

AGRICULTURAL EDUCATION AND STUDIES (AGEDS)

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: Advanced Communications for Agriculture and Life Sciences

(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 skills and perspectives consistent ethical and democratic principles applicable to agriculture, natural resource, and life science issues. Provide explanations of scientific and technical concepts to rural, industry, and urban audiences. Field trips.

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

(3-2) Cr. 4. 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 465: Horticulture Enterprise Management

(Cross-listed with HORT). (1-6) Cr. 3. F.

Prereq: Junior or senior classification.

Participation in the management and operation of fruit and vegetable enterprises for local markets. The class is responsible for the plans, records, and decision for planting, operating, harvesting, and marketing fruit and vegetables.

AGEDS 465A: Horticulture Enterprise Management - Planting

(Cross-listed with HORT). (1-6) Cr. 3. S.

Prereq: Junior or senior classification.

Participation in the management and operation of fruit and vegetable enterprises for local markets. Principles and practices of researching and developing a commercial business plan that will meet industry standards and that will be linked to the operations and production associated with the Hort 465 class. Laboratory work includes development of a horticulture enterprise business plan, high tunnel site preparation and planting, development of summer crop protocols, seedling production for the summer crop (if applicable) and land preparation and planting of a portion of the summer crop.

AGEDS 465B: Horticulture Enterprise Management: Harvesting

(Cross-listed with HORT). (1-6) Cr. 3. SS.

Prereq: Junior or senior classification.

Participation in the management and operation of fruit and vegetable enterprises for local markets. Principles and practices of harvesting and marketing high tunnel crops and the planting and growing of a variety of summer vegetables in the field. Laboratory work includes all operation and production aspects involved with the day-to-day running of a horticultural enterprise. The class will be responsible for crop selection and crop protocols for the fall high tunnel crop and seedling production for this crop (if applicable). Additionally, the class will be responsible for all crop maintenance decisions and record keeping during the season.

AGEDS 465C: Horticulture Enterprise Management: Marketing

(Cross-listed with HORT). (1-6) Cr. 3. F.

Prereq: Junior or senior classification.

Participation in the management and operation of fruit and vegetable enterprises for local markets. Principles and practices of researching and developing a commercial horticulture enterprise market plan that could be used by a startup business and that will be linked directly to the operations and production associated with the Hort 465 class. Laboratory work includes completing the summer crop harvest, development of a horticulture marketing plan, high tunnel site preparation and planting, development of spring high tunnel crop protocols and all crop maintenance decisions and the record keeping for the fall high tunnel crop.

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 514: Organizing Agricultural Information for Professional and Scientific Meetings

(1-2) Cr. 2. F.

Prereq: Graduate classification in agriculture

Concepts and practices in planning, preparing, and presenting materials used in professional meetings and scientific papers by agriculturalists with special emphasis on computerized delivery methods.

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.