

Agricultural Systems Technology and Education

Utah State University

Assessment Plan

For the Agricultural Education Program

Department Mission Statement

The mission of the ASTE Department is to apply the Land Grant University philosophy to learning, discovery, and engagement with an interdisciplinary systems science approach for the resolution of family and agricultural issues through the advancement of education, technology transfer, scientific inquiry, and agricultural mechanization.

- We prepare educators in agriculture and family and consumer sciences.
- We practice excellence as we recruit, prepare, and provide instruction for individuals in agricultural and family and consumer science careers.
- We serve the people and inform them about agricultural and family issues, needs, opportunities, and challenges.
- We value serving all populations, developing the whole person, responding to the needs of the marketplace, and functioning as part of the total higher education system.
- We use proven educational processes which include formal and informal instruction, experiential learning, leadership, and personal development at an undergraduate and a graduate level.

ASTE Department Learning Objectives

After completing the program in Agricultural Systems Technology and Education at Utah State University, our students will be able to:

- A. Become familiar with the formal and informal aspects of agricultural education as a career;
- B. Explore the diversity of career types and industries in agricultural education through internships, clinical experiences, and student teaching;
- C. Demonstrate valid techniques in the development of community based agricultural education programs;
- D. Integrate technical agricultural science, technology, and management concepts into the comprehensive design of a localized agricultural education program;
- E. Demonstrate teaching competency in a student teaching site under the direction of a mentoring teacher and assessment by professors in the ASTE department;
- F. Evaluate instruction in agricultural education through criterion-referenced techniques using USOE teaching procedures;
- G. Design performance assessment systems based upon stated learning/program objectives; and
- H. Utilize contemporary instruction materials to guide instruction.

Secondary Education Department Learning Objectives

The goal of this program is to provide students with the professional knowledge and teaching skills to complement the content knowledge acquired in general education and in teaching majors and minors. Successful completion of this program enables students to be recommended for secondary teacher licensure (grades 6-12) in Utah.

Objectives

- A. Students will acquire and demonstrate knowledge related to twelve principles (Appendix A) in the several courses that constitute the Professional Education Framework;
- B. Students will articulate democratic values consistent with American education and will provide evidence of a strong commitment to the well-being of youth in our society;
- C. Students will participate in on-campus teaching simulations as well as 60 hours of clinical experience in middle school and high school settings preceding student teaching;
- D. Students will first prepare a comprehensive Professional Portfolio based on their course work and clinical experience at Levels 1 and 2, then pass a Portfolio Interview; and
- E. Students will successfully meet the requirements for secondary student teaching and for the professional seminar that accompanies this experience.

Utah State Office of Education Competencies

Following are the teaching competencies needed for effective performance in the area of agricultural education as directed by the Agricultural Education division of the Utah State Office of Education. Students who graduate with agricultural education degrees should be able to:

1. Identify the student performance objectives for a lesson;
2. Plan the content of a lesson;
3. Select teaching techniques for a lesson;
4. Plan the introduction for a lesson;
5. Write a lesson plan;
6. Plan student learning experiences for a lesson;
7. Select tools and/or equipment for a lesson;
8. Determine student needs and interests;
9. Teach using problem-solving methods;
10. Summarize correlation unit content with on-the-job and/or laboratory experience;
11. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts;
12. Identify the competencies needed for entry into an occupation;
13. Determine the occupations for which training is to be offered in the agricultural education programs;
14. Assist in the identification of the school's agricultural education purposes and goals;
15. Assess the relevancy of the agricultural education offering;
16. Construct an instrument to collect occupational data for program planning;
17. Plan an instructional program based upon findings of an occupational survey;
18. Write student performance objectives for the agricultural education offering;
19. Direct student laboratory experience;
20. Present a concept or principle through a demonstration;
21. Demonstrate a manipulative skill;
22. Reinforce learning;
23. Enrich instruction to challenge the abilities of more capable students;
24. Conduct field trips;
25. Employ question techniques;
26. Employ oral questioning techniques;
27. Present information with the assistance of a resource person;
28. Identify unacceptable standards of student behavior in agricultural education classrooms and laboratories and uphold acceptable standards;
29. Carry out approved disciplinary action when warranted;
30. Provide approved safety apparel and devices for hazardous equipment;
31. Control outbursts of fighting and aggressive behavior;
32. Encourage students to exercise self-discipline;
33. Uphold school standards of expected behavior;
34. Formulate with students acceptable standards of behavior in agricultural education classrooms and laboratories;
35. Maintain a record of safety instructions presented in compliance with safety laws and regulations;

36. Identify new tools and/or equipment needed for the academic year;
37. Schedule laboratory equipment for maximum utilization by students;
38. Prepare purchased requests for approved agricultural education equipment and supplies;
39. Arrange laboratory work areas and storage space to facilitate student work performance;
40. Arrange layout of the agricultural education laboratory to stimulate the occupational environment;
41. Devise a filing system for instructional material;
42. Conduct a conference with a student;
43. Develop constructive working relationships among students;
44. Demonstrate a regard for and an interest in students as individuals;
45. Present information to students on occupational opportunities;
46. Recognize potential problems of students;
47. Plan the school community relations activities for the agricultural education program;
48. Construct a questionnaire to obtain information from parents relative to their expectations of the agricultural education program;
49. Participate in area, state, regional, and national activities of the student FFA organization;
50. Speak to school and community groups on the agricultural education program;
51. Assist students in developing a yearly program of work for the student FFA organization;
52. Maintain the ethical standards expected of a professional educator;
53. Keep up-to-date through reading professional literature;
54. Exchange observational visits, innovations, and ideas with others in the profession;
55. Develop procedures to insure student safety and protection in the training session;
56. Check the student-learner's progress with the on-the-job instructor and other training station personnel;
57. Develop a procedure to insure student safety and protection in the training station;
58. Evaluate the student-learner's work qualities and habits on the job;
59. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation;
60. Develop a systematic training plan with the cooperating employer and/or on-the-job instructor;
61. Assist the student-learner in on-the-job training orientation;
62. Prepare the student-learner for an interview with the cooperating employer and training station personnel;
63. Assist the student-learner in the solution of problems related to on-the-job training;
64. Control student-learner absenteeism from school and on-the-job training;
65. develop a plan for supervision of on-the-job training;
66. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation;
67. Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction;
68. Develop a training agreement between student-learners, parent, school, and cooperating employer;
69. Identify prospective cooperative employers to provide on-the-job training stations;
70. Assess the student-learner's performance with the assistance of the on-the-job instructor;

71. Demonstrate subject competency through application of teaching methods to content in biological, physical, and applied sciences as they relate to solutions in agricultural problems;
72. Demonstrate content proficiency for plant, soils, animal science, natural resources, and agricultural mechanization;
73. Demonstrate content proficiency in sales and service, marketing, and economic principles; and
74. Demonstrate technical content proficiency by satisfactory methods and content mastery in student teaching.

ASTE Course Map
Agricultural Education
ASTE Department Learning Objectives

	Required Courses (Appendix B)																
	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E		S C E D	S C E D	S C E D	S C E D	S C E D		S P E D
<u>ASTE Department Learning Objectives</u>	2 7 1 0	3 1 0 0	3 2 4 0	3 3 0 0	3 6 2 0	4 1 5 0	4 3 0 0	5 5 0 0	5 6 0 0		3 1 0 0	3 2 1 0	4 2 0 0	4 2 1 0	5 3 0 0		4 0 0 0
A. Become familiar with the formal and informal aspects of agricultural education as a career;	X	X	X	X	X	X	X	X	X		X	X			X		
B. Explore the diversity of career types and industries in agricultural education through internships, clinical experiences, and student teaching;				X			X	X	X						X		
C. Demonstrate valid techniques in the development of community based agricultural education programs;	X		X	X	X	X			X						X		
D. Integrate technical agricultural science, technology, and management concepts into the comprehensive design of a localized agricultural education program;	X	X	X		X	X			X		X	X	X	X			X
E. Demonstrate teaching competency in a student teaching site under the direction of a mentoring teacher and assessment by professors in the ASTE department;				X			X		X						X		
F. Evaluate instruction in agricultural education through criterion-referenced techniques using USOE teaching procedures;				X		X	X		X		X		X	X	X		X
G. Design performance assessment systems based upon stated learning/program objectives; and			X	X		X	X		X			X	X	X	X		X
H. Utilize contemporary instruction materials to guide instruction.	X	X	X	X	X	X	X		X			X	X	X	X		X

ASTE Course Map

Agricultural Education

Utah State Office of Education Competencies

	Required Courses (Appendix B)																
	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E		S C E D	S C E D	S C E D	S C E D	S C E D		S P E D
<u>USOE Competencies (1 of 6)</u>	2 7 1 0	3 1 0 0	3 2 4 0	3 3 0 0	3 6 2 0	4 1 5 0	4 3 0 0	5 5 0 0	5 6 0 0		3 1 0 0	3 2 1 0	4 2 0 0	4 2 1 0	5 3 0 0		4 0 0 0
1. Identify the student performance objectives for a lesson;			X			X			X				X	X			
2. Plan the content of a lesson;			X			X			X				X				
3. Select teaching techniques for a lesson;			X			X			X				X				
4. Plan the introduction for a lesson;			X			X			X				X				
5. Write a lesson plan;			X			X			X				X				
6. Plan student learning experiences for a lesson;			X			X			X			X	X				
7. Select tools and/or equipment for a lesson;			X			X			X				X				
8. Determine student needs and interests;			X			X			X		X	X	X				X
9. Teach using problem-solving methods;						X			X				X				X
10. Summarize correlation unit content with on-the-job and/or laboratory experience;			X			X			X								
11. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts;			X	X		X	X		X				X	X	X		

	Required Courses (Appendix B)																
	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E		S C E D	S C E D	S C E D	S C E D	S C E D		S P E D
<u>USOE Competencies (2 of 6)</u>	2 7 1 0	3 1 0 0	3 2 4 0	3 3 0 0	3 6 2 0	4 1 5 0	4 3 0 0	5 5 0 0	5 6 0 0		3 1 0 0	3 2 1 0	4 2 0 0	4 2 1 0	5 3 0 0		4 0 0 0
12. Identify the competencies needed for entry into an occupation;	X							X	X								
13. Determine the occupations for which training is to be offered in the agricultural education programs;	X	X						X	X								
14. Assist in the identification of the school's agricultural education purposes and goals;	X				X	X			X		X						
15. Assess the relevancy of the agricultural education offering;	X								X								
16. Construct an instrument to collect occupational data or program planning;						X			X					X	X		
17. Plan an instructional program based upon findings of an occupational survey;						X			X								
18. Write student performance objectives for the agricultural education offering;			X	X		X	X		X						X		
19. Direct student laboratory experience;			X	X			X		X						X		
20. Present a concept or principle through a demonstration;	X	X	X	X	X	X	X		X				X	X	X		
21. Demonstrate a manipulative skill;	X		X	X	X	X	X		X						X		
22. Reinforce learning;			X	X		X	X		X				X	X	X		
23. Enrich instruction to challenge the abilities of more capable students;				X		X	X		X		X	X		X	X		X
24. Conduct field trips;				X		X	X		X						X		
25. Employ question techniques;						X			X				X	X			X

	Required Courses (Appendix B)																
	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E		S C E D	S C E D	S C E D	S C E D	S C E D		S P E D
<u>USOE Competencies (4 of 6)</u>	2 7 1 0	3 1 0 0	3 2 4 0	3 3 0 0	3 6 2 0	4 1 5 0	4 3 0 0	5 5 0 0	5 6 0 0		3 1 0 0	3 2 1 0	4 2 0 0	4 2 1 0	5 3 0 0		4 0 0 0
39. Arrange laboratory work areas and storage space to facilitate student work performance;			X			X			X								
40. Arrange layout of the agricultural education laboratory to stimulate the occupational environment;			X			X			X								
41. Devise a filing system for instructional material;				X			X	X	X						X		
42. Conduct a conference with a student;				X		X	X		X		X	X		X	X		X
43. Develop constructive working relationships among students;	X			X		X	X		X		X	X			X		X
44. Demonstrate a regard for and an interest in students as individuals;	X		X	X	X	X	X		X		X	X			X		X
45. Present information to students on occupational opportunities;	X								X								
46. Recognize potential problems of students;				X		X	X		X		X	X		X	X		X
47. Plan the school community relations activities for the agricultural education program;	X	X	X	X	X	X	X	X	X						X		
48. Construct a questionnaire to obtain information from parents relative to their expectations of the agricultural education program;									X						X		
49. Participate in area, state, regional, and national activities of the student FFA organization;	X			X	X	X	X		X						X		
50. Speak to school and community groups on the agricultural education program;				X			X		X						X		
51. Assist students in developing a yearly program of work for the student FFA organization;	X			X	X	X	X		X						X		

	Required Courses (Appendix B)																
	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E	A S T E		S C E D	S C E D	S C E D	S C E D	S C E D		S P E D
<u>USOE Competencies (5 of 6)</u>	2 7 1 0	3 1 0 0	3 2 4 0	3 3 0 0	3 6 2 0	4 1 5 0	4 3 0 0	5 5 0 0	5 6 0 0		3 1 0 0	3 2 1 0	4 2 0 0	4 2 1 0	5 3 0 0		4 0 0 0
52. Maintain the ethical standards expected of a professional educator;	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X
53. Keep up-to-date through reading professional literature;	X						X	X									
54. Exchange observational visits, innovations, and ideas with others in the profession;				X			X	X	X				X		X		
55. Develop procedures to insure student safety and protection in the training session;			X	X			X		X						X		
56. Check the student-learner's progress with the on-the-job instructor and other training station personnel;				X	X		X		X						X		
57. Develop a procedure to insure student safety and protection in the training station;			X	X			X		X						X		
58. Evaluate the student-learner's work qualities and habits on the job;				X			X		X						X		
59. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation;	X			X			X		X						X		
60. Develop a systematic training plan with the cooperating employer and/or on-the-job instructor;				X	X		X		X						X		
61. Assist the student-learner in on-the-job training orientation;				X	X		X		X						X		
62. Prepare the student-learner for an interview with the cooperating employer and training station personnel;						X		X	X								
63. Assist the student-learner in the solution of problems related to on-the-job training;				X			X		X						X		
64. Control student-learner absenteeism from school and on-the-job training;				X			X		X						X		

ASTE Plan for Measuring the Achievement of Degree and Program Objectives

The Bachelor of Science (BS) Degree in Agricultural Education is designed to develop the needed background knowledge of basic agricultural concepts and technologies for teaching and cooperative extension. Coursework covers topics in the following fields: agricultural economics, agricultural mechanization, animal, dairy and veterinary sciences, plant and soil science, and natural resources. Students choosing this major must also be admitted to the Secondary Teacher Education Program (STEP) administered by the College of Education.

All graduates from the department must satisfy requirements for the basic core curriculum and meet the following three minimum requirements: (1) Grade point average must be 2.75 or higher in all courses required for the major. (2) Courses required for the major may be repeated only once to improve a grade. (3) Courses required for the major may not be taken for *pass-fail* credit. The format of the agricultural education curriculum with several emphasis and endorsement areas has added greater opportunities and flexibility for students within the major.

The Agricultural Education degree prepares an individual to become a high school teacher of agriculture. High school teaching opportunities exist in Utah, the Intermountain West, and the United States. Those earning a Bachelor of Science Degree in Agricultural Education become eligible for teacher licensure in Utah. Additional requirements or endorsements may be required in other states. All Agricultural Education majors are encouraged to complete the Biological Science Teaching Endorsement.

The evaluation of the Secondary Teacher Education Program (STEP) is based on measures of student performance. The performances that are measured are derived from the Conceptual Framework for STEP. Three unique performance assessments were developed from the conceptual framework. These assessments allow continuous evaluation of student performance and progress, as well as, data for the evaluation of the program.

NOTE: Graduating seniors in agricultural education must demonstrate competency by applying skills they have learned to an integrating task or experience. Agricultural Education majors must complete and demonstrate competency through a **student portfolio** AND a capstone **student teaching** experience.

Student Portfolio

Students in the first course in STEP begin developing a portfolio which will become an integral tool in the assessment of their professional performance as a teacher. Students select materials from their professional education courses, courses in their major/minor, clinical experiences, as well as other experiences they have had working with children to demonstrate successful performance of the knowledge, skills, and attitudes reflected in each the 12 principles of the conceptual framework. In this course, the relation between the portfolio and the conceptual framework is explained and students are informed about how the portfolio will be used in assessing their performance. At this level, the portfolio is a working portfolio which will be

added to in succeeding semesters. Students have to pass a portfolio review to advance to the next level, but at this stage, the review is an assessment of having a portfolio organization.

Students continue the process of documenting achievement for each portfolio area. Prior to student teaching, students submit their portfolios for review and participate in a portfolio interview. The rubric for evaluating the portfolios includes measures of student performance for each of the 12 principles as well as evidence of reflection and communication skills. Students must pass this review before they student teach.

The portfolios present a picture of the professional development of students based on performance indicators as they move through the program. The composites of the reviews of the portfolios allow faculty to identify areas of the program which are successfully training students to perform as teachers. Faculty members who participated as interviewers discuss the results of the interviews after each cycle of formal parts of the assessment of STEP. For example, in the spring 2000 interviews, it was noted that students did not have a good understanding of the principle, Knowledge Construction. It was also noted that students had demonstrated performance related to classroom management but had a difficult time incorporating that performance into the proper place in the portfolio. The analysis of these results leads to earlier and more in depth discussions of the 12 principles and the conceptual framework.

Student Teaching

Agricultural Education students complete a capstone experience in student teaching. Students spend a minimum of 14 weeks in the student teaching site under the supervision of a qualified agricultural education instructor. Students are evaluated during a minimum of 3 supervisory visits by ASTE faculty members. During the visits, student teachers are evaluated utilizing the Student Teaching Performance Report (STPR) developed through the Secondary Education department.

The STPR was developed after the latest revision of the conceptual framework and has the same 12 principle structure as the portfolio. Tasks were identified that delineate the knowledge, skills, and dispositions that constitute successful performance. Indicators were identified for the tasks which are used to judge the degree to which the student teacher has demonstrated achievement. The evaluation form is completed jointly by the student teacher, cooperating teacher, and university supervisor as a summative evaluation of that student's performance. The level of performance is indicated by placing a mark on a line which represents a continuum from successful completion of the task to unsuccessful performance.

An example of the 12 principle evaluation instrument used by student supervisors is found in Appendix C.

Figure 1 shows the Knowledge Construction portion of STPR. A space is provided for anecdotal comments.

KNOWLEDGE CONSTRUCTION: Understands central concepts and tools of inquiry to create learning experiences that make the material meaningful for students.			
Content knowledge	Explains concepts accurately and clearly	----- -----	Explains lessons in shallow, confusing, or inaccurate terms
Choices of content	Uses appropriate content materials and tools of inquiry	----- -----	Shows lack of knowledge of the subject: uses inappropriate materials
Student experiences	Engages students in meaningful learning experiences where they can construct their own knowledge using a wide array of tasks and materials	----- -----	Delivers knowledge with no opportunities for student involvement
Comments:			

Figure 1. The Knowledge Construction portion of the Student Teaching Performance Report.

An abridged version was also produced to be used for formative evaluations after each observation by the university supervisor. It has the 12 principles and the associated criteria but the indicators of success have been omitted. Users of this version provide written, anecdotal evaluation of the student performance for each of the 12 concepts.

Measurement of Other Student Outcomes

Agricultural Education faculty members should develop measurement methods for determining the satisfaction of employers, placement success, and student satisfaction of the program post-graduate.

Exit Interviews

All graduates in agricultural education will complete an exit interview in connection with ASTE 5500 – Agricultural Education Secondary Curriculum Seminar.

- Agricultural education faculty should meet before the seminar and prepare specific items of inquiry for all students as they have completed student teaching.
- University-wide questions should be gathered from the appropriate USU assessment program(s).
- Agricultural education faculty members should meet soon after the conclusion of the seminar to plan and update the agricultural education program accordingly.

Using Assessment Data for Departmental Decision Making

Faculty in the ASTE department should carefully review the assessment plan on an annual basis. Once measurement data has been collected, decisions should be considered and implemented. To this end, the ASTE department should:

- Involve all faculty and staff members in the collection of information as outlined in the assessment plan;
- Select an assessment coordinator within the department;
- Provide input to the assessment plan on an annual basis;
- Prepare recommendations to be submitted to the assessment coordinator;
- Replace the summer departmental retreat with an assessment retreat where the recommendations can be discussed and implemented for the year; and
- Continue with an on-going process of measurement – assessment – implementation.

Department Website

Once the ASTE department assessment plan is in place, the department technology coordinator is to update the department website. All documents will be supplied to the technology coordinator by the department assessment coordinator.

Appendix A

Twelve Principles for Secondary Teacher Education at Utah State University

Teaching is a complex interaction among instructors and students that is influenced by the unique requirements of the subject being taught and the characteristics of the community in which the school is located. Although each classroom is different and each student/teacher interaction is unique, there are well established principles that guide instruction. The Secondary Teacher Education Program is structured around twelve principles that guide the selection of content for its courses and the assessment procedures of the program. The twelve principles are described below. These principles will be used to organize the professional portfolio which is prepared during the first two semesters of the program.

Knowledge Construction: Teacher uses central concepts and tools of inquiry to create meaningful learning for students.

Learner Development: Teacher provides opportunities that support intellectual, social, and personal growth for students.

Multiculturalism: Teacher engages all students in learning activities by providing for differences in gender, socioeconomic status, culture, and English language proficiency.

Exceptionality: Teacher implements learning activities for students with special needs.

Instructional Strategies: Teacher uses reading and writing as well as other strategies to enhance student learning and develop students critical thinking, problem solving, and performance skills.

Management/Motivation: Teacher produces a positive, orderly classroom climate; shows care and respect for each student to orchestrate lessons which engage the class in learning.

Communication: Teacher provides clear instruction and valuable feedback.

Technology: Teacher uses a variety of media to supplement instruction.

Instructional Planning: Teacher plans well organized instruction based on student development level and standards. Uses a variety of appropriate strategies which promote both conceptual development and higher level thinking.

Assessment: Teacher uses informal and formal measurements to make formative and summative evaluations which accurately assess meaningful learning.

Cooperation/Collaboration: Teacher works with other professionals and parents to achieve school mission.

Professionalism: Teacher demonstrates professionalism by seeking and using knowledge of current literature, associating with other professionals, reflecting on practice, and performing in a legal and ethical manner.

Appendix B

Required Courses for Agricultural Education Majors

Agricultural Education

ASTE 2710. Orientation to Agricultural Education. Students examine the framework of agricultural education, with a special emphasis on the nature of the programs, career opportunities, and the qualifications and preparation requirements of future agricultural educators. Students will spend 25-30 hours observing instruction in secondary classrooms. (2 cr) (F)

ASTE 3100. Leadership Applications in Agricultural Science, Management, and Development. Study of leadership styles and their applications in development of agricultural programs for youth and adults. Emphasizes leadership and communication principles for effective community resource management in rural environments. Experiences provided in leadership styles, program planning, and meeting organization. (2 cr) (Sp)

ASTE 3240 (CI). Teaching in Laboratory Settings. Basic principles of teaching students in laboratory settings. Overview of major concepts, considerations, and practices used for developing and evaluating agriscience curricula. Prerequisite: ASTE 2710. (3 cr) (Sp)

ASTE 3300. Clinical Experience I in Agricultural Education. In-school clinical observation experience. Students involved in observing management and assisting in teaching. Designed to provide familiarity with agricultural education classroom. (1 cr) (Sp)

ASTE 3620. Managing the FFA and SAE Programs. Introduction to basic concerns, understandings, and practices needed to effectively advise an FFA chapter. Students learn appropriate philosophies and skills for operation of a comprehensive supervised agricultural experience program. (2 cr) (Sp, Su)

ASTE 4150 (CI). Methods of Teaching Agriculture. Introduction to basic practices of classroom teaching and program planning. Through participation in discussions, activities, and assignments, students refine their abilities to develop programs, diagnose the learner, prepare the instruction, and guide student learning. Prerequisites: ASTE 2710, 3240. (3 cr) (F)

ASTE 4300. Clinical Experience II in Agricultural Education. Continued in-school observation of agricultural education teaching. Requires student participation in teaching, management, and program development in agricultural education. (1 cr) (F)

ASTE 5500. Agricultural Education Secondary Curriculum Seminar. Cooperative examination of considerations and processes for teaching secondary students. Reflection on the practice of teaching. Preparation for entry into the teaching profession. (2 cr) (Sp)

ASTE 5600. Agricultural Education Student Teaching in Secondary Schools. Students teach agriscience and technology courses in secondary and middle school settings under the guidance of clinical and Utah State University supervisors. (8 cr) (Sp)

Secondary Education

ScEd 3100. Motivation and Classroom Management. Designed to lead pre-service secondary school teachers to address two questions: (1) What diverse traits, talents, attitudes, and experiences do pre-adolescent and adolescent students bring to the middle school, junior high school, and high school environment? and (2) In light of these diverse traits, talents, attitudes, and experiences, how should teachers work with students to build cooperative classroom communities where students are motivated to engage in productive learning activities? (3 cr) (F, Sp)

ScEd 3210 (CI, DSS). Educational and Multicultural Foundations. Provides preservice teachers with the opportunity to critically examine the political, economic, and educational policies influencing students' access to equitable educational experiences. Examines historical and philosophical foundations influencing the nature of multicultural education in our Democratic society, how personal biases can influence instructional practices, and development of multicultural curriculum relevant to specific content areas. (3 cr) (F, Sp)

ScEd 4200 (CI). Reading, Writing, and Technology. Performance-based class focused on a wide range of academic skills related to reading, writing, and advanced technology access. Prerequisite: Program admission and completion of Level 1. (3 cr) (F, Sp)

ScEd 4210. Cognition and Evaluation of Student Learning. Designed to lead the preservice secondary school teacher to address two questions: (1) How do students construct concepts; discover relationships; and develop knowledge-level skills, comprehension and communication skills, and problem-solving abilities? (2) How do teachers monitor students' progress, evaluate and communicate their achievement, and interpret the results of system-wide and standardized test results to students and their parents? (3 cr) (F, Sp)

ScEd 5300. Clinical Experience III. Third clinical practicum in middle and secondary schools. Arranged by Office of Field Experiences for 5 weeks before student teaching (40 hours minimum). Required of all students at Level 3. Prerequisites: Level 1 and Level 2 completion, and student teaching placement. (1 cr) (F, Sp)

Special Education

SpEd 4000. Education of Exceptional Individuals. Characteristics of all types of exceptional children with emphasis on the educational and psychological implications of these conditions to the development of the child. (2 cr) (F, Sp, Su)

Appendix C
Student Teaching Evaluation Instrument