

## **Agronomy Concentration in the Plant Sciences Major**

The **agronomy concentration** in the Plant Sciences Major is designed to provide students with training in crop production and soil management. It places more emphasis on applied agronomy than do concentrations in crop science or soil science. In addition to the college requirements, a student with a concentration in agronomy is expected to complete the following courses:

**(A) At least 12 credits** of applied crop science selected from the following courses, or the equivalent:

- Field Crop Systems (CSS 211 or CSS 405)
- Forage Crops (CSS 312)
- Weed Biology and Management (CSS 315)
- Seed Science and Technology (CSS/HORT 317)
- Tropical Cropping Systems: Biodiversity, Social, and Environmental Impacts (CSS 414 or IARD 414)
- Golf and Sports Turfgrass Management (HORT 330)
- Principles of Plant Propagation (HORT 400)
- Principles of Vegetable Production (HORT 450)

**(B) At least 12 credits** of soil science selected from the following courses, or the equivalent:

- Soil Science (CSS 260)
- Soil Morphology (CSS 362)
- Soil Genesis, Classification, and Survey (CSS 363)
- Environmental Chemistry: Soil, Air, and Water (CSS 365)
- Nutrient Management in Agroecosystems (CSS 372)
- Soil and Water Management (CSS 421)
- Soil Ecology (CSS 466)

**(C) At least 6 credits** of plant protection selected from the following courses, or the equivalent:

- Insect Biology (ENTOM 212)
- Insect Pest Management for Practitioners (ENTOM 241)
- Integrated Pest Management (CSS/ENTOM 444)
- Biology and Management of Plant Diseases (PL PA 301)

**(D) At least 5 credits** of plant physiology selected from the following courses, or the equivalent:

Plant Function and Growth (BIOPL 242 and 244)

Plant Physiology (BIOPL 342 and 344)

**(E) At least 5 credits** of biology selected from the following courses, or the equivalent:

Plants, Genes, and Global Food Production (PL BR 201)

Ecology and the Environment (BIOEE 261)

Introductory Botany (BIOPL 241)

Taxonomy of Cultivated Plants (BIOPL 243) or Taxonomy of Vascular Plants (BIOPL 248)

Genetics (BIOGD 281)

General Microbiology (BIOMI 290-291)

**(F) At least 10 credits** of chemistry and biochemistry.

Additional courses beyond those listed above will be selected by the student in consultation with the academic advisor. (**Certification as an Agronomist** [<https://www.agronomy.org/certification/>] requires in addition 3 credits in computing, 3 credits of mathematics, 3 credits of physics, geology, or climatology, 3 credits of statistics, 6 credits of economics or agricultural economics, 3 credits of speech, and 3 credits of technical writing).