

Advanced GIS Applications in Fire Ecology and Management Syllabus for NR506, Fall 2005

Date	Lecture/Demo	Lab	Reading / Homework
Week1a Tue October 11, 12:30 – 2:20	GIS in Fire Ecology and Management Incident mapping		Reading 1. Gollberg et.al. Introduction: Integrating spatial technologies....
Week1b Th October 13, 12:30 – 2:20	Overlay analysis Demo – Bayesian statistics model	Overlay analysis in ArcView and ArcGIS	
Week2a Tue October 18, 12:30 – 2:20	Progression maps AML demo	Create a progression map	
Week2b Th October 20, 12:30 – 2:20	Fire Atlas Data ArcInfo Regions	Regions coverages – compute fire frequency and fire rotation	Reading 2: Rollins, M.G. et.al. Evaluating a century of fire patterns...
Week3a Tue October 25, 12:30 – 2:20	Intro to the Geodatabase	Create and populate a simple geodatabase	
Week3b Th October 27, 12:30 – 2:20	GIS raster models: Binary and index	Model fire-fuels from vegetation Derive Delta NBR for the Maloney Creek Fire	Reading 3. Chang K. Geographic Information Systems; Chapter 14: GIS Models and Modeling
Week4a Tue November 1, 12:30 – 2:20	FARSITE	Preparation of input data to FARSITE – run FARSITE	Reading 4. Keane R.E. et. al. Mapping wildland fuels.... Reading 7: Rollins et al. 2004
Week4b Th November 3, 12:30 – 2:20	Demo <u>V</u> egetation <u>D</u> ynamics <u>D</u> evelopment <u>T</u> ool	Lab: Understand VDDT models	
Week5a Tue November 8, 12:30 – 2:20	LANDFIRE Fire Regime Condition Class		Reading 5. Hann et. al. http://www.landfire.gov http://www.fire.org/frcc/
Week5b Th November 10, 12:30 – 2:20		Landfire and Fire Regime Condition Class labs	<i>Proposal for final project due</i>
Week6a Tue November 15, 12:30 – 2:20		Work on final presentation	
Week6b Th November 17, 12:30 – 2:20	Telsa / Landsum – Ecological models	Work on final presentation	
Nov 29 & Dec 1, 12:30-2:20	Final Presentations (oral)		