Fall 2003

NRM338 Introduction To Geographic Information Systems

http://nrm.salrm.uaf.edu/~dverbyla/nrm338/

Lectures: Tuesday/Thursday, 11:30- 1PM Natural Sciences Room 202

Lab: Tuesday 2-5PM or Tuesday 6-9PM ONeill 330 or

Wednesday 2-5PM or Thursday ONeill 359

Instructor: Dave Verbyla, Professor, ONeill Building, Room 366

Phone: 474-5553 (but Email is much preferred instead of telephone tag!)

Email: **D.Verbyla@uaf.edu**.

Dave's Office Hours: ONeill 366 Thursdays 1-3:30 PM or by email appointment..

Email: **D.Verbyla@uaf.edu**.

Teaching Assistant: Doug Smart Email: **ftdds@uaf.edu**

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 resoures 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 using ArcView.

Grading: Late assignments will not be accepted!

Based on total points from the following:

- **Homework Assignments: 20 points each**
- **Weekly Quizzes: 20 points each**
- **On-line Final Exam: 100 points**

Final grades will be curved based on total points earned in the course.

Textbook: Getting to Know Arcview GIS (ESRI Press), and web site readings

(Available from amazon.com, esri.com for $35)

Reading Assignments (for weekly quiz)

Map Projections: Read by Tues Sept 9	GPS: Read by Thurs Sept 11
GeoExplorer3: Read by Tues Sept 16	Arcview Book Chapters 1-3: Read by Thurs Sept 18
Arcview Book Chapters 4-6:Read by Tues Sept 23	Arcview Book Chapters 7-9: Read by Thurs Sept 25
DRGs: Read by Tues Oct 7	Remote Sensing: Read by Thurs Oct 9
DEMs:Read by Tues Oct 16	Arcview Book Chapters 10-12:Read by Thurs Oct 16
Arcview Book Chapters 13-14:Read by Tues Oct 21	
Arcview Book Chapters15-16:Read by Tues Oct 28	
Arcview Book Chapters 17-20:Read by Tues Nov 5	
Arcview Book Chapters 21-22:Read by Tues Nov 12	
Arcview Book Chapters 23-25:Read by Tues Nov 19	

Fall 2002 Schedule

Date	Lectures	Lab
Sept. 4	Introduction Map Projection Thurs Lecture	
Sept. 9-11	Tues Lecture Thurs Lecture/Quiz: Map Systems assignment	Lab1: Generating Tile Polygons
Sept. 16-18	Tuesday Lecture Thurs. Lecture	Lab2: GPS
Sept. 23-25	Tuesday Lecture: Affine Transformation Assignment Thursday Lecture: Landsat TM/ETM+ Order Assignment	Lab 3: GPS to GIS
Sept. 31-2	Tuesday Lecture Thursday Lecture	Lab 4: Image Rectification
Oct.7-9	Tuesday Lecture Thursday Lecture	Lab 5: Image Classification
Oct. 14-16	Tuesday Lecture: DRGs, go over Lab6 Thursday Lecture	Lab 6: Scanned Maps
Oct. 21-23	Tuesday Lecture: Digital Elevation Models Thursday Lecture: Grid Operations Assignment	Lab 7: Elevation Data
Oct. 29-31	Tuesday Lecture: Grid OperationsII Assignment Thursday Lecture: DEM datums, Creating Major Contours	Lab 8: Grid Analysis
Nov. 4-6	Tuesday Lecture: Websites & GIS data Thursday Lecture: Finding adjacent polygons	Lab 9: DLGs, Building and Selecting Polygons
Nov. 11-13	Tuesday Lecture: Vector Analysis Operations Exercise Thursday Lecture: Announcements/Quiz	Lab 10: Heads-Up Digitizing Raster to Vector Conversion
Nov. 18-20	Tuesday:Go over lab11(preview) Thursday: Go over Quiz10, Take Quiz11	Lab 11: ArcView:Error Checking, Vector Analysis
Nov. 25	ArcView Tables: Go over lab12 No class Thursday	Lab 12: ArcView:Tabular Analysis
Dec. 2-4	Go over lab13 Practice Final Exams	Lab 13: ArcView: Map Production
Dec. 9-11	No lectures:Study and take exam	On-Line Exam By Dec. 12, 2002

Email: Dave Verbyla (D.Verbyla@uaf.edu).