Introduction to Geoinformatics: Department of Geology and Geophysics, University of Alaska Fairbanks

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Class Schedule : GEOS 378 : Spring 2005 (Lecs: M/F 9.15 - 10.15 am at NSF-233; Labs: W 2.15 - 5.15 pm at NSF 316)

Date	Day	Lecture/Lab No.	Topic	Comments
Jan-21-05	Friday	Lecture 1	Introduction to Geoinformatics	general intro to course and to geoinformatics
Jan-23-05	Monday	Lecture 2	Earth system science and Geoinformatics	what geospatial data is used for
Jan-26-05	Wednesday	Lab 1	Geospatial resources on the web	Communicate your project ideas (general)
Jan-28-05	Friday	Lecture 3	Data Types	Start thinking about a project
Jan-30-05	Monday	Lecture 4	Spreadsheets	Guest lecturer, Jeremy Nicoll ASF
Feb-02-05	Wednesday	Lab 2	Spreadsheets	Spreadsheets for geospatial data
Feb-04-05	Friday	Lecture 5	Data Formats	compressed, text, vector, raster data formats
Feb-06-05	Monday	Lecture 6	Introduction to projects + aerial photos	
Feb-09-05	Wednesday	Lab 3	Download/read different format data	If possible, define your data needs
Feb-11-05	Friday	Lecture 7	Aerial photography	
Feb-13-05	Monday	Lecture 8	Satellite remote sensing	
Feb-16-05	Wednesday	Lab 4	Raster data: Introduction	Erdas + Erdas/Arc GIS interface
Feb-18-05	Friday	Lecture 9	Manipulating digital data	
Feb-20-05	Monday	Lecture 10	GIS project: examples + DEMs + recap	
Feb-23-05	Wednesday	Lab 5	Introduction to projects + focus group	Decide on a project (self / suggested)
Feb-25-05	Friday	First Test		up to lecture 9 and lab 5 (Quiz - 15% total)
Feb-27-05	Monday	Lecture 11	Digital data - vector	
Mar-02-05	Wednesday	Lab 6	Data mining + import in Arc GIS	pull project data + ArcCatalog + ArcMap
Mar-04-05	Friday	Lecture 12	GIS1: Concepts and tools (Arc GIS)	Guest lecturer: Bill Witte
Mar-07-05	Monday	Lecture 13	GIS 2: Project planning + questions	
Mar-09-05	Wednesday	Lab 7	ArcGIS: Data preparation for analysis	Including ArcScene
Mar-11-05	Friday	Lecture 14	GIS 3: data preparation	
Mar-14-05	Monday	Lecture 15	GIS 4: GIS analysis	
Mar-16-05	Wednesday	Spring Recess		
Mar-18-05	Friday	Spring Recess		
Mar-21-05	Monday	Spring Recess		

Mar-23-05	Wednesday	Lab 8	ARSC Visualization	Prakash out
Mar-25-05	Friday	Lecture 16	Meeting with GIS professional	Guest lecture: Prakash out
Mar-28-05	Monday	Lecture 17	Recap class + Test 2	Take home test (20%)
Mar-30-05	Wednesday	Lab 9	ArcGIS: GIS analysis	
Apr-01-05	Friday	Lecture 18	GPS 1	
Apr-04-05	Monday	Lecture 19	GPS 2	
Apr-06-05	Wednesday	Lab 10	GPS data collection	
Apr-08-05	Friday	Lecture 20	GIS application guest lecture	Matt Nolan: EarthSlot
Apr-11-05	Monday	Lecture 21	Field data capture using palmtops	
Apr-13-05	Wednesday	Lab 11	GPS data integration	
Apr-15-05	Friday	Lecture 22	Cartography and map making basics	
Apr-18-05	Monday	Lecture 23	Making Maps with Arc GIS	
Apr-20-05	Wednesday	Lab 12	Industry visit	to DGGS
Apr-22-05	Friday	Lecture 24	Advanced visualization + recap	
Apr-25-05	Monday	Lecture 25	Compiling GIS reports	
Apr-27-05	Wednesday	Lab 13	Project work + printing map in ArcGIS	
Apr-29-05	Friday	Lecture 26	Compiling final presentations	
May-02-05	Monday	Lecture 27	Independent project work	
May-04-05	Wednesday	Lab 14	Project work	
May-06-05	Friday	Lecture 28	Independent project work	
May-09-05	Monday	Final Exams	Final Exams (presentation and report)	40% ot total marks
May-11-05	Wednesday	Final Exams	Final Exams (presentation and report)	40% ot total marks

Basics	
Field data capture	
AP and RS	
GIS	
Cartography	
Independent project	
Tests/Exam	25% marks are reserved for class participation and homework

Last update: February 06, 2005