

# AGRICULTURAL EDUCATION AND STUDIES (AGEDS)

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*Any experimental courses offered by AGEDS can be found at:*  
[registrar.iastate.edu/faculty-staff/courses/explisting/](http://registrar.iastate.edu/faculty-staff/courses/explisting/) (<http://www.registrar.iastate.edu/faculty-staff/courses/explisting/>)

## Courses primarily for undergraduates:

### AGEDS 110: Orientation

(1-0) Cr. 1. F.S.

Orientation to the department. Careers in agriculture.

### AGEDS 110A: Agriculture and Life Sciences Education (Fall only)

(1-0) Cr. 1. F.S.

Orientation to the department. Careers in agriculture.

### AGEDS 110B: Agricultural Studies (Fall only)

(1-0) Cr. 1. F.S.

Orientation to the department. Careers in agriculture.

### AGEDS 110C: Agricultural and Life Sciences exploration

(1-0) Cr. 1. F.S.

Orientation to the department. Careers in agriculture.

### AGEDS 111: Dean's Leadership Seminar

(1-0) Cr. 1. F.

*Prereq: Permission of the Associate Dean for Academic Programs, College of Agriculture and Life Sciences*

Introduction to leadership in agriculture and the life sciences, problem solving applied to current case studies, global perspective required by leaders, and designing programs to respond to societal needs in the agricultural and life sciences.

### AGEDS 112: Agriculture Biotechnology Colloquium

(1-0) Cr. 1. S.

*Prereq: Enrollment as an agricultural excellence scholar*

The scientific basis of biological and social sciences in agriculture.

### AGEDS 113: Access to Success Seminar I

(1-0) Cr. 1. Repeatable. F.S.

Course provides career skills, learning strategies and social and academic integration techniques to student members of Step Forward Learning Community. Utilization of campus resources, encouragement of self-exploration, and development of academic skills. Offered on a satisfactory-fail basis only.

### AGEDS 116: Initial Field Experience in Agricultural Education

(1-2) Cr. 1. F.

*Prereq: AGEDS majors only.*

Field experience in a formal education setting designed to explore teaching as a career through guided observation and interviews, reflection, and on-campus dialogue.

### AGEDS 211: Early Field Based Experience

(1-0) Cr. 1. Repeatable, maximum of 3 credits. F.S.SS.

*Prereq: AGEDS 110*

Forty hours on-site in an agricultural setting. Students will have an opportunity outside the classroom for career guidance, role modeling, and reflection on their observations that they can apply to their courses and other educational experiences.

### AGEDS 211A: High School Agriculture Programs

(1-0) Cr. 1. Repeatable, maximum of 3 credits. F.S.SS.

*Prereq: AGEDS 110*

Forty hours on-site in an agricultural setting. Students will have an opportunity outside the classroom for career guidance, role modeling, and reflection on their observations that they can apply to their courses and other educational experiences.

### AGEDS 211C: Agricultural Industries and Agencies

(1-0) Cr. 1. Repeatable, maximum of 3 credits. F.S.SS.

*Prereq: AGEDS 110*

Forty hours on-site in an agricultural setting. Students will have an opportunity outside the classroom for career guidance, role modeling, and reflection on their observations that they can apply to their courses and other educational experiences.

### AGEDS 215: Career Seminar

(1-0) Cr. 1. F.S.

*Prereq: Sophomore classification*

Overview of career opportunities. Evaluation of interests and accomplishments and setting career goals. Development of job search and interviewing skills. Establishing networks of job contacts.

### AGEDS 310: Foundations of Agricultural Education Programs

(3-0) Cr. 3. F.S.

Historical development of agricultural education programs. Philosophic premises, program goals and objectives. Educational and social issues impacting the implementation of agricultural education programs.

### AGEDS 311: Presentation and Sales Strategies for Agricultural Audiences

(3-0) Cr. 3. F.S.

Utilizing instructional methods, techniques, and problem solving, presentation and sales strategies with agricultural audiences.

**AGEDS 312: Science With Practice**

(1-6) Cr. 3. Repeatable. F.S.

*Prereq: College of Agriculture and Life Sciences majors only*

A planned learning experience wherein each student and faculty mentor develops a learning agreement that encompasses specific activities and expectations. Students are engaged in reflective activities that include journals, micro-reflections, formal presentations, and a comprehensive portfolio.

**AGEDS 315: Personal, Professional, and Entrepreneurial Leadership in Agriculture**

(3-0) Cr. 3. F.S.

Leadership principles and strategies to influence and motivate team members to achieve personal, professional, and entrepreneurial goals in production agriculture, agricultural education, and agricultural organizations.

**AGEDS 327: Survey of Agriculture and Life Sciences Communication**

(2-2) Cr. 3. F.S.

*Prereq: ENGL 250 or equivalent.*

Development of written, oral, visual and electronic communications relevant to agriculture and life sciences. Students develop a set of communication skills applicable to agriculture and life science contexts and for various audiences.

**AGEDS 388: Agricultural Mechanics Applications**

(2-3) Cr. 3. Repeatable, maximum of 2 times. F.S.SS.

Introduction to SMAW (Arc), GMAW (Mig), GTAW (Tig), Oxy-Fuel welding, Oxy-Fuel cutting, and Plasma cutting theories and applications. Emphasis will be on theoretical foundation of welding, safety, welding skill development, and management of equipment, and materials. Introduction to small engines and applications. Emphasis will be on theory of operating systems, maintenance, troubleshooting, failure analysis, and safety.

**AGEDS 398: Cooperative Education**

Cr. R. F.S.SS.

*Prereq: Permission of the department cooperative education coordinator; junior classification*

Required of all cooperative education students. Students must register for this course prior to commencing each work period.

**AGEDS 401: Planning Agriculture and Life Sciences Education Programs**

(Dual-listed with AGEDS 501). (3-0) Cr. 3. F.

*Prereq: AGEDS 310*

Responsibilities of an agricultural education teacher, curriculum development, experiential learning opportunities including FFA and SAE, and assessment and maintenance of program quality.

**AGEDS 402: Methods of Teaching in Agriculture and Life Sciences**

(Dual-listed with AGEDS 502). (3-0) Cr. 3. F.

*Prereq: Concurrent enrollment in AGEDS 401*

Topics include: principles of teaching and learning, individualized and group methods, application of learning, instructional management, special populations, and evaluation.

**AGEDS 412: Internship in Agricultural Education and Studies**

Cr. 2-6. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior classification in AGEDS and permission of instructor*

A supervised two to twelve week learning experience in an approved learning setting with application to educational, agricultural, communications and/or environmental practices and principles.

**AGEDS 414: Developing Agricultural Education Programs in Non-Formal Settings**

(2-0) Cr. 2. S.

Basic concepts in planning, conducting, and evaluating educational programs in non-formal settings. Includes programming for youth and adults in Extension, agricultural industry, and related agencies.

**AGEDS 416: Pre-Student Teaching Experience in Agricultural Education**

Cr. 1. F.S.

*Prereq: AGEDS 211, AGEDS 402 and admission to teacher education program*

A forty hour field-based experience in an approved secondary agricultural education program. Concurrent enrollment in 417 is required.

**AGEDS 417: Supervised Teaching in Agriculture and Life Sciences**

Cr. 1-16. Repeatable. F.S.

*Prereq: AGEDS 211, AGEDS 402 and admission to teacher education program*

Supervised teaching in public schools.

**AGEDS 450: Farm Management and Operation**

(2-4) Cr. 3. Repeatable, maximum of 9 credits. F.S.SS.

*Prereq: Econ 235, Econ 230, junior classification*

Participation in the management and operation of a diversified Iowa farm. The class is responsible for the plans, records, and decisions for buying and selling the farm's livestock, crops, and equipment. Special speakers on current topics. May be taken for credit 3 times at different times of the year with permission of the instructor.

**AGEDS 451: Agricultural Law**

(3-0) Cr. 3. S.

*Prereq: Senior classification*

The legal framework impinging upon decision-making by firms, families, and individuals, real and personal property, contracts, secured transactions, negotiable instruments, debtor-creditor relations, bankruptcy, farm income tax organization of firms, intergenerational property transfers, trusts and farm estate planning, civil and criminal liabilities, environmental law, federal and state regulatory powers.

**AGEDS 461: Technology Transfer and the Role of Agricultural and Extension Education**

(Dual-listed with AGEDS 561). (3-0) Cr. 3. S.

Impact of agricultural and extension education processes on development and their role in the transfer of agricultural technology. Utilizing situational analysis techniques to analyze and solve problems in international agricultural education programs. Meets International Perspectives Requirement.

**AGEDS 475: Agri-Marketing and Communications Competition**

(2-0) Cr. 1-2. Repeatable, maximum of 6 credits. F.S.

*Prereq: Admission by invitation.*

Specialized training in communication and agricultural marketing knowledge and skills in preparation for intercollegiate competition. Maximum of 6 credits can be applied toward graduation.

**AGEDS 488: Methods of Teaching Agricultural Mechanics**

(2-3) Cr. 3. F.S.

Methods and management techniques in agricultural mechanics laboratories. Emphasis will be on safety, mechanical skills development and management of students, facilities, equipment, and materials.

**AGEDS 490: Independent Study in Agricultural Education and Studies**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490A: Philosophy, Curriculum, and Methods**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490B: Leadership, Evaluation, and Administration**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490C: Business, Industry, and Production Agriculture**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490D: Extension and International Agriculture**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490E: Instructional Technology**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490F: Environmental Issues**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490G: Entrepreneurship**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490H: Independent Study in Agricultural Education and Studies, Honors**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 490I: Communications**

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Junior or senior classification, permission of instructor*

**AGEDS 496: Agricultural Travel Course**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: Permission of instructor*

Limited enrollment. Extended field trips to study agriculture and education related topics. Location and duration of trips will vary. Pre-trip sessions arranged. Trip expenses paid by students.

**AGEDS 496A: International**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: Permission of instructor*

Limited enrollment. Extended field trips to study agriculture and education related topics. Location and duration of trips will vary. Pre-trip sessions arranged. Trip expenses paid by students.

Meets International Perspectives Requirement.

**AGEDS 496B: Domestic**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: Permission of instructor*

Limited enrollment. Extended field trips to study agriculture and education related topics. Location and duration of trips will vary. Pre-trip sessions arranged. Trip expenses paid by students.

**AGEDS 499: Undergraduate Research**

Cr. arr. F.S.SS.

*Prereq: Permission of instructor, adviser, and departmental chair*

Research experience in agricultural education and studies with application to selected problems.

**Courses primarily for graduate students, open to qualified undergraduates:****AGEDS 501: Planning Agriculture and Life Sciences Education Programs**

(Dual-listed with AGEDS 401). (3-0) Cr. 3. F.

*Prereq: AGEDS 310*

Responsibilities of an agricultural education teacher, curriculum development, experiential learning opportunities including FFA and SAE, and assessment and maintenance of program quality.

**AGEDS 502: Methods of Teaching in Agriculture and Life Sciences**

(Dual-listed with AGEDS 402). (3-0) Cr. 3. F.

*Prereq: Concurrent enrollment in AGEDS 401*

Topics include: principles of teaching and learning, individualized and group methods, application of learning, instructional management, special populations, and evaluation.

**AGEDS 510: Introduction to Research in Agricultural Education**

(3-0) Cr. 3. S.

*Prereq: Graduate classification*

Determining your research focus; developing research problems and objectives; reviewing the literature and establishing a theoretical framework; establishing procedures for data collection and analysis; ethical issues.

**AGEDS 511: Professional Agricultural Presentation Practices**

(3-0) Cr. 3. F.SS.

*Prereq: Graduate Classification*

The identification and use of key planning, delivery and evaluation of presentations using audience engagement techniques focused on research-based principles and field-based practices of professional presenters in agriculture and the life sciences.

**AGEDS 517: Student Teacher Education Practicum**

Cr. 2-6. F.S.

*Prereq: AGEDS 590B, AGEDS 501, AGEDS 502 Admission to the University Teacher Education program*

Supervised 5th-12th grade public and private schools teaching practicum for graduate students in Masters degree teacher certification program.  
NA

**AGEDS 520: Instructional Methods for Adult and Higher Education in Agriculture and Natural Resources**

(3-0) Cr. 3. S.

*Prereq: Graduate classification*

Theory and practice of adult education. Teaching and learning in formal and non-formal instructional programs for adult learners.

**AGEDS 524: Program Development and Evaluation in Agricultural and Extension Education**

(3-0) Cr. 3. F.

*Prereq: Graduate classification*

Theories and practice of program planning for nonformal education. Addresses use of program logic modeling and considers critical theories of planning to address power and interests in program development, needs assessment, and evaluation.

**AGEDS 533: Introduction to Learning Theory in Agricultural Education**

(3-0) Cr. 3. S.

*Prereq: Graduate classification*

Introduction to a variety of theoretical perspectives of learning and how they may be used within the context of agricultural education. Emphasis will be on the major domains of learning, developmental considerations, basic assumptions, concepts, and principles of various learning theories; understanding how each theoretical perspective may be used in both formal and non-formal educational settings.

**AGEDS 550: Foundations of Agricultural Education**

(3-0) Cr. 3. F.

*Prereq: Graduate classification*

Philosophical premises, ethical principles, historical development, contextual applications, and knowledge bases for agricultural education.

**AGEDS 561: Technology Transfer and the Role of Agricultural and Extension Education**

(Dual-listed with AGEDS 461). (3-0) Cr. 3. S.

Impact of agricultural and extension education processes on development and their role in the transfer of agricultural technology. Utilizing situational analysis techniques to analyze and solve problems in international agricultural education programs.  
Meets International Perspectives Requirement.

**AGEDS 590: Special Topics in Agricultural Education**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590A: Curriculum**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590B: Methods**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590C: Philosophy**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590D: Evaluation**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590E: Administration**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590F: Leadership**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education*

**AGEDS 590G: Guidance**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 590I: Instructional Technology**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 590J: Extension**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 590K: International Agriculture**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 590L: Program Planning**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593: Workshop in Agricultural Education**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593A: Curriculum**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593B: Methods**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593C: Evaluation**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593D: Administration**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593E: Leadership**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593F: Extension**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593G: Program Planning**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593H: Instructional Technology**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 593M: Biotechnology Workshop**

Cr. 1-3. Repeatable. F.S.SS.

*Prereq: 12 credits in agricultural education***AGEDS 599: Creative Component**

Cr. arr. Repeatable. F.S.SS.

For nonthesis masters degree programs.

**Courses for graduate students:****AGEDS 615: Seminar in Agricultural Education**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 615A: Writing for publication**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 615B: Ethics**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 615C: Grant writing**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 615D: Career planning**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 615E: Contemporary issues**

(1-0) Cr. 1. Repeatable. F.S.SS.

Offered on a satisfactory-fail basis only.

**AGEDS 617: Professional Internship for Agricultural Educators**

Cr. 1-6. Repeatable, maximum of 6 credits. F.S.SS.

*Prereq: Permission of instructor*

Analysis of the roles and activities of professionals in agricultural education. Supervised professional field-based experience in public and private settings. Offered on a satisfactory-fail basis only.

**AGEDS 625: Leadership, Administration, Supervision and Management of Agricultural Education Programs**

(3-0) Cr. 3. Alt. F., offered even-numbered years.

*Prereq: Graduate classification*

Principles and best practices for leading, administering, supervising, and managing agricultural education programs. Analyzing selected case studies that apply theory to practice in agricultural situations.

**AGEDS 699: Research**

Cr. arr. Repeatable.