

## **Geos 378 – Introduction to Geoinformatics**

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Course offering - Every Spring

### **Educational aim of the course:**

The aim of this course is to develop students' understanding, approach and technical skills in geospatial data acquisition, processing, analysis, management and visualization.

### **Educational objectives of the course:**

By the end of the course, students should be able to

1. *Know* where to look for and find data, how to download it, and bring it to a useful format for their research or application.
2. *Use* the basic functionalities of an Excel spreadsheet
3. *Acquire* GPS measurements using portable hand held GPS devices
4. *Integrate* GPS data with other GIS data
5. *Sync* data from mobile GIS units to their desktop environment
6. *Plan* a GIS project
7. *Build* a GIS geodatabase for an application of their interest
8. *Analyze* the GIS digital data using available software packages (such as ArcGIS)
9. *Make* a good map using principles of cartography
10. *Appreciate* the role and potential of geoinformatics in research and industry
11. *Discuss* the advantages and limitation of the technology
12. *Demonstrate* his/her understanding of the subject by completing a small independent project.

### **Course web site:**

<http://www.gi.alaska.edu/~prakash/teaching/geos378/index.html>