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.

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


Course Requirements and Grading
It is strongly encouraged to attend each lecture and actively participate in online discussion board as well as in class. Students are required to post a reply on the issues or questions posted by the instructor. Students are required to provide three one-page reviews on papers related to their interest and formulate research problem statement based on literature review. In order to enforce timely completion of the project, each student must provide a final project proposal and project time table describing their detail weekly plan. Final project will be evaluated based on the quality of the
project implementation including robustness, user friendliness, correctness, and completeness of the outcome.

- Weekly discussions, presentation, and participation 10%
- Weekly Assignments and Project Proposal 40%
- Final Project 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.

Make-up Policy
Assignments must be turned in by the midnight at which they are due. Late assignments will result in penalties unless prior arrangements are made with the instructor. If you have a documented disability and wish to discuss academic accommodations, please contact the instructor immediately. Students should not expect Incomplete grades as they will be only given under extra-ordinary circumstances.

Academic Integrity
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.

Online Learning
This is an online course with occasional in-person experiences. We will meet online at the announced time for a live audio/video lecture. The lecture will be archived for anyone who absolutely must miss the class, but I encourage you to login at the appointed time so that you can ask questions. Our class will meet within Blackboard, the university’s online learning system. Go to
http://elms.umd.edu to access the course. After you login, our course will be listed in the right column under My Courses. Click on the course link to access the course. Short videos that illustrate how to use the online learning system are available on the course page. Click the Tutorials button on the left sidebar to access the tutorials.

**Hardware and Software Requirements for Online Learning**
You may use either a PC or a Macintosh computer to access Blackboard. Whichever you choose, it must be equipped with the following hardware:
- Webcam
- Headset (including headphones and microphone)

You will also need the following plug-ins (be sure you have the latest versions):
- Real Media
- Flash Player
- Quicktime for PCs
- Quicktime with the Flip4Mac plugin (for Macs)

**Support for Online Learning**
This method of taking classes is undoubtedly new to some of you, so we have a few tools to make life easier for you.

**Email**
Both TA and instructor will always be available by email. Use the email link in the sidebar to send us emails at any time. We will try to answer within 24 hours and probably much sooner.

**Online office hours**
We will have office hours in a Live Classroom each week. The times will be posted in the Announcements. Use the link in the sidebar to access office hours.

**On campus office hours**
We will post times when we will be available on campus for face-to-face office hours. The TAs will have lab office hours on periodic Saturday mornings.

**Lounge**
We have created a place for you to visit with your classmates. This discussion board uses both text and voice. Share everything from discussions about the course material to what you did last weekend. I will look in from time to time but I probably won’t respond to anything posted here.

**Study Rooms**
Several study rooms have been set up for you to form study groups with your classmates. We will not be monitoring these rooms. Remember that the Honor Code specifies that you are free to work together to discuss the assignments but that you must then separately produce an original and independent result.
Course Schedule
This is a tentative schedule and may be adjusted to suit our class. Changes will be announced and posted on Blackboard.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment</th>
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| 1    | Dec 2 | Course Introduction  
Overview of research process  
Searching for literature | Assignment 1  
(Research Interest)  
(Literature Review) |
| 2    | Dec 9 | Formulating research problem  
Useful data sources  
Review students’ research topics and assignment | Assignment 2  
(Literature Review) |
| 3    | Dec 16| Identifying variables  
Constructing Hypothesis  
Writing a Research Proposal  
Outline of Project Proposal  
Review students’ assignment | Assignment 3  
(Background - Literature Review & Research Problem Statement) |
|      | Dec 23| Winter Break                                                        |                                                |
|      | Dec 30| Winter Break                                                        |                                                |
| 4    | Jan 6 | Case study  
Review students’ assignment | Assignment 4  
(Design Methodology-Flow chart) |
| 5    | Jan 13| Qualitative research and Ethical issues  
Case study  
Review student’s assignment | Assignment 5  
(Complete Final Project Proposal) |
| 6    | Jan 20| Project Proposal Presentation                                      |                                                |
| 7    | Jan 27| Steps for implementation  
Review and Questions  
Students’ demonstration of the project progress |                                                |
| 8    | Feb 3 | Steps for implementation  
Review and Questions  
Students' demonstration of the project progress |                                                |
| 9    | Feb 10| Writing a report : structure and guideline  
Review and Questions  
Students' demonstration of the project progress |                                                |
| 10   | Feb 17| Final Project Presentation                                         | Final Project  
Due : 11:59 PM  
2/21/2011 |