ADG - Agricultural Education

ADG 105 Microcomputers in Agriculture: 3 Credits (1 Lec, 2 Lab)
Utilizing and selecting microcomputer software for the broad field of agriculture. Decision aid software, spreadsheets, database, telecommunication and financial records are emphasized. Application of computers to control, monitor, and calibrate devices in addition to aiding management decisions.

ADG 140US Leadership Development for Agriculture: 3 Credits (2 Lec, 1 Lab)
Process of developing and managing individuals by providing leadership and guidance at all levels of personnel development. Self-concepts developed through situational leadership and management, principles of people management, goal setting, and belief systems. Collaborative learning and field experience utilized.

ADG 253 Ag Ed in Public Schools: 3 Credits (3 Lec)
PREREQUISITE: ADG 140US and HDFS 101S. Establish a philosophy of agricultural education at the secondary, middle school, and elementary level. Instructional content in agricultural science, mechanics, and leadership will be identified. Principles needed in developing agricultural experiences associated with agricultural education will be presented.

ADG 291 Special Topics: 1-4 Credits (1-4 Lec)
PREREQUISITE: None required but some may be determined necessary by each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Repeatable up to 12 credits.

ADG 292 Independent Study: 1-3 Credits (1-3 Other)
PREREQUISITE: Consent of instructor and approval of department head. Directed research and study on an individual basis. Repeatable up to 6 credits.

ADG 294 Seminar: 3 Credits (1)
PREREQUISITE: Consent of instructor. Focuses on planning and implementing agricultural activities for youth. The emphasis is on planning an event, developing awareness and utilization of resources (people and things), developing a log and records regarding the event, and evaluating the effectiveness of an implementation plan and the actual event. Repeatable up to 6 credits.

ADG 309 Philosophy and Programs in Extension: 3 Credits (3 Lec)
Designed for students from any major who are interested in pursuing a career in the Cooperative Extension Service, community education, or other non-formal educational settings. The course focuses on land-grant and extension history, philosophies, and program areas: teaching methods, non-formal educational philosophies, instilling community change through education, basic program development and evaluation, and development of career preparation skills.

ADG 312R Communicating Agriculture: 3 Credits (3 Lec)
The course will provide an overview of communications strategies used to foster public understanding and meaning of agricultural and natural resources industries. A mixture of skills, including written, verbal, digital, and research, are emphasized that allow students to develop ideas and express them clearly, consider the message and audience, foster understanding, and communicate effectively. This course is open to all majors interested in learning practical communications techniques.

ADG 315 Electrical and Power Systems Operation: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: Junior standing. Provides students an opportunity to develop knowledge and skills related to the basic wiring requirements for agricultural buildings and electrical motors as well as the principles of engine operation, control, repair and maintenance. Agricultural Education

ADG 333 Construction Technology: 3 Credits (1 Lec, 4 Lab)
Various construction systems that are used to construct structures on site. Includes all aspects of the construction industry such as basic planning, materials, estimating, building techniques, managing, and the actual construction of building projects.

ADG 363 Agricultural Youth Event Planning & Management: 3 Credits (1 Lec, 2 Lab)
PREREQUISITE: US Core. Practical-based course utilizing leadership skills developed through planning and implementing Montana FFA State Career & Leadership Development Events. It is intended to provide knowledge and practice for students in any major, but particularly those in Agricultural Education
Repeatable up to 6 credits.

ADG 397 Educational Methods in CTE: 1 Credits (1 Lab)
COREQUISITE: EDM 411. Provides additional experience in planning, teaching, and evaluating lessons in agricultural education.

ADG 401 Agricultural Issues and Research: 3 Credits (3 Lec)
PREREQUISITE: Senior standing in ADG. This course will prepare students for future careers by researching agricultural issues and refining professional skills. Current issues in extension, leadership, and communications, as well as social science research methodologies, will serve as course content. Students will conduct and apply techniques, methodologies and procedures that can be used in numerous social science research contexts. In addition, these students will become more familiar with the industry and have a better understanding of current agricultural issues and methods.

ADG 475 Professional Paper: 1-4 Credits (1-4 Other)
A research or professional paper or project dealing with a topic in the field. The topic must have been mutually agreed upon by the student and his or her major advisor and graduate committee. Repeatable up to 4 credits.

ADG 482 Non-Formal Teaching Methods in Agriculture: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: Junior standing. Designed for students in Agricultural Communications, Leadership and Extension and other majors who will be designing, implementing and evaluating learning in non-formal environments and/or other careers. Graduate students may also take this course to aid in developing their teaching skills. The course covers theories, principles and practices associated with effective non-formal teaching and learning for adults and youth. The lab provides hands-on experience in planning, teaching, and evaluating lessons/seminars in the non-formal educational setting.

ADG 485 Laboratory Management and Teaching in CTE: 3 Credits (2 Lec, 1 Lab)
PREREQUISITE: ADG 315 or ADG 333
COREQUISITE: EDM 411. The purpose of this course is to provide students an opportunity to develop the pedagogical knowledge, skills, and attributes required for organizing and delivering laboratory instruction in agricultural systems. An emphasis is placed on planning, implementing, and evaluating effective laboratory management and teaching strategies.
AGED 490R Undergraduate Research: 1-6 Credits (1 Other)
Directed undergraduate research/creative activity which may culminate in a research paper, journal article, or undergraduate thesis. Course will address responsible conduct of research. Repeatable up to 12 credits.

AGED 491 Special Topics: 1-4 Credits (1-4 Lec)
PREREQUISITE: Course prerequisites as determined for each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Repeatable up to 12 credits.

AGED 492 Independent Study: 1-3 Credits (1-3 Other)
PREREQUISITE: Junior standing, consent of instructor and approval of department head. Directed research and study on an individual basis. Repeatable up to 6 credits.

AGED 499 Seminar: 3 Credits (1-3 Lec)
PREREQUISITE: Junior standing and as determined for each offering and consent of instructor. Focuses on planning and implementing agricultural activities for youth. The emphasis is on planning an event, developing awareness and utilization of resources (people and things), developing a log and records regarding the event, and evaluating the effectiveness of an implementation plan and the actual event. Repeatable up to 6 credits.

AGED 498 Internship: 4-8 Credits (4-8 Other)
PREREQUISITE: Junior standing, consent of instructor and approval of department head. An individualized assignment arranged with an agency, business, or other organization to provide guided experience in the field of Agricultural Education. Repeatable up to 12 credits.

AGED 506 Research Method in Agricultural Education: 3 Credits (3 Lec)
PREREQUISITE: Admission to a graduate degree program at MSU. Principles and techniques of research appropriate for planning, conducting and reporting agricultural and extension education research.

AGED 507 Program Planning and Evaluation: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. A study of the literature on specific facets of program planning and evaluation applicable to agricultural and extension education. Application of program planning and evaluation concepts through individual and class projects.

AGED 511 Philosophy of Teaching and Learning in Agricultural Education: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. The purpose of this course is to provide graduate students with a comprehensive understanding of broad-based Agricultural Education through an examination of its formative individuals/events, philosophical premises, and instructional approaches. Specifically, this course will focus on historical development, foundational philosophies, and various learning theories and teaching techniques for formal and non-formal educational settings.

AGED 575 Prof Paper & Project: 1-4 Credits (1 Other)
PREREQUISITE: Graduate Standing. A research or professional paper or project dealing with a topic in the field. The topic must have been mutually agreed upon by the student, the major advisor, and graduate committee. Repeatable up to 6 credits.

AGED 585 Laboratory Management and Teaching in Agricultural Education: 3 Credits (2 Lec, 2 Lab)
PREREQUISITES: TE 207 and either AGED 315 or AGED 333. COREQUISITE: EDU 497, Teaching Methods in Agriculture & Technology Education. The purpose of this course is to develop the pedagogical knowledge, skills, and attributes required for organizing and delivering laboratory instruction in agricultural systems. An emphasis is placed on planning, implementing, and evaluating effective laboratory management and teaching strategies.

AGED 588 Professional Development: 2 Credits (2 Lec)
PREREQUISITE: Graduate Standing. This course may be used only by students who have completed all of their course work (and thesis if on a thesis plan) but who need additional faculty or staff time or help.

AGED 588Z Professional Development: 2 Credits (2 Lec)
Courses offered on a one-time basis to fulfill professional development needs of in service educators. A specific focus is given to each course which is appropriately subtitled.

AGED 589 Graduate Consultation: 3 Credits (3 Other)
PREREQUISITE: Master’s standing and approval of the Dean of Graduate Studies. This course may be used only by students who have completed all of their coursework (and thesis, if on a thesis plan), but who need additional faculty or staff time or help.

AGED 590 Master’s Thesis: 1-10 Credits (1 Other)
PREREQUISITE: Master’s Standing. Department of Agricultural Education. Repeatable up to 10 credits.

AGED 591 Special Topics: 1-4 Credits (1 Other)
PREREQUISITE: Upper division courses and others as determined for each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Repeatable up to 4 credits.

AGED 592 Independent Study: 1-6 Credits (1 Other)
PREREQUISITE: Graduate Standing, consent of instructor, approval of department head and Dean of Graduate Studies. Direct research and study on an individual basis. Repeatable up to 6 credits.

AGED 594 Graduate Seminar: 1 Credits (1 Other)
PREREQUISITE: Graduate standing. Course prerequisites as determined for each offering. This course will focus on the guidelines, procedures, and processes necessary to complete your Master’s degree, either on-campus or online. Topics offered at the graduate level which are not covered in regular courses. Students participate in preparing and present discussion material. Repeatable up to 4 credits.

AGED 598 Internship: 2-12 Credits (2 Other)
PREREQUISITE: Graduate Standing, consent of instructor, approval of department head and Dean of Graduate Studies. An individualized assignment arranged with an agency, business or other organization to provide guided experience in the field. Repeatable up to 12 credits.