Introduction to GIS

Instructor: Dr. Yuming Wen
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Time: 8:00 am - 5:00 pm, Three Days, Spring 2010
Place: University of Guam - PIP Computer Lab

Description: This introductory Geographical Information Systems (GIS) training course focuses on concepts of GIS, and how to use ArcGIS software to deal with geospatial information. Related geospatial technologies such as remote sensing and global positioning system (GPS) are also discussed. The training is composed of lectures, software demonstrations, and lab exercises using ESRI ArcEditor. Upon completion of the training, students may be able to be knowledgeable in GIS, and know how to use ArcCatalog and ArcMap for data input, data processing, mapping, outputs, and basic analysis.

Course Schedule

DAY 1

8:00 am – 8:30 am   Training structure and schedule, introduction

8:30 am – 10: 00 am Topic 1: Geospatial Technologies – Concepts & Applications

10:00 am – 10:10 am Break

10:10 am – 12:00 am Topic 2: Introduction to ArcGIS (Software demo)

Lunch 12:00 pm – 1:00 pm

1:00 pm – 2:00 pm Topic 3: Applications of GIS in Emergency Response

2:00 pm – 2:50 pm Topic 4: Types of Maps and Map Media

2:50 pm – 3:00 pm Break

3:00 pm – 4:00 pm Topic 5: Adding Information To Maps (Software demo)

4:00 pm – 5:00 pm Topic 6: Linking Coordinates to Photos & Videos

DAY 2

8:00 am – 9:50 am Topic 7: Geodesy, Coordinate Systems & Projections

9:50 am – 10:00 am Break

10:00 am – 12:00 pm Topic 8: Aerial & Satellite Images

Lunch 12:00 pm – 1:00 pm

1:00 pm – 2:50pm Topic 9: Digitizing & Scanning of Geospatial Data

2:50 pm – 3:00 pm Break

3:00 pm – 5:00 pm Topic 10: Data Standards & Quality

DAY 3

8:00 am – 9:50 am Topic 11: Data Formats and Conversions (Software Demo)

9:50 am – 10:00 am Break

10:00 am – 12:00 pm Topic 12: Attribute Data

Lunch 12:00 pm – 1:00 pm

1:00 pm – 3:20 pm Topic 13: Introduction to Spatial Analysis

3:20 pm – 3:30 pm Break

3:30 pm – 5:00 pm Topic 14: Spatial Interpolations