

Class Schedule : Spring 2008 (version dt. January 25, 2008)

GEOS 458/658: Geoscience Applications of GPS and GIS

Department of Geology and Geophysics, University of Alaska Fairbanks

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(Lecs: M/F 9.15 - 10.15 am at Reichardt 233; Labs: W 2.15 - 5.15pm at Reichardt 316)

Fri	Jan 25	Lec 1: Gen Intro; What is GIS; Data Types
Mon	Jan 28	Lec 2: Data Formats
Wed	Jan 30	Lab 1: Internet resources
Fri	Feb 1	Lec 3: Applied GIS and Project Ideas
Mon	Feb 4	Lec 4: Excel and Basic Programming
Wed	Feb 6	Lab 2:Excel with VB Macros
Fri	Feb 8	Lec 5: Intro to Arc GIS and Internet based map servers
Mon	Feb 11	Lec 6: Databases and MS Access
Wed	Feb 13	Lab 3: From text to GIS via excel and MS Access
Fri	Feb 15	Lec 7: Map Projection
Mon	Feb 18	Lec 8: Datum transformations and AK specific issues
Wed	Feb 20	Lab 4: Introduction to ArcGIS: plotting points on map
Fri	Feb 22	Lec 9: GIS Analysis 1
Mon	Feb 25	Lec 10: GIS Analysis 2
Wed	Feb 27	Lab 5: Arc GIS: Creating files; on-screen digitizing; spatial analysis
Fri	Feb 29	Lec 11: GPS 1
Mon	Mar 3	Lec 12: GPS 2
Wed	Mar 5	Lab 6: GPS with Garmins
Fri	Mar 7	Lec 13: Revision, Project discussion
Mon	Mar 10	Spring Break
Wed	Mar 12	Spring Break
Fri	Mar 14	Spring Break
Mon	Mar 17	Lec 14: Accuracy, reliability - old topo maps etc.
Wed	Mar 19	Lab 7: GPS with Geoplotter - differential corrections
Fri	Mar 21	Lec 15: DEMs, Hill shade, Slope, Aspect and other geoscience data
Mon	Mar 24	Lec 16: Gridding, Contouring, Geologic Symbols
Wed	Mar 26	Lab 8: 3D drape and flythrough with Arc Scene
Fri	Mar 28	Lec 17: Google Earth and other Visualization Environments
Mon	Mar 31	Lec 18: Discussions + homework analysis
Wed	Apr 2	Lab 9: Industry Visit
Fri	Apr 4	Lec 19: GIS application in Circum Arctic North
Mon	Apr 7	Lec 20: Geodatabase
Wed	Apr 9	Lab 10: Project Work
Fri	Apr 11	Lec 21: Cartographic principles
Mon	Apr 14	Lec 22: Effective Map Presentation

Wed [Apr 16](#) [Lab 11: Map Composition, labelling +GIS Google synergy](#)
Fri [Apr 18](#) [Spring Fest](#)
Mon [Apr 21](#) [Lec 23: Other graphic GIS software packages](#)
Wed [Apr 23](#) [Lab 12 Discovery Lab](#)
Fri [Apr 25](#) [Lec 24: Industrial application of GIS](#)
Mon [Apr 28](#) [Lec 25: Project report and writing](#)
Wed [Apr 30](#) [Lab 13: Corel Draw / Adobe Illustrator](#)

Fri [May 2](#) [Lec 26: Revisiting GPS](#)
Mon [May 5](#) [Lec 26: Final Project](#)
Wed [May 7](#) [Final Exam](#)