AGRICULTURAL OPERATIONS MANAGEMENT

Not all courses are offered every semester. Refer to the schedule of courses for each term’s specific offerings.

More Info (http://registrar.ufl.edu/soc)

Unless otherwise indicated in the course description, all courses at the University of Florida are taught in English, with the exception of specific foreign language courses.

Courses

**AOM 4060 Agri-food Systems Innovation 3 Credits**
Grading Scheme: Letter Grade
Explore the role of innovation in food systems from a reverse chain perspective. Gain knowledge of the food system framework from a multilevel (i.e., individual, organizational, etc.) perspective, identify current, innovative business and technological practices, as well as present and think critically about future trends in food.
Prerequisite: (Any AOM, ABE, or PKG course) or (junior standing or higher).

**AOM 4062 Principles of Food Engineering 4 Credits**
Grading Scheme: Letter Grade
The functional requirements and principles of operation of systems for handling and processing food and agricultural products.
Prerequisite: MAC 1147 and 3 credits of physics.

**AOM 4314C Power and Machinery Management 3 Credits**
Grading Scheme: Letter Grade
Fundamental concepts of electricity, power, instrumentation, computer control operations and selected transducers. Foundation to aid in management of agricultural processing operations.
Prerequisite: junior standing or higher.

**AOM 4444C Electrical Power and Instrumentation for Agricultural Operations Management 3 Credits**
Grading Scheme: Letter Grade
Principles and applications of technologies supporting precision farming and planning for natural resource data management. Global positioning systems (GPS), geographic information systems (GIS), variable rate technologies (VRT), data layering of independent variables, automated guidance, Internet, information access and computer software for management.
Prerequisite: AOM 4314C or (junior standing or higher).

**AOM 4444C Agricultural Risk Management and the Law 3 Credits**
Grading Scheme: Letter Grade
Develops an understanding of the basic concepts of common and statutory law. Identifies and addresses current legal issues of importance at the personal and professional levels. Develops an understanding of risk and the solutions for managing risk and relates the concepts of risk management and law in limiting exposure to legal liability.
Prerequisite: BSC 2010 and PHY 2004 and CHM 2045 or the equivalents.

**AOM 4455 Agricultural Operations and Systems Management 3 Credits**
Grading Scheme: Letter Grade
Principles and applications of technologies supporting precision farming and planning for natural resource data management. Global positioning systems (GPS), geographic information systems (GIS), variable rate technologies (VRT), data layering of independent variables, automated guidance, Internet, information access and computer software for management.
Prerequisite: MAC 1147 and 3 credits of physics.

**AOM 4461 Sustainable Agricultural Systems 3 Credits**
Grading Scheme: Letter Grade
Minimizing energy and costs in agricultural and natural resource systems and industries. Students explore ways to enhance sustainable systems by improving efficiency. Topics include agricultural machinery, pumps, motors, fans, refrigeration, lights and construction methods.
Prerequisite: senior standing and PHY 2004 or the equivalent.

**AOM 4521 Introduction to Biofuels 3 Credits**
Grading Scheme: Letter Grade
An overview of biofuel production related to technologies and feedstocks, economics of producing biofuels and impact on the environment and the local economy. Dealing specifically with liquid and gaseous biofuels and bioenergy produced from renewable resources, it provides a summary of the past, present and future production technologies and applications.
Prerequisite: BSC 2010 and PHY 2004 and CHM 2045 or the equivalents.
AOM 4642 Environmental Systems for Agricultural Structures 3 Credits  
**Grading Scheme:** Letter Grade
Effects of the environment on plant and animal production, processing operations and quality of stored produce. Selection of building materials and sizing of components of environmental systems in agricultural structures to enhance more efficient agricultural production, processing and storage.  
**Prerequisite:** MAC 1147 and 3 credits of physics.

AOM 4643 Environmental Hydrology: Principles and Issues 3 Credits  
**Grading Scheme:** Letter Grade
This is a basic course in environmental hydrology intended for agricultural and natural resource managers. The first half of the course covers scientific principles of the hydrologic cycle while the second half investigates case studies of current water quality and water management issues.

AOM 4900 Supervised Extension Experience in Agricultural Operations Management 0-3 Credits  
**Grading Scheme:** S/U
Firsthand, authentic extension experiences in agricultural operations management under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation.  
(S-U)

AOM 4905 Special Problems in Agricultural Operations Management 1-4 Credits  
**Grading Scheme:** Letter Grade
Selected problems or projects in the student's major field of mechanized study.  
**Prerequisite:** permission of department chair or advisor.

AOM 4911 Supervised Research in Agricultural Education and Communication 0-3 Credits  
**Grading Scheme:** S/U
Firsthand, authentic research in Agricultural Education and Communication under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application.  
(S-U)

AOM 4915 Honors Thesis Research in Agricultural Operations Management 0-3 Credits  
**Grading Scheme:** S/U
Independent research in agricultural operations management leading to an honors thesis. Student will be mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application.  
(S-U)  
**Prerequisite:** junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file.

AOM 4932 Special Topics in Agricultural Operations Management 1-4 Credits  
**Grading Scheme:** Letter Grade
Variable topics provide content for the study of mechanized agriculture topics not offered in other courses.  
**Prerequisite:** instructor permission.

AOM 4933 Professional Practices in Agricultural Operations Management 1 Credit  
**Grading Scheme:** Letter Grade
Professionalism and interfacing of technical skills. Topics include ethics, continuing education, placement skills and professional development in agricultural operations management.  
**Prerequisite:** junior standing in agricultural operations management.