

August 31, 2012

**SOIL, ENVIRONMENTAL AND ATMOSPHERIC SCIENCES WITH EMPHASIS IN SOIL
RESOURCE MANAGEMENT/GEOLOGICAL SCIENCES DUAL B.S. DEGREE
(132 credit hours)**

Description

The Department of Soil, Environmental and Atmospheric Sciences and the Department of Geological Sciences offer a dual BS degree in Soil, Environmental and Atmospheric Sciences with a Soil Resource Management emphasis, and in Geological Sciences. For more information, contact an adviser in the Department of Soil, Environmental and Atmospheric Sciences or the Department of Geological Sciences.

University Requirements (35 credits)

ENGLISH 1000 - Exposition and Argumentation (3 credits) FSpS
Course to fulfill State Law Requirement (3 credits)
(History 1100, 1200, or 1400 or Political Science 1100 or 1700)
Social and Behavioral Sciences (9 credits)
Humanistic Studies and Fine Arts electives (9 credits)
MATH 1100 - College Algebra for Calculus Bound Students (3 credits) FSpS
STAT 2530 - Statistical Methods in Natural Resources (3 credits) Sp
CHEM 1310 - General Chemistry I (2 credits) FSpS
CHEM 1320 - General Chemistry II w/Lab (3 credits) FSpS

Departmental Quantitative Skills (10 credits)

MATH 1500 – Analytical Geometry and Calculus I (5 credits) FSpS
MATH 1700 – Calculus II (5 credits) FSp

Departmental Sciences (18 credits)

Biological Science (5 credits)
BIO SC 1200 - General Botany w/Lab (5 credits) F
Chemistry (3 credits)
CHEM 1330 - General Chemistry III w/Lab (3 credits) FSpS
Physics (10 credits)
PHYSCS 2750 - University Physics I (5 credits) FSpS
PHYSCS 2760 - University Physics II (5 credits) FSp

Departmental Requirements (69 credits)

Atmospheric Science/Soil Science (8 credits)
ATM SC 1050 - Introduction to Meteorology (3 credits) FSp
SOIL 2100 - Introduction to Soils (3 credits) FSp
SOIL 2106 - Soil Science Laboratory (2 credits) FSp
Computer Science (3 Credits)
AGRIC 1111 – Computing & Information Systems I (3 credits) FSp **or**
NAT R 4325 – Introduction to GIS (3 credits) Sp
Geological Sciences (33 credits)

GEOL 1100 – Principles of Geology with Laboratory (4 credits) **or**
GEOL 1150 – Physical Geology for Scientists and Engineers (4 credits) **or**
GEOL 1200 – Environmental Geology with Laboratory (4 credits)
GEOL 2350 – Historical Geology (3 credits)
GEOL 2400 – Surficial Earth Processes and Products with Laboratory (4 credits)
GEOL 3250 – Mineralogy (5 credits)
GEOL 3300 – Introduction to Geochemistry (3 credits)
GEOL 3800 – Sedimentology with Laboratory (4 credits)
GEOL 4100 – Groundwater Hydrology (3 credits)
GEOL 4150 – Structural Geology (4 credits)
GEOL 4650 – Plate Tectonics (3 credits) **or**
GEOL 4800 – Introduction to Geophysics (3 credits)

Soil Science Writing Intensive Requirement (3 credits)

SOIL 3290 - Soils and the Environment (WI) (3 credits) F

Soil Science Courses (9 credits), choose from the following courses:

SOIL 4305 – Environmental Soil Physics (3 credits) F

SOIL 4306 – Environmental Soil Physics Laboratory (2 credits) F

SOIL 4308 – Soil Conservation (3 credits) Sp

SOIL 4312 – Environmental Soil Microbiology (3 credits) Sp

SOIL 4313 – Soil Fertility & Plant Nutrition (3 credits) Sp

SOIL 4314 – Soil Fertility & Plant Nutrition Laboratory (2 credits) Sp

SOIL 4318 – Environmental Soil Chemistry (3 credits) Sp

SOIL 4360 – Precision Agriculture Science & Technology (3 credits) Sp

Elective courses (3 credits)

An additional course at the 4000 level or higher in either Soil Science or Geological Sciences

Capstone Experience (10 credits)

GEOL 4992 – Field Course (6 credits)

SOIL 4320 – Genesis of Soil Landscapes (4 credits) F