

PLANT & SOIL SYSTEMS

SUSTAINABLE PRODUCTION SYSTEMS

This concentration is a blend of applied agronomy and horticulture, with less emphasis on science and more on production and economics. Study ways to improve crops and discover new plants breeds, and learn the latest approaches to the cultivation, marketing, and processing of agronomic crops, ornamental plants, fruits, and vegetables. Students in this major receive a broad education that prepares them for a variety of career paths.

Career Possibilities: agricultural sales and consulting, crop scientist, farm manager, horticulturist, landscape manager, soil scientist, nursery manager, agronomist, public health, and graduate or professional school.

SEMESTER 1

CRITICAL: ENGL 1001, MATH 1021.

ENGL 1001 English Composition (3)
BIOL 1001 General Biology (3) or
BIOL 1201 Biology for Science Majors I (3)
MATH 1021 College Algebra (3)
CHEM 1001 Chemical Fundamentals (3) or
CHEM 1201 General Chemistry I (3)
General Education course - Arts (3)
General Education course - Social Sciences (3)

Total Semester Hours: 18

SEMESTER 3

CRITICAL: AGRO 1001.

AGRO 1001 Plants and People (3)
AGEC 2003 Introduction to Agricultural Economics (3) or
ECON 2030 Economic Principles (3)
AGRO 2051 Soil Science (4)
General Education course - Humanities (3)

Total Semester Hours: 13

SEMESTER 5

CRITICAL: HORT 2050.

PLHL 4000 General Plant Pathology (4)
AGEC Course (3) ¹
BIOL 3060 Introductory Plant Physiology (4) or
PLHL 3060 Introductory Plant Physiology (4) or
HORT 2860 Growth and Development of Agricultural Crops (3)
Approved Elective (2-1) ²

Total Semester Hours: 12

SEMESTER 7

AGRO 4052 Soil Fertility and Soil Management (4)
PLHL 4001 Plant Disease Management and Control (3)
Approved Electives (8-7) ²

Total Semester Hours: 15-14

SEMESTER 2

CRITICAL: BIOL 1001/BIOL 1201; MATH 1022 or EXST 2201.

BIOL 1002 General Biology (3) or
BIOL 1202 Biology for Science Majors II (3)
BIOL 1005 Introductory Biology Laboratory (2) ³
CHEM 1002 Chemistry of Life and the Environment (3) or
CHEM 1202 General Chemistry (3)
MATH 1022 Plane Trigonometry (3) or
EXST 2201 Introduction to Statistical Analysis (4)
General Education course - Humanities (3)

Total Semester Hours: 14-15

SEMESTER 4

CRITICAL: AGRO 2051; BIOL 1002/BIOL 1202

CMST 2060 Public Speaking (3)
AGRO 3040 Soil Conservation (2)
ENGL 2000 English Composition (3)
ENTM 2001 Insects in the Environment (3)
HORT 2050 General Horticulture (3)
HORT 2061 Plant Propagation (3)
HORT 2070 Horticulture Lab (1)

Total Semester Hours: 18

SEMESTER 6

ENTM 4006 Fundamentals of Applied Entomology (3) or
ENTM 4012 Fundamentals of Horticultural Entomology (3)
HORT 3503 Sustainable Horticulture (3)
HORT 3000 Horticultural Internship (3) or
HORT 3010 Research Problems (3) or
AGRO 3010 Research Problems (3) or
AGRO 3090 Agronomic Internship (3) or
PLHL 3000 Pest Management Internship (3) or
ENTM 3000 Pest Management Internship (3)
Approved Electives (6) ²

Total Semester Hours: 15

SEMESTER 8

AGRO 4070 Weed Science and the Environment (3)
AGRO 4078 Land Use Planning and Land Management (3)
Approved Electives (9) ²

Total Semester Hours: 15

120 TOTAL SEMESTER HOURS

¹ - AGECE COURSE: Select one from: AGECE 3303, AGECE 3413, AGECE 4443.

² - A list of approved electives is available in the School of Plant, Environmental & Soil Sciences.

³ - Students may elect to take BIOL 1208 and BIOL 1209 in place of BIOL 1005.