

NRM338 Introduction To Geographic Information Systems

FALL 1999

Instructors:

Dave Verbyla, Associate Professor

Office Hours: Anytime I am in my office or by email appointment.

[My Schedule](#)

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Lectures: Tuesday/Thursday, Elvey Auditorium, Geophysical Institute

Lab: Tuesday 2-5PM or Tuesday 6-9PM or Wednesday 2-5PM or Wednesday 6-9PM

Grading:

Based on total points from the following:

Four Homeworks Assignments: 80 points

Two On-line Exams: 200 points

Five Reading Assignments: 120 points

Thirteen Lab Assignments: 260 points

Total possible points sum to 660 points. Final grades will be curved based on total points earned in the course.

Course Objectives:

1) To learn how technologies such as Global Positioning Systems (GPS), Geographic Information Systems (GIS), and satellite imagery can be used in natural resources management.

2) To understand basic concepts independent of any particular software. All exams are open-book because *memorization is not important*. Memorization is short-term learning. We emphasize long-term *understanding*.

3) To learn basic GIS tools in ARC/INFO and ArcView. These are the most popular GISs used by natural resource management agencies such as the Alaska Department of Natural Resources, USDA Forest Services, U. S. Bureau of Land Management, U. S. Park Service, U. S. Fish and Wildlife Service, Alaska Fish and Game, Ducks Unlimited, Tanana Chiefs, Sea Alaska, North Slope Borough, Fairbanks North Star Borough, etc.

Reading Assignments

On reserve at the Rasmuson and Bioscience libraries:

[Introduction to Global Positioning Systems \(GPS\)](#)

[GPS Differential Corrections](#)

[GPS Applications](#)

[Arc Model](#)

[Map Projections](#)

Homework Assignments

[Web Browsing Assignment](#)

[Map Coordinates](#)

[Affine Transformation Models](#)

[Practice Exam Questions](#)

Download Data For ArcView Labs

Fall 1998 Schedule

Date	Lectures	Lab
Sept. 2	Introduction	
Sept. 7-9	GPS/GIS	Lab1: Windows/Help
Sept. 14-16	Coordinate Systems	Lab2: Field GPS
Sept. 21-23	Vector GIS Model	Lab 3: Documentation/GPS to GIS
Sept. 28-Sept 30	Images	Lab 4: Image Rectification
Oct. 5-7	Tile Systems	Lab 5: Arcedit Digitizing
Oct. 12-14	Rubbersheeting	Lab 6: Edgematching Stream Coverages
Oct. 19-21	Scanning	Lab 7: Edgematching Scanned Maps
Oct. 26-28	Attribute Data	Lab 8: Heads-Up Digitizing/Adding Attributes
Nov. 2-4	GridEdit Tools	Lab 9: Autotracing Scans
Nov. 9-11	Image Classification	Lab 10: Image Classification
Nov. 16-18	ArcView Views, Themes, Legends	Lab 11: ArcView:Error Checking
Nov. 23	ArcView Tables	Lab 12: ArcView:Tabular Analysis
Nov. 30-Dec. 2	Layout and Charts	Lab 13: ArcView: Map Production
Dec. 7-9	Review	On-Line Exam

[Solution to 1997 On-Line Final](#)
[Mid-Semester Exam 1996](#)
[Last Year's On-Line Final](#)

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