NATR 213
Basics of Geospatial Technology
Spring 2019

Final Examination Study Guide

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- Know how to define GIS and what can it do.
- Understand the primary benefits of GIS.
- Know the related fields of GIS.
- Understand the primary advantages, capabilities, current uses, and the potential sources of data for GIS.
- Know the primary differences between vector and raster data.
- Understand the differences among the three types of vector data used in GIS.
- Know how to work with vector data in ArcGIS, including standard GIS data formats used for storing feature and attribute data, attribute table format, joining and relating databases, spatial joins, and creating vector data using digitizing.
- Know how to work with map scale.
- Know the difference between feature and choropleth maps.
- Understand the basic graphic design principles in GIS including color, contrast, symbolizing features, and classification of features based on attribute(s).
- Understand how to work with GIS queries.
- Understand the basic concepts of GIS output, including categories of map audience, and acceptable map output.
- Know the basic “tools” and buttons covered in ArcGIS Basic (you need to review the questions posed on the laboratory exercises and be familiar with the answers).
- Know the types of orthoimages available from the NYS GIS Clearinghouse.
- Understand the naming system for digital orthoimagery available from the NYS GIS Clearinghouse (both the 1994-1999 and high resolution editions).
- Understand the fundamentals of GPS.
- Know the three components of GPS.
- Understand the concept of satellite ranging.
- Understand how a position can be determined using a GPS unit.
- Name the factors that affect GPS accuracy.
- Understand the basic principles of DGPS and why it is used.

Note: The final exam for NATR 213 is scheduled for 8:00 a.m. on Tuesday - 03/13/2018 in 101 Marshall Hall.