AGRONOMY (AGRO)

AGRO 110   Introduction to Plant Science   3 Hours
Principles of plant growth and development are applied to agriculture.
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

AGRO 111   Plant Science Laboratory   1 Hour
A laboratory course correlated with AGRO 110. Laboratories coincide with lecture topics. Lab is strongly encouraged for students in the plant sciences.
Corequisite(s): AGRO 110
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; spring 2024

AGRO 310   Pest Management   3 Hours
Identification and management of insects, diseases and weeds of major importance in agronomic crops, turfgrasses and landscape plantings.
Prerequisite(s): AGRO 110 and CHEM 105
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

AGRO 320   Crop Physiology   3 Hours
Effects of various physiological and environmental factors on crop production are discussed.
Prerequisite(s): AGRO 110 and BIOL 120 and (CHEM 105 or CHEM 120)
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024

AGRO 350   Soils   3 Hours
A basic study of soil properties and processes emphasizing soil management and its application to agriculture.
Prerequisite(s): (CHEM 105 and CHEM 106) or (CHEM 120 and CHEM 121)
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

AGRO 351   Soils Laboratory   1 Hour
A laboratory course correlated with AGRO 350. Laboratory exercises and experiences to supplement lecture topics.
Prerequisite(s): AGRO 350 (may be taken concurrently)
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; spring 2024; fall 2024

AGRO 352   Soil Fertility and Fertilizers   3 Hours
Soil reactions of elements essential for plant growth and development, sources and manufacture of fertilizer materials, use of fertilizers and lime, use of sound management practices are stressed.
Prerequisite(s): AGRO 350 and AGRO 110
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AGRO 409   Weed Science   2 Hours
Identification of prominent weed species; relationship of weeds to crop production problems; control measures, both physical and chemical, are presented.
Prerequisite(s): (CHEM 107 or CHM 107C) and (AGRO 320 and AGRO 350)
Corequisite(s): AGRO 410
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AGRO 410   Weed Science Laboratory   1 Hour
A laboratory course correlated with AGRO 409.
Corequisite(s): AGRO 409
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AGRO 418   Plant Pathology   3 Hours
Introduction to common plant pathogens and diseases of agronomically important field and forage crops, turf, vegetables, and ornamentals; Topics include control measures, newly discovered diseases, and plant-pathogen interactions. Note: Permission of instructor may be required.
Prerequisite(s): AGRO 110 and BIOL 120 and AGRO 350
Recent Term(s) Offered: None

AGRO 420   Forage Crop Management   3 Hours
Familiarizes students with grass and legume forage crops. Crops will be considered from the standpoint of pasture, hay, and silage crops, along with discussions of forage physiology and nutrient cycling.
Prerequisite(s): AGRO 110 and AGRO 350 and BIOL 120
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

AGRO 421   Forage Crops Laboratory   1 Hour
A laboratory course correlated with AGRO 420.
Corequisite(s): AGRO 420
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

AGRO 422   Field Crops   3 Hours
Distribution, improvement, morphology, culture, harvesting and utilization of field crops are presented.
Prerequisite(s): AGRO 320 and AGRO 350
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AGRO 452   Soil Microbiology   3 Hours
Soil microbial populations and systems and their influence on plant nutrition, soil organic matter, its decomposition and other soil microbial biochemical processes are presented.
Prerequisite(s): AGRO 350
Recent Term(s) Offered: spring 2023

AGRO 454   Soil Management and Conservation   3 Hours
Economic utilization of land for agricultural, recreation and public purposes based on location and capability characteristics; interpretation and application of soil survey information for best interests in crop production, conservation, public and industrial use; practice in designing land use maps are stressed.
Prerequisite(s): AGRO 350
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

AGRO 457   Soil Formation, Classification and Mapping   2 Hours
Soil origin; classification schemes; profile description, mapping and interpretation of soil survey information emphasizing Kentucky soils, are discussed. Note: Permission of instructor may be required.
Prerequisite(s): AGRO 350
Corequisite(s): AGRO 458
Recent Term(s) Offered: fall 2023

AGRO 458   Soil Formation, Classification and Mapping Laboratory   1 Hour
A laboratory course correlated with AGRO 457.
Corequisite(s): AGRO 457
Recent Term(s) Offered: fall 2023

AGRO 459   Techniques in Physical Soil Description   3 Hours
Field descriptions of soils in the southeastern U.S. based upon observations of several local soil series and their relationship to the online web soil survey. Training is provided for students seeking governmental positions in the soil science discipline. Off campus travel to field sites and a soil judging contest in the southeast region.
Prerequisite(s): AGRO 350
Restriction(s): Enrollment is limited to students in Agricultural Technology Mgt (205) , Agriculture (508) or Agriculture (605)
Recent Term(s) Offered: fall 2022; fall 2024

AGRO 475   Selected Topics in Agriculture   1-3 Hours (repeatable max of 12 hrs)
Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content. Note: Consent of instructor required.
Recent Term(s) Offered: spring 2022; spring 2023