Course Number ENS-204-01 Course Description

An introduction to Geographic Information Systems (GIS) technology and its practical uses. Topics include history of GIS, geographic data types, primary data structures, system design, map coordinate systems, data sources, metadata, census data, geographic coding and address matching, digitizing, remote sensing imagery, measures of data quality, and needs assessment. An emphasis will be on hands-on instruction using GIS software (ArcView). Students will work with ArcView throughout the term to complete assignments and a class project. Focus areas include archeology, electric and gas utilities, surveying, health and human services, insurance, law enforcement and criminal justice, media and telecommunications, transportation, water and wastewater, and natural resources. The ultimate goal is to use the spatial component of data in conducting analysis and making decisions.

Academic Term

20/WI

Instructor

Ghaly, Ashraf

Location & Meeting Time

Wold Center-028+ T/TH 09:00AM-10:45AM LEC

Petition

N

Credits

1.00

Capacity

20

**Total Students** 

19

**Additional Information** 

http://www.union.edu/EnvironmentalStudies

Common Curriculum

SET Science, Engineering Tech

**Interdisciplinary Programs** 

Environmental Science & Policy

Science, Medicine & Tech in Cu

Academic Department

Environmental Science & Policy

Field Of Study

Env Science, Policy & Engrng (ENS)