

NRM F369

satellite imagery. Landscape patterns through time (especially as influenced by human activity) will be quantified, analyzed and displayed by comparing historic with recent aerial photography and satellite imagery.

Since landscape analysis is heavily dependent upon computer analytical techniques, students should have a familiarity with the Windows operating system and compatible computers. Students will become familiar with ESRI ArcGIS, a PC-compatible GIS software package, and Hexagon Geospatial ERDAS Imagine, a remote sensing/image processing (RS/IP) software package. Both software packages are widely used in both the governmental and private sectors for spatial analysis and mapping. Other spatial software will also be demonstrated in class. Landscape analysis will be conducted through assigned exercises to demonstrate both the strengths and weaknesses associated with these powerful technologies. These exercises will also demonstrate the usefulness of landscape level analysis for examination of common ecological and natural resource issues, and for monitoring the

I Incomplete, missing assignments or tests

Computer Assignments:

Lecture notes and laboratory assignments will be distributed using the Blackboard[®] system. Completed assignments will be turned in using the assignment submission built into Blackboard. If you are unfamiliar with Blackboard, please contact me, I am still learning the new version too.

Homework assignments will require analysis of data sets provided by the instructor. These analyses can be done using the computer lab in Rasmuson 404 or MBS 116 (both open 24 hours). Students who have access to the required software elsewhere can use that equipment. Students will have some time, usually 1 to 1.5 hours, to work on assignments during the classroom session but are expected to complete lab assignments based on their own time schedules and on available lab space (scheduled classes have priority, then on a first-come basis).

Late assignments will be penalized a point for each day they are late, for a total of half the assignment (for example: On a 20 point assignment, 10 points will be deducted one point for each day the assignment is late. After ten days, the maximum grade possible will only be 10 e:

NRM F369 GIS and Remote Sensing for Natural Resources

Instructor: Norm Harris

Thursday Evening 5:50 - 8:30 PM, Location

Date

Session/Laboratory Content

**Readings &
Assignments**