GGS 463: Applied GIS Fall 2015 Course Syllabus

**Class Time:** W 1:30-4:10 p.m. Exploratory Hall 2312

**Recommended Text:** *The GIS 20: Essential Skills, 2nd Edition* by Gina Clemmer Publisher: ESRI Press Instructor: Timothy Leslie Associate Professor tleslie@gmu.edu

Office: Exploratory 2405 Office Hours: M 4-5, Th 2-3 or by appt

**Pre-Requisites:** GGS 311 must have been taken previously to enrollment in this course. GGS 300 should have been taken previously or taken concurrently.

**Course Objective:** In this course you will participate in a research project based on a scholarly research questions. This project will involve the selection of a relevant research question, collection and management of geographic data, analysis using standard geographic techniques, and the presentation of your findings. You will work through this creative project as a GIS project team.

**Expectations:** This class is upper division course designed for students with an understanding of geographic information systems. As such, I expect preparation and participation at every class. Your work should show attention to detail, with the expectation that the course experience provides the basis for potential employers to consider your skills. Attendance is critical - you are expected to be at all classes and to make productive use of class time.

**Electronically:** Blackboard will be used for the distribution of lectures and assignments. The URL is **http://mymason.gmu.edu.** Students must check their Mason email accounts to receive important University information, including messages related to this class.

**Evaluation:** Students will be graded in the following manner:

Homework Assignments	50%
Research Poster	30%
Research Paper	20%

Grades generally follow 90/80/70/60 with plus/minus being within 3 percent of the cutoffs. I reserve the right to alter the exact boundaries at the end of the semester. Homework assignments will set up the analysis completed in each problem set, and are due at the **beginning of class**. Late assignments will be marked off 20% per complete weekday they are late, starting at the beginning of class on the day they are due.

**Honor Code:** GMU is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this

course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. *Labs are to be done individually*. When in doubt (of any kind) please ask for guidance and clarification.

## Tentative Course Schedule:

DATE	LECTURE	ΑCTIVITY
2 – SEP	(1) Introduction to GIS Research	GROUP FORMATION TOPIC AND STUDY AREA SELECTION
9 – SEP	(2) GIS Data	GROUP CONTRACT DUE (TOPIC, PAPERS, DATASET)
16 – SEP	(3) Spatial Description	HW 2 ASSIGNED
23 – SEP	(4) Interpolation	HW 3 ASSIGNED
30 – SEP	(5) Clustering	HW 4 ASSIGNED
7 – OCT	(6) Distance as a Research Input	
14 – OCT	(7) Using Regression	HW 5 ASSIGNED
21 – OCT	(8) Co-Location Analysis	
28 – OCT	(9) Presenting GIS Research	
4 – NOV	(10) Entering the GIS Field with Research*	DRAFT POSTER DUE
11 – NOV	(11) Network Analysis	HW 6 ASSIGNED
18 – NOV	No Class - GIS Day	POSTER PRESENTATION
25 – NOV	NO CLASS - THANKSGIVING	
2 – DEC	(13) Research as part of the GIS Industry*	
9-DEC	(14) Ethics & Course Summary	
15-DEC	RESEARCH PRESENTATIONS	