# **AGRONOMY (AGRO)**

#### AGRO 110. Soil Science. (3 Credits)

This course covers the fundamentals of soil science, origin, nature and formation of soils, physical and chemical properties and soil management practices. This course has an additional laboratory fee. 3 credits (2 lecture hours, 2 laboratory hours), fall and spring semester This course satisfies the Liberal Arts and Sciences requirement and the SUNY General Education Requirement for Natural Science.

#### AGRO 115. Principles of Compost Mgmt. (3 Credits)

In this course students will learn the science behind compost production. They will implement the food waste compost program on campus from source material collection through final product production. New ideas of organic source material will be tested to continually improve and expand upon the composting program. This course will be conducted in a seminar style with associated lab. 3 credits (2 seminar hours, 2 laboratory hours), fall and spring semester

### AGRO 210. Field Crops. (3 Credits)

Production of field crops, their importance, adaptation, varieties and cultural practices are covered in this course. Prerequisite: AGRO 110 or permission of instructor 3 credits (2 lecture hours, 2 laboratory hours), spring semester

### AGRO 215. Soil Fertility & Fertilizers. (3 Credits)

Principles involved in supplying essential elements for growing plants. Soil and tissue analysis, nutrient deficiency symptoms. Factors in manufacture, applications and economics of fertilizers, amendments and organic materials. Prerequisite: AGRO 110 3 credits (2 lecture hours, 2 laboratory hours), spring semester This course satisfies the Liberal Arts and Sciences requirement and the SUNY General Education Requirement for Natural Science.

# AGRO 305. Adv Soil & Water Conservation. (3 Credits)

Principles of soil and water conservation will be covered in this course, building on the foundation provided in soil science. Focus will be on practical applications through land use, runoff and erosion control, and soil and water management. Emphasis will also be placed on assessing the impact of conservation practices on the environment including pollution remediation strategies. Two common computer models used in the field will be taught, introducing students to the tools professionals use to manage the complex, multifaceted problems related to soil and water conservation. Prerequisite: AGRO 110 3 credits (2 lecture hours, 2 lab hours)

## AGRO 310. Pasture Mgt and Forages Prod. (3 Credits)

Fundamentals of pasture management and forages production for maximum yield, quality, and longevity. Prerequisite: AGRO 110 or ENSC 101 3 credits (2 lecture hours, 2 laboratory hours), fall semester

# AGRO 320. Urban Agriculture and Food Production. (3 Credits)

As the global population grows, and land resources become scarce, it will be necessary to efficiently and effectively use all available space for food production. This course will cover urban food production from the small scale community gardens to the large scale intensive farms and much in between including animal agriculture in urban settings. We will investigate food deserts and what is being done in urban settings to address this resource concern. Field trips to urban farms in the CNY region will be used to complement coursework. Prerequisite: Junior standing (60 credits completed) in ABT School majors or permission by instructor. 3 credits (3 lecture hours)