Fall 2010 Syllabus for GEOG352: GIS & LAND CHANGE SCIENCE

The participants in this seminar work collaboratively to create new GIS-based methods. The work is linked closely to funded research at Clark University. Students must take initiative and be creative because we will address issues for which standard methods of analysis do not yet exist. A goal of the seminar is to create the methods. Students will make regular oral presentations in class to report on progress. Participants will be encouraged to present the results at professional conferences such as the Association of American Geographers meeting. A prerequisite is Introduction to GIS or competency in GIS. Courses in statistics and quantitative modeling are useful, but not essential. This is a graduate level course in which undergraduates can enroll with special permission from Professor Pontius (rpontius@clarku.edu). Mr. Pontius/Offered periodically

SETTING  Tuesdays & Thursdays 10:25am-11:40am, room 104 Geography
PROFESSOR  Robert Gilmore Pontius Jr (rpontius@clarku.edu)
OFFICE  102 Jefferson Academic Center, Tuesdays 3PM-5PM, 508-793-7761

Graduate students must receive a grade of at least B- in order for the course to count towards graduation. At the end of the course, you will submit a one page description of your accomplishments that the professor will use to help determine your grade. The Add/Drop date is 7 September 2010, which is the date you begin officially to commit to pay tuition irrevocably. The last day to withdraw with a grade of W is 5 November 2010 for undergraduates and 10 December 2010 for graduate students. You are required to attend every class on time. If you will be absent, then send the Professor a message that states the reason, preferably before the absence.

This semester’s projects are likely to include:
Cross-site comparison
  Creation of index of stationarity [funded by MALS]
  Comparison of Markov and alternative matrices
  PIE versus GCE including GCE mapping[funded by GCE]
Integration of Social Science and HOLMES data [funded by CNH]
  Comparison of hydrological models (to serve as Rafael’s thesis)
  Link LUCC scenarios with Wolheim’s hydrological model
Flooding Vulnerability
Accuracy Assessment methods [funded by CNH]
  Growth based method
  Use based method
  Estimation of necessary accuracy for change analysis
Puerto Rico [funded by ULTRA]
Boston Region [funded by ULTRA]

As of 21 August 2010, participants are:
Glen Aronson, Rafael Harun, Ryan Norton, Zhenqi Lu, Dan Rees, Dan Runfola

Students can pursue a project that leads to a thesis. University deadlines to submit theses are:
15 January 2011 for degree to be conferred 5 February 5 2011
1 April 1 2011 for degree to be conferred 22 May 2011
IDCE deadlines might be earlier.
READINGS