

GG5 685 – Capstone Course Geoinformatics – Spring 2020

Class Time: Thursday, 7:20pm – 10pm

Class Location: Exploratory Hall 2103

Instructor: Dr. Steve Jackson, sjacks11@gmu.edu (Office hours by appointment only)

Course Goal: Write, present, and discuss a journal-worthy paper applying what you have learned in your program of study related to one of the course themes.

Course Description - This is a graduate capstone course including seminar and paper components:

-Seminar: The seminars will generally be led by students who will be presenting and discussing articles covering the trends and challenges in geoinformatics. Students are required to read articles each week, write reflections documenting the relevance and quality of the articles, and come to class prepared to discuss the articles as a group. The objective of the seminars is to develop a critical eye towards academic writing which the students will apply towards the writing of their papers.

-Paper: The paper is an opportunity for students to combine the skills learned in this course with the skills learned in their program of study. Students will write a journal-worthy paper and present their work to the class at the end of the semester. Students can work individually or in groups for their paper.

Course Schedule

Jan 23 – Course Introduction and Structure

Jan 30 – Overview of Course Themes

Feb 06 – Defining, Planning, and Managing Geographic Investigation

Discussion Lead Sign-Up & Project Partner Selection

Feb 13 – Trends in Spatial Data and Geoinformation Technology

Feb 20 – Modeling a Problem Domain – **Project Proposals Due**

Feb 27 – Measuring the Environment

Mar 05 – Observing - Human-based Observation

SPRING BREAK

Mar 19 – Observing - Computer Vision

Mar 26 – Analysis – Applied Spatial Analysis

Apr 02 – Analysis – Emerging Methods

Apr 09 – Data Presentation and Visualization

Apr 16 – Project Work (no class)

Apr 23 – **Project Presentations part 1 & Project Papers Due**

Apr 30 – **Project Presentations part 2**

Grading: There are five components to course grade:

Course Paper = 40%

Paper Presentation = 20%

Leading Discussion(s) = 20%

Class Participation/Article Reflections = 10%

Class Attendance = 10%