

MASTER'S DEGREE IN ENVIRONMENTAL SCIENCE

Area of Concentration In:

RESOURCE ANALYSIS

The efficient use of natural resources requires the ability to understand the resources in question. Such an understanding is best achieved through comprehensive resource analysis. This should involve both basic techniques of resource characterization as undertaken, for example, in biological, geomorphological, pedological, and hydrological investigations and the application of research tools such as aerial photography. This Area of Concentration requires exposure to resource analysis from both biological and physical sciences perspectives, yet it permits specialization in one of these two perspectives.

Methods Courses

8-11

Regional Land Use Capability Analysis (GEO 537; Summer III) 3

One of the following:

Plant Ecology Methods - Community Analysis (BOT 534; Spring) 2

Limnology (ZOO 563; Fall) 4

One of the following:

Introduction to GIS (GEO 614; Fall & Spring) 4

Aerial Photo Interpretation (GEO 547; Fall & Summer III) 4

Techniques and Applications of Remote Sensing (GEO 548; Spring) 3

Content Courses

12

12 credits, with at least 3 from A and 3 from B (note: students may petition to count a field-oriented workshop course for up 2 of the remaining 6 credits)

A. Biological Sciences

Plant Geography (BOT/GEO 531; Spring) 3

Ecological Foundations of Vegetation - North America
(BOT/GEO 532; Fall & Summer II) 3

Field Methods in Plant Population Ecology (BOT 536; infrequent) 1

Field Methods in Population Ecology (BOT/ZOO 537; Fall) 1

Advanced Plant Taxonomy (BOT 621; alternate Springs) 3

Population and Community Ecology (BOT/MBI/ZOO 671; Fall) 4

Ecosystem and Global Ecology (BOT/MBI/ZOO 672; Spring) 4

Ichthyology (ZOO 507; Spring) 4

Ornithology (ZOO 508; Spring) 4

Herpetology (ZOO 509; alternate Springs) 4

Mammalogy (ZOO 510; infrequent) 4
other Botany or Zoology course listed under Methods Courses above 2/4

B. Physical Sciences

Climatology (GEO 521; Spring) 3
Hydrogeography (GEO 525; infrequent) 3
Soil Geography (GEO 528; infrequent) 4

Introduction to Hydrogeology (GLG 508; infrequent) 4
Geomorphology (GLG 554; infrequent) 4
other Geography courses listed under Methods Courses above 3-7

Total Hours

20-23

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