

## Syllabus for GEOG797

### **Instructor**

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*Office Hours:* Wednesdays (3:00pm-5:00pm)  
(Additional office hours can be scheduled by appointment via email or phone.)

### **About the Course**

*Time:* 5:30pm – 8:00pm, Wednesdays (lectures)  
*Location:* Online (<http://elms.umd.edu/>)

### **Description**

This course is designed to provide a project environment through which you practice and integrate what you have learned through the Master of Professional Studies in GIS. The purpose of this course is to design and develop an applied GIS project. Topics covered include formulating research problems, reviewing published literatures, collecting data, designing, implementing, and reporting a GIS project. By the end of the term, each student is expected to complete an individual project. The project will be a GIS application that can be tested, demonstrating the student's ability to manage and develop a GIS application project in real world situation. The final project product should also serve as a portfolio of what you have accomplished in the MPSGIS program.

There are weekly lectures but no lab sessions.

### **Textbooks** (optional)

There is no required text book for this course. Following books can be used as useful references.

- J. Gatrell, G. Bierly, and R. Jensen (2005) *Research Design and Proposal Writing in Spatial Science*, Springer.
- R. Kumar (2005) *Research Methodology: A Step-by-step Guide for Beginners*, 2nd edition, Sage Publications.
- D. Peters (2008) *Building a GIS: System Architecture Design Strategies for Managers*, ESRI Press.
- A. K.W. Yeung and G.B. Hall (2007) *Spatial Database Systems: Design, Implementation and Project Management*, Springer.
- U.M. Shamsi (2005) *GIS Applications for Water, Wastewater, and Stormwater Systems*, CRC Press.
- J. Maantay and J. Ziegler (2006) *GIS for the Urban Environment*, ESRI Press.
- E. K. Cromley and S. L. McLafferty (2002) *GIS and Public Health*, The Guilford Press.

### **Assignments**

Besides the capstone project, there are totally five (5) assignments to be completed. Each of these assignments will count 4% of the final grade. Late submission of lab reports will result in a reduction of the grade for that assignment of 10 points (out of 100 in total) per day. However, in some rare situations (e.g. medical or family emergency), if you need extra time, you will have to contact the instructor before the due date so that the deadline may be extended.

Presentations are also required in this class. The final presentation need to be made in person.

**Grading**

The distributions of grade among lab assignments, participation, and final project are:

Assignments =	20% (five assignments; each accounts for 4% in the final grade)
Presentations=	20% (two presentations; each accounts for 10% in the final grade)
Project Proposal =	10%
Final Report =	50%

The plus/minus grading system will be used to assign student grades which will be determined as follows:

97-100 =	A+
93-96.99 =	A
90-92.99 =	A-
87-89.99 =	B+
83-86.99 =	B
80-82.99 =	B-
77-79.99 =	C+
73-76.99 =	C
70-72.99 =	C-
67-69.99 =	D+
63-66.99 =	D
60-62.99 =	D-
<60 =	F

Minor adjustments to this scale might be made based on the performance of the class as a whole.

**Rules & Policies*****Medical Excuses***

Campus Senate policy requires students who are absent due to illness/injury to furnish documentary support to the instructor. I require students to contact me by email or by phone prior to class time in which you indicate that you have an illness or an injury. You must provide written documentation verifying your illness/injury immediately upon your return to class. You will not be allowed to turn in missed assignments or make up quizzes, tests, papers, etc. if you have not provided this documentation. Documentation not presented to me in a timely manner will not be accepted. In addition, if it is found that you have falsified the documentation provided, I will refer you to the University's Student Conduct Office.

***Religious Preference Absence***

Please refer to the Online Undergraduate Catalog Policy on Religious Observance.

***Academic Dishonesty***

The University of Maryland, College Park, has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student, you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.shc.umd.edu>.

**Course Schedule**

This is a tentative schedule and may be adjusted to suit our class. (guest speakers TBA)

WEEK	DATE	TOPIC	ASSIGNMENTS
1	Mar 5	Course Introduction Overview of research process Formulating research problem Useful data sources	
2	Mar 12	Guest lecture (TBA) Review students' research topics Searching for literature	Assignment 1 (Identify Research Problem)
3	Mar 19	<b>No class (Spring break)</b>	
4	Mar 26	Writing a Research Proposal Outline of Project Proposal How to write introduction How to write literature review How to write abstract Review students' assignments	Assignment 2 (Literature Review)
5	Apr 2	Identifying variables Constructing Hypothesis Case study Review students' assignments	Assignment 3 (Timeline and Flow Chart)
6	Apr 9	Guest speakers (TBA) Review student's assignments	Assignment 4 (Data)
7	Apr 16	Steps for implementation Review and Questions	Assignment 5 (Methods)
8	Apr 23	Students' demonstration of the project progress	Full Proposal
9	Apr 30	Project Proposal Presentation	Preliminary results and presentation
10	May 7	Writing a report : structure and guideline Review and Questions Students' demonstration of the project progress	
11	May 14	Final Project Poster Symposium	Final Report + Poster Poster Symposium