

# Agriculture Specialist Preconditions and Program Standards

**Commission on Teacher Credentialing**

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Commission on Teacher Credentialing

1900 Capitol Avenue

Sacramento, California 95811

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## Preconditions

1. **Admission.** An institution that operates a program for the Agriculture Specialist Instruction Credential shall determine, prior to admitting the candidate into the program, that the candidate either (1) possesses a single subject teaching credential in agriculture, or (2) is enrolled in a preparation program leading to a single subject teaching credential in agriculture concurrently with enrollment in the program leading to the Agriculture Specialist Instruction Credential.
2. **Prerequisite Credential.** An institution that operates a program for the Agriculture Specialist Instruction Credential shall determine, prior to recommending the candidate for the credential, that the candidate possesses a valid single subject teaching credential in agriculture. If the candidate completes both the single subject and agriculture specialist instruction programs concurrently, the institution may recommend the candidate for both credentials concurrently.
3. **Area of Specialization.** An institution that operates a program for the Agriculture Specialist Instruction Credential shall determine, prior to recommending the candidate for the credential, that the candidate has demonstrated advanced knowledge in one of the following domains in agriculture: animal science; plant and soil science; ornamental horticulture; agricultural business management; environmental science and natural resource management; or agricultural systems technology. This advanced knowledge must be demonstrated through one of the following means: (1) possession of a baccalaureate degree with a major in one of the six domains listed above or in a field closely related to one of those domains; (2) verification of subject matter competence as required for the single subject credential in agriculture, plus a minimum of nine semester units or twelve quarter units of college coursework in one of the domains listed above; or, (3) verification of subject matter competence as required for the single subject credential in agriculture, plus 1,000 hours of occupational experience in one of the domains listed above. (Occupational experience accrued to meet this requirement also applies to the occupational experience precondition defined below.)
4. **Occupational Experience.** An institution that operates a program for the Agriculture Specialist Instruction Credential shall determine, prior to recommending the candidate for the credential, that the candidate has completed occupational experience in agriculture that consists of one of one of the following:
* A minimum of 2,000 hours of either paid or voluntary experience, the entirety of which must be completed after graduation from high school; or,
* A minimum of 3,000 hours of either paid or voluntary experience, of which a maximum of 1,500 hours may be accrued prior to graduation from high school.

## Agriculture Specialist Instruction Credential Program Standards

### Category I: Program Design and Curriculum

#### Standard 1: Program Design

The Agriculture Specialist Instruction Credential program and its prerequisites include a purposeful, developmentally designed sequence of coursework and field experiences that effectively prepare candidates to serve as agriculture specialists in California schools and lead agriculture education programs. The sequenced design of the program is based on a clearly stated rationale that has a sound theoretical and scholarly foundation anchored in the knowledge base of teacher education. The program’s organizational structure ensures that all of its administrative components are carefully coordinated. By design, the program provides extensive opportunities for candidates to learn and apply the concepts, skills and principles included in this set of program standards.

##### Required Elements for Standard 1: Program Design

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

1(a) The design of the program and the selection of prerequisites are clearly grounded in a well-reasoned rationale that draws on sound scholarship and theory anchored to the knowledge base of teacher education, are articulated clearly, and are evident in the delivery of the program’s coursework and fieldwork. Program activities are carefully sequenced to ensure that candidates appropriately develop their competence in the performance standards defined in Category III.

1(b) The program design and its delivery form a cohesive set of learning experiences that provide candidates with the opportunity to develop the knowledge and skills required to serve as agriculture specialists and to lead agriculture education programs.

1(c) The program has an organizational structure that provides for coordination of the administrative components of the program to facilitate each candidate’s completion of the program.

1(d) Coursework and field experiences utilize a variety of strategies for professional instruction and provide multiple opportunities for candidates to learn and practice the concepts, skills and principles included in this set of program standards.

#### Standard 2 – Career and Technical Education

The program includes preparation to develop and apply specialized knowledge and understanding of the philosophy, history, issues and trends, and current research associated with career and technical education, and their specific influence and effect on agriculture education programs.

##### Required Elements for Standard 2 – Career and Technical Education:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

2(a) The program provides candidates with knowledge of the philosophical underpinnings of career and technical education with particular attention to the role occupational experience plays in this type of education, and the ability to apply this knowledge in the development and implementation of agriculture education programs.

2(b) The program provides candidates with the historical background for the emergence of career and technical education as a component of a comprehensive education.

2(c) The program exposes candidates to current and emerging trends that affect career and technical education, including the increased emphasis on core educational skills and standardized learning and assessment of those skills, and the effects of these trends on agriculture education programs.

2(d) The program provides candidates with current and emerging research on the value of situated and contextual learning in terms of acquiring knowledge, understanding and skills for academic and career success, and methods for creating educational experiences reflecting this research.

#### Standard 3 – Program Management

The program provides candidates with the knowledge, skill, and the ability to integrate and apply the concepts of agriculture program development and administration required to successfully manage agriculture education programs. The program prepares candidates to obtain community support for and involvement in agriculture programs, acquire necessary resources, and maintain program accountability. The program familiarizes candidates with key agriculture programs and organizations, including Supervised Agriculture Experiences and Future Farmers of America.

##### Required Elements for Standard 3 – Program Management:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

3(a) The program prepares candidates to organize and deliver a comprehensive program of agriculture instruction, including identification of relevant instruction, appropriate sequencing of courses, and articulation of curriculum.

3(b) The program provides candidates with knowledge and skills needed for acquisition of instructional resources, including identifying grant and funding opportunities and available community resources.

3(c) The program prepares candidates to integrate classroom instruction, activities related to Future Farmers of America (FFA) programs, and Supervised Agricultural Experiences (SAEs).

3(d) The program provides candidates with knowledge and skills needed to design and develop community-based programs, including assembling advisory committees, managing support/booster organizations, and accessing community resources.

3(e) The program prepares candidates to maintain program accountability.

3(f) The program exposes candidates to statewide organizations that are actively involved in agricultural education.

#### Standard 4 – Coordination of Supervised Agricultural Experience (SAE) Programs

The program includes basic preparation that develops the knowledge, skill and the ability to integrate and apply the concepts required to coordinate Supervised Agricultural Experience (SAE) Programs and advise and supervise students in those programs.

##### Required Elements for Standard 4 – Coordination of Supervised Agricultural Experience (SAE) Programs:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

4(a) The program provides candidates an opportunity to develop and demonstrate knowledge and understanding of record keeping using the California FFA Record Book.

4(b) Through the program, candidates develop the skills required to conduct successful project site visits, including home, school farm, and employer visits.

4(c) The program provides candidates an opportunity to develop the ability to assist students in identifying and establishing appropriate project selection, placement, planning, managing and marketing.

4(d) The program ensures that candidates have a deep understanding of the ethical principles that govern the design and development of appropriate student projects and supervised agricultural experiences.

#### Standard 5 – Coordination of Future Farmers of America (FFA) Programs

The program provides candidates with knowledge and understanding of principles of leadership, cooperation, and relationships with appropriate constituencies, and the ability to integrate and apply those principles through the Future Farmers of America (FFA) Program.

##### Required Elements for Standard 5 – Coordination of Future Farmers of America (FFA) Programs:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

5(a) The program provides candidates with the knowledge of student, chapter and community development activities of the FFA needed to successfully organize and provide oversight of these activities.

5(b) Through the program, candidates develop methods for integrating leadership concepts and activities and procedures of student organizations into the agriculture curriculum.

5(c) The program ensures that candidates gain knowledge and skill in creating and maintaining positive interpersonal relationships, including relating to students, parents, other teachers, school administrators, local industry and the general community.

#### Standard 6 – Area of Specialization

The program requires specialized study – beyond that required for basic preparation – in one of the following domains: animal science, plant and soil science, ornamental horticulture, agricultural business management, environmental science and natural resource management, or agricultural systems technology. One subject matter specialization area must be developed to the extent that the candidate has advanced knowledge, skill, and ability to integrate concepts in greater depth than that required for the single subject credential in agriculture.

##### Required Elements for Standard 6 – Area of Specialization:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

6(a) The program design includes specific procedures for identifying each candidate’s area of specialization and the activities the candidate will complete to fulfill this program requirement.

6(b) The program requires each candidate to demonstrate advanced knowledge in one of the six domains in agriculture as defined in the Specific Preconditions for the Agriculture Specialist Instruction Credential.

#### Standard 7 – Teaching Methods in Agricultural Systems Technology

The program prepares candidates for the additional challenges presented in teaching in a shop or outdoor environment with potentially hazardous materials and equipment. The program requires basic preparation that develops knowledge, skill and the ability to establish, maintain and teach in safe and effective shop and field environments where students will utilize tools, machinery and equipment, and to manage student learning activities and behavior to maintain safe conditions for learning.

##### Required Elements for Standard 7 – Teaching Methods in Agricultural Systems Technology:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

7(a) The program includes pedagogical preparation specific to teaching Agricultural Systems Technology (Agricultural Mechanics) including cognitive and psycho-motor ~~domains~~ applications.

7(b) The program prepares candidates to develop lesson plans and teaching materials appropriate to Agricultural Systems Technology (e.g. projects, drawings)

7(c) The program trains candidates in the application of current safety practices required of classroom teachers and practices common to industry relating to hand tools, power tools, and agricultural machinery (e.g. tractors, harvesters).

7(d) The program ensures that candidates are knowledgeable in the proper selection, nomenclature, and proper use of tools commonly used in agricultural systems technology.

7(e) The program provides candidates with strategies in managing student behavior in shop and field settings to ensure a safe learning environment.

7(f) The program prepares candidates in facilities planning, management~~,~~ and maintenance (e.g. budgeting, tool and material selection and purchasing, tool management, safety inspection).

#### Standard 8 – Teaching in Non-traditional Learning Environments

The program requires each candidate to demonstrate the ability to teach in venues other than the traditional classroom environment.

##### Required Elements for Standard 8 – Teaching in Non-traditional Learning Environments:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

8(a) The program provides strategies and methods for teaching in non-traditional learning environments.

8(b) Program coursework provides each candidate with opportunities to practice teaching and class management strategies in non-traditional learning environments that are common to agricultural education programs in California.

8(c) Non-traditional learning environments in which candidates are provided an opportunity to practice must include, but are not limited to, agricultural technology shops, school laboratories, school farm locations and school field trips.

#### Standard 9 – Career Planning and Preparation

The program provides the opportunity for candidates to develop the knowledge, skill and ability to integrate and apply concepts of career planning and preparation in careers in agriculture needed to advise students, including the foundations of work, the career development process, occupational skills standards, and workplace skill requirements.

##### Required Elements for Standard 9 – Career Planning and Preparation:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

9(a) The program provides candidates with knowledge of the history, organization and future of work and how work relates to the needs and functions of the economy and society, both generally and in specific agricultural occupations.

9(b) The program familiarizes candidates with career development concepts, an understanding of the relationship between work and learning, and the fundamentals of the career planning process, both generally and in specific agricultural occupations.

9(c) The program exposes candidates to professional literature relating to specific content area and workplace needs, both generally and in specific agricultural occupations.

9(d) The program provides candidates with an understanding of economic and socio-economic conditions, patterns of business development, and changing labor and career opportunities and their impact on the relevancy of classroom instruction, both generally and in specific agricultural occupations.

9(e) The program provides candidates with an understanding of the value of instilling lifelong learning concepts as a component of career success, both generally and in specific agricultural occupations.

### Category II: Field and Occupational Experiences

#### Standard 10 – Field Experience

Each candidate in the program completes substantive, supervised field experiences in public schools selected by the program sponsor. Field experiences may be completed concurrently with a candidate’s student teaching assignment for the single subject credential in agriculture, and must extend the candidate’s understanding of major ideas and emphases developed in the program and provide the candidate an opportunity to apply these concepts in school situations. These field experiences further develop the candidate’s knowledge and experience in agricultural educational program management, entrepreneurial and workplace learning, professional development, and student leadership activities. At least one field experience placement must include experience in non-traditional learning environments.

##### Required Elements for Standard 10 – Field Experience:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

10(a) The field experience prepares candidates to practice multiple strategies for managing and delivering instructional programs in agriculture, and to effectively communicate and cooperate with colleagues and other school staff to establish and maintain program support.

10(b) The field experience provides an opportunity for candidates to develop practical skill in providing entrepreneurial and workplace education, including assisting students in selecting and planning supervised agricultural experiences; conducting effective home visits; supervising students with work experience projects; and assisting students in preparing award applications.

10(c) The field experience allows candidates to participate in appropriate district professional development activities; to participate in section, regional and state meetings, conclaves and skills sessions; and to attend and participate in university sponsored seminars.

10(d) The field experience provides an opportunity for candidates to gain familiarity in student leadership activities, including serving as an advisor in at least one agriculture student meeting and at least one individual agriculture student activity, and chaperoning at least one agriculture student contest or leadership event.

10(e) At least one field experience placement must include experience in non-traditional learning environments as defined in Standard 8.

#### Standard 11 – Occupational Experience

The program requires each candidate to develop knowledge of and experience in employer/employee interactions and agricultural occupations by completing occupational experience in one or more of the following domains: animal science, plant/soil science, ornamental horticulture, agriculture business management, environmental science and natural resource management and/or agricultural systems technology.

##### Required Elements for Standard 11 – Occupational Experience:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

11(a) The program requires each candidate to complete occupational experience as defined in the Specific Preconditions for the Agriculture Specialist Instruction Credential.

11(b) One or more of the occupational experiences provide an opportunity for the candidate to develop an understanding of and experience in employer/employee interactions.

11(c) One or more of the occupational experiences provide an opportunity for the candidate to gain knowledge, skills and concepts concerning employment in agricultural occupations that can be integrated into the agricultural classroom.

### Category III: Candidate Competence and Performance

#### Standard 12 – Assessment of Candidate Competence

Prior to recommending each candidate for the Agriculture Specialist Credential, one or more persons who are responsible for the program determine, on the basis of thorough documentation and written verification by at least one supervising teacher and one institutional supervisor, that the candidate has met all requirements and competencies for the Agriculture Specialist Instruction Credential. This determination is based on documentation of completion of all specific program requirements and verification that the candidate has demonstrated competence in each of the elements listed below, as evidenced by multiple measures, including a combination of formative and summative assessments.

##### Required Elements for Standard 12 – Assessment of Candidate Competence:

*An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:*

12(a) Each candidate understands the philosophy, history, issues and current research associated with career and technical education and their specific influence on agriculture education, and is able to apply these concepts in the development and implementation of agriculture education programs.

12(b) Each candidate is prepared to manage agriculture education programs based on knowledge of the appropriate curriculum, the ability to garner program resources and establish community support, familiarity with leading state and national agriculture education organizations, and an understanding of key concepts of program management and accountability, and is able to apply this information in the management agriculture education programs.

12(c) Each candidate has a working knowledge of the integral nature and purpose of supervised agricultural experience programs, is familiar with related activities including record keeping, home visits, project advisement and management, and project ethics, and is able to apply this information in the supervision of student agriculture experiences.

12(d) Each candidate has an understanding of the integral nature, key principles and activities of Future Farmers of America (FFA), including principles of leadership, student chapter and community development activities, appropriate procedures for student organizations, and creating an maintaining positive interpersonal relationships, and is able to integrate and apply these activities and principles in FFA programs and related student agriculture education experiences.

12(e) Each candidate has completed a program of specialized study in one of the six agriculture domains identified in Standard 6, from which the candidate has developed advanced knowledge and understanding of this area of specialization, and is able to apply this advanced knowledge and understanding in the development and implementation of agriculture education programs.

12(f) Each candidate understands the special issues involved in teaching agriculture systems technology, including the hazards existent in working with tools and equipment and methods for mitigating those hazards and ensuring safety; specialized pedagogical skills and practices involved in this domain; and tool, equipment and facility use and management; and is able to apply this information in the development and implementation of agriculture systems technology education.

12(g) Each candidate is prepared to plan and successfully execute agriculture education experiences in non-traditional learning environments, including implementing appropriate class management strategies in non-classroom situations such agricultural technology shops, school laboratories, school farm locations and school field trips.

12(h) Each candidate is able to competently advise students in planning and preparation for careers in agriculture through the candidate’s knowledge of career development concepts and the organization and needs of the and future workplace in general and the agriculture industry specifically.