number and Quantity
Coursework addresses number and quantity and includes number systems, number theory, properties and structures of numbers, quantitative reasoning, and justification of mathematical relationships through conjecture, proof, or other forms of formal reasoning.

Domain 2: Algebra
Coursework addresses algebra and includes algebraic structures, symbolic reasoning, functions, equations and inequalities, and the use of algebraic methods to represent, analyze, model, and solve problems.

Domain 3: Geometry
Coursework addresses geometry and includes geometric reasoning and proof, axiomatic systems, and two- and three-dimensional geometry, including coordinate, synthetic, transformational, and non-Euclidean approaches.

Domain 4: Probability and Statistics
Coursework addresses probability and statistics and includes probability, probability distributions, data analysis, statistical reasoning, and the use of statistical and probabilistic methods to solve problems and draw inferences.

Draft Condensed SMR Domain Descriptions for Single Subject Mathematics

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Candidates who demonstrate successful completion of calculus or higher satisfy the requirements for Domains 1-3 and 5.

Domain 1: Number and Quantity
Coursework addresses number and quantity and includes number systems, number theory, properties and structures of numbers, quantitative reasoning, and justification of mathematical relationships through conjecture, proof, or other forms of formal reasoning.

Domain 2: Algebra
Coursework addresses algebra and includes algebraic structures, symbolic reasoning, functions, equations and inequalities, and the use of algebraic methods to represent, analyze, model, and solve problems.

Domain 3: Geometry and Trigonometry
Coursework addresses geometry and trigonometry and includes geometric reasoning and proof; axiomatic systems; and two- and three-dimensional geometry, including coordinate, synthetic, transformational, and non-Euclidean approaches; and trigonometric functions.

Domain 4: Probability and Statistics
Coursework addresses probability and statistics and includes probability, probability distributions, data analysis, statistical reasoning, and the use of statistical and probabilistic methods to solve problems and draw inferences.

Domain 5: Trigonometry and Calculus
Coursework addresses calculus and includes relationships, limits, derivatives, and integrals, and calculus-based methods to analyze and solve mathematical and applied problems.

Draft Condensed SMR Domain Descriptions for Single Subject: Music

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Creating
Coursework addresses musical creation and includes processes and roles involved in creating music; conceptualizing, generating, organizing, developing, refining, and completing musical works; sources of creative ideas; and techniques, skills, and tools used in the creative process.

Domain 2: Performing
Coursework addresses musical performance and includes vocal and instrumental music for soloists, ensembles, and music classes; a broad range of repertoire; and interpretation of musical works in relation to structure and context.

Domain 3: Responding
Coursework addresses response to music and includes aural analysis, aesthetic valuing, written music theory and analysis, and the ability to respond to, analyze, critique, and judge the quality of musical works and performances.

Domain 4: Connecting
Coursework addresses the cultural and interdisciplinary contexts of music and includes music from diverse cultures and the relationships between music and other arts, academic disciplines, and societal, cultural, and historical contexts.

Draft Condensed SMR Domain Descriptions for Single Subject: Physical Education

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Professional Foundations
Coursework addresses the philosophical, historical, legal, and ethical foundations of physical education and includes major issues in the field of physical education, including assessment and evaluation and the integration and application of concepts in physical education.

Domain 2: Growth, Motor Development, and Motor Learning
Coursework addresses human growth and development, motor development, and motor learning and includes the interaction of developmental processes and motor learning and their application to safe, appropriate, and effective physical education for all students, including students with disabilities.

Domain 3: The Science of Human Movement
Coursework addresses the scientific bases of human movement and includes a combination of anatomy, physiology, kinesiology, biomechanics, exercise physiology, and/or health-related fitness, as well as analysis of movement and body systems in relation to physical activity and performance.

Domain 4: The Sociology and Psychology of Human Movement
Coursework addresses the sociological and psychological dimensions of human movement and includes motivation, behavior, personal and social development, and the role of physical activity in supporting participation, responsibility, and lifelong engagement across diverse backgrounds and abilities.

Domain 5: Movement Concepts and Forms
Coursework addresses movement concepts and forms and includes a broad range of movement activities and environments, such as aquatics, dance, track and field, fitness activities, fundamental and creative movement, individual and team activities, outdoor activities, and gymnastics, and the application of movement concepts across varied contexts and ability levels.

Draft Condensed SMR Domain Descriptions for Single Subject Science: Foundational-Level Science

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

General Science Domain 1: Scientific Practices, Engineering Design, and Crosscutting Concepts
Coursework addresses scientific practices, engineering design and applications, and crosscutting concepts and includes scientific inquiry, analysis and interpretation of evidence, engineering design and problem solving, and concepts that connect the sciences and engineering.

General Science Domain 2: Physical Sciences
Coursework addresses the physical sciences and includes the structure and properties of matter, chemical reactions and biochemistry, motion and forces, waves, energy, and electricity and magnetism.

General Science Domain 3: Life Sciences
Coursework addresses the life sciences and includes cells, organisms, ecosystems, heredity, and biological evolution.

General Science Domain 4: Earth and Space Sciences
Coursework addresses Earth and space sciences and includes Earth's place in the universe, Earth's materials and systems, plate tectonics and large-scale system interactions, weather and climate, and natural resources and natural hazards.

Draft Condensed SMR Domain Descriptions for Single Subject Science: Biology

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Biology Domain 1: From Molecules to Organisms: Structures and Processes
Coursework addresses biological structures and processes and includes cells, the organization and function of multicellular organisms and systems, growth and development, and matter and energy flow in organisms.

Biology Domain 2: Ecosystems: Interactions, Energy, and Dynamics
Coursework addresses ecosystems and includes interdependent relationships in ecosystems, cycles of matter, energy transfer, and ecosystem dynamics, functioning, and resilience.

Biology Domain 3: Heredity: Inheritance and Variation of Traits
Coursework addresses heredity and includes inheritance of traits, variation of traits, and genetic engineering.

Biology Domain 4: Biological Evolution: Unity and Diversity
Coursework addresses biological evolution and includes evidence of common ancestry and diversity, natural selection, and adaptation.

Draft Condensed SMR Domain Descriptions for Single Subject Science: Chemistry

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Chemistry Domain 1: Structure and Properties of Matter
Coursework addresses the structure and properties of matter and includes atomic and molecular structure, physical and chemical properties of matter, solutions, and nuclear processes.

Chemistry Domain 2: Chemical Reactions and Chemical Bonding
Coursework addresses chemical reactions and chemical bonding and includes chemical reactions, chemical bonding, conservation of matter, stoichiometry, and organic chemistry and biochemistry.

Chemistry Domain 3: Energy
Coursework addresses energy in chemistry and includes definitions and forms of energy, conservation and transfer of energy, and energy in chemical processes and everyday applications.

Draft Condensed SMR Domain Descriptions for Single Subject Science: Earth and Space Science

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Earth and Space Science Domain 1: Earth's Place in the Universe
Coursework addresses Earth's place in the universe and includes the universe and its stars, Earth and the solar system, and the history of planet Earth.

Earth and Space Science Domain 2: Earth's Systems
Coursework addresses Earth's systems and includes Earth's materials and systems; plate tectonics and large-scale system interactions; oceanography; and the role of water in Earth's surface processes, and the atmosphere, weather, and climate.

Earth and Space Science Domain 3: Earth and Human Activity
Coursework addresses Earth and human activity and includes natural resources, natural hazards, human impacts on Earth's systems, and global climate change.

Draft Condensed SMR Domain Descriptions for Single Subject Science: Physics

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Physics Domain 1: Motion and Stability: Forces and Interactions
Coursework addresses motion and stability and includes forces, motion, and the conservation of energy and momentum.

Physics Domain 2: Energy
Coursework addresses energy and includes definitions and forms of energy, thermal energy, kinetic molecular theory, electricity, and magnetism.

Physics Domain 3: Waves and Their Applications
Coursework addresses waves and their applications and includes wave properties, electromagnetic radiation, and applications of waves in information technologies and instrumentation.

Physics Domain 4: Modern Physics
Coursework addresses modern physics and includes quantum mechanics, the standard model of particles, special relativity, and nuclear processes.

Draft Condensed SMR Domain Descriptions for Single Subject Social Science

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: World History
Coursework addresses world history and includes major Western and non-Western civilizations across time--from the origins of humankind to the present--with attention to significant people, events, ideas, and global processes, as well as the use of primary and secondary sources to engage in historical analysis and interpretation and consider multiple perspectives.

Domain 2: United States History
Coursework addresses United States history and includes the development of the United States from the colonial period to the present, with attention to significant people, events, ideas, and issues, as well as the use of primary and secondary sources, historical analysis and interpretation, and multiple perspectives.

Domain 3: California History
Coursework addresses California history and includes the history of California from the pre-Columbian period to the present, including the state's regional development and its relationship to United States history, as well as the use of primary and secondary sources to engage in historical analysis and interpretation and consider multiple perspectives.

Domain 4: Principles of American Democracy
Coursework addresses the principles of American democracy and includes constitutional principles, democratic institutions, political processes, and the ways governmental structures, economic conditions, and social forces shape the distribution and use of power, as well as the application of concepts and methods from political science, economics, and geography.

Domain 5: Principles of Economics
Coursework addresses economics and includes microeconomics and macroeconomics, domestic and international economic systems, and the use of economic reasoning and analytical methods, including marginal and equilibrium analysis, to interpret data and evaluate economic behavior and policy.

Domain 6: Principles of Geography
Coursework addresses geography and includes geographic concepts, spatial relationships, and human-environment interaction, as well as the use of maps and other geographic tools to analyze location, place, movement, regions, and the distribution of physical and human systems.

Draft Condensed SMR Domain Descriptions for Single Subject Theatre

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Creating
Coursework addresses theatre creation and includes processes and roles involved in drama and theatre production; envisioning, generating, organizing, developing, refining, rehearsing, and completing theatrical works; techniques, skills, and tools used in the creative process; and the collaborative nature of theatre.

Domain 2: Performing
Coursework addresses theatrical performance and includes selection, analysis, interpretation, development, and refinement of artistic work for performance; dramatic structure and technical theatre elements; acting exercises and character development; and factors involved in presenting works to specific audiences.

Domain 3: Responding
Coursework addresses response to drama and theatre and includes perceiving and analyzing artistic work through interpretation of intent and meaning and reflection on the impact of dramatic processes and theatre experiences, the role of emotion and culture in interpretation, and the use of criteria to evaluate theatre works.

Domain 4: Connecting
Coursework addresses the societal, cultural, and historical contexts of theatre and includes western and non-western theatre traditions, the history and diversity of theatre, empathy and relationships between self and others in theatre, connections between theatre and other arts, and the role of research in theatre.

Draft Condensed SMR Domain Descriptions for World Languages: American Sign Language

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Linguistics of American Sign Language
Coursework addresses general linguistics with a focus on ASL linguistics and includes phonological structures, lexical formation, grammar, morphology, syntax, semantics, discourse, pragmatic and sociolinguistic features, rhetorical and stylistic devices, and historical and regional variation in ASL.

Domain 2: Literary and Cultural Texts and Traditions
Coursework addresses ASL and Deaf culture literary and cultural texts and traditions and includes major literary and intellectual movements, genres, creators, and works in ASL and English-language works by Deaf authors, as well as interpretation of texts in relation to the historical, social, and cultural contexts that shape American Deaf culture.

Domain 3: Cultural Analysis and Comparisons
Coursework addresses cultural analysis and comparison and includes perspectives, practices, and products of American Deaf culture, including daily life, institutions, contemporary and historical issues, artistic and literary works, major figures, and cultural references; and comparisons between American Deaf culture and other cultures.

Domain 4: Language and Communication: Receptive Comprehension
Coursework addresses receptive comprehension in ASL and includes comprehension and interpretation of ASL discourse across purposes, contexts, and levels of formality; analysis of main ideas and supporting details; inference and interpretation; and critical evaluation of discourse in relation to style, purpose, audience, and social context.

Domain 5: Language and Communication: Expressive Production
Coursework addresses expressive production in ASL and includes production of ASL discourse across everyday, formal, and academic contexts; narration and description across time frames; culturally appropriate expression; and presentations tailored to purpose, audience, and situation.

Draft Condensed SMR Domain Descriptions for World Languages
(Arabic, Armenian, Cantonese, Farsi, Filipino, French, German, Hmong, Japanese, Khmer, Korean, Mandarin, Punjabi, Russian, Spanish, Vietnamese)

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Linguistics of the Target Language
Coursework addresses general linguistics with a focus on target-language linguistics and includes sound systems, word formation, grammar, orthography, morphology, syntax, semantics, discourse, pragmatics, sociolinguistic features, rhetorical and stylistic devices, and historical and regional variation in the target language.

Domain 2: Cultural Analysis and Comparisons
Coursework addresses cultural analysis and comparison and includes perspectives, practices, and products of cultures associated with the target language; relationships among culture, geography, institutions, and daily life; significant historical and contemporary issues in cultures associated with the target language; major literary and intellectual movements, genres, writers, and works; and comparisons between the target culture and other cultures.

Domain 3: Language and Communication: Listening Comprehension
Coursework addresses listening comprehension in the target language and includes comprehension and interpretation of oral messages across a range of contexts, text types, and content areas; inference and analysis of meaning; and critical evaluation of spoken language in relation to purpose, audience, and style.

Domain 4: Language and Communication: Reading Comprehension
Coursework addresses reading comprehension in the target language and includes comprehension and interpretation of written texts across a range of genres and purposes, synthesis of ideas, culturally grounded interpretation, and critical evaluation of texts in relation to logic, style, and audience.

Domain 5: Language and Communication: Oral Expression
Coursework addresses oral expression in the target language and includes spoken communication across practical, social, professional, and abstract topics; narration and description across time frames; culturally appropriate language use; and formal and informal presentations tailored to audience and context.

Domain 6: Language and Communication: Written Expression
Coursework addresses written expression in the target language and includes writing across time frames and text types, use of vocabulary and syntax appropriate to purpose and audience, use of cohesive devices and discourse strategies, and extended written communication on practical, social, professional, and public topics.

Draft Condensed Subject Matter Domains for World Language: English Language Development

For transcript evaluations of all Single Subject credential areas, candidates must demonstrate completion of at least one upper-division course per domain area, accept where otherwise noted.

Domain 1: Knowledge of English Learners in California and the United States
Coursework addresses knowledge of English learners in California and the United States and includes historical, demographic, and social contexts for English learner education; educational research related to English learner achievement; characteristics and typologies of English learners; and child and adolescent growth and development.

Domain 2: Applied Linguistics
Coursework addresses applied linguistics and includes the nature of language and language use, language development, English language linguistics, and the nature and role of academic language in language acquisition across the curriculum.

Domain 3: Cultural Foundations
Coursework addresses cultural foundations and includes cultural perspectives and resources, cultural influences on learning, and the roles and influence of families and communities in schooling.

Domain 4: Principles of ELD Instruction to Promote Receptive and Productive Language Proficiency
Coursework addresses principles of English language development instruction and includes principles of English aural language and oral language; reading, composition and writing instruction; and assessment for English learners; and language support for academic content instruction and assessment across the curriculum.