

JUS 333: GIS APPLICATIONS IN LAW ENFORCEMENT  
**Spring 2005 syllabus**

**PROFESSOR:** Mrs. Susan Pulsipher

Office Hours: By appointment or drop in

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**COURSE DESCRIPTION:**

- X Understand why and how Geographic Information Systems (GIS) are used in law enforcement.
- X Learn how to critique and manipulate data to solve or illustrate problems using a GIS program.
- X Emphasize the production of layouts that convey a clear message to the intended audience.
- X Review ethical and implementation problems.

**COURSE COMPETENCIES:** Upon completion of the course, students will be able to:

- X Explain what a GIS system is and how such a system is used in different law enforcement applications.
- X Identify and discuss technical limitations and ethical problems related to the use of GIS within the law enforcement community and as a means of communicating information to the public. (Note: This objective addresses Program Goal #1: Graduates with a major in Criminal Justice Studies will demonstrate critical thinking and problem solving skills required for practice as professionals in a wide variety of criminal justice positions.)
- X Locate sources of data for use in a GIS, transfer data into a GIS, and know how to evaluate that data.
- X Manipulate data to assess or solve problems and to produce graphics (maps, charts, etc.) that clearly convey a message to the intended audience.

**TEXTBOOK:**

The text is available from the Methodist College bookstore or by purchase from sellers like Amazon.com.

*Mastering ArcGIS*. Maribeth Price. McGraw Hill, 2004. Purchase the edition that includes the CDROM.

**Optional software.** A limited time period use copy of the ArcGIS software is available with some textbooks.

Example. *Getting to Know ArcGIS Desktop*. ESRI Press, 2001. (ISBN 1-879102-89-7)

Comes with CDROM containing 180 day trial of ArcView 8.1 software and a CD of exercise data.

Available directly from the ESRI Press bookstore (1-800-447-9778 or

<http://gis.esri.com/esripress>). If you purchase the book from another source check that you will receive a usable copy of the software.

**REQUIRED COMPUTER SKILLS:** The majority of your time in this course will be spent using a computer. Students learn how to use the ArcGIS program. In addition students are expected to be familiar with (or prepared to learn on their own) how to use the following programs: Microsoft Excel, Microsoft PowerPoint, an [FTP] program, a zip program, and a text editor such as Notepad.

**GIS SOFTWARE:** The ArcGIS 8.1 software is loaded on the computers in the LIC room in the library and three computers (Dells) in the south wing of the library. There is a charge for color printing.

**SUPPLEMENTAL COURSE WEB SITE:** The course web site (at <http://www.mconline.org>) contains course materials, assignments, references, a drop box, and a discussion board. Some exercise results must be submitted electronically through the drop box.

**CLASS MEETINGS:** The two hour lab time on Monday is compulsory. Lab exercises and exams will be conducted between 1 – 4 p.m. There will be a break time.

**GRADING:**

Lab exercises	30%
Exams	20%
Readings and class participation	10%
Web site review	10%
Project	15%
Quizzes	15%

**ASSIGNMENTS:**

**1. Lab Exercises (30% of final grade)**

Lab exercises are graded for a) resolution of the problem, b) production of requested maps, charts, reports or layouts, and c) correct answers to questions.

**2. Exams (20% of final grade)**

The exams will be similar to lab exercises except that you will be on your own to decide how to solve the problem(s) and produce the requested results. Notes and textbook are allowed.

**3. Readings and class participation (10% of final grade)**

Readings will be assigned from the textbook on technical information and from provided documents and articles on law enforcement applications. You will be responsible for reading material BEFORE the class in which the content will be discussed or reviewed. For each reading come prepared with 2-3 questions/speaking points that you want to address in class. All required readings will be either from the textbook, on reserve in the library, available on the course web site, available on the web, or handed out in class.

**4. Web site review (10% of final grade)**

Each student will provide a 2-3 page written review of an assigned community information police web site. Detailed instructions will be provided.

### **5. Project (15% of final grade)**

Each student will select a problem to solve or illustrate using a set of data provided by the instructor. Two or three data sets will be available to select from. The final products will be a working project (all data and layouts), data & project descriptions, and a procedure log. Detailed instructions will be provided.

### **6. Quizzes (15% of final grade)**

Quizzes will be administered in class and will consist of multiple choice, fill in the blank, and short essay questions. Many of the questions will assess your comprehension of assigned readings and of effective use of a GIS program.

Assignments turned in late will result in a reduction in that portion of your grade. A two day extension without penalty can be granted upon prior request.

**E-MAIL ADDRESS:** All students are required to have an email address. If you do not already have an e-mail address, you may obtain one from the CAC Lab in the Trustee's Building. Turn around time is approximately 24 hours.

**ATTENDANCE:** Students are required to attend every class. Unexcused absences will result in a reduction in the participation portion of your grade. A student who misses more than 5 unexcused classes will be dropped from the course. Arriving late to class repeatedly disrupts the class, and may reduce the participation portion of your grade.

If you are going to miss a class, you must contact me prior to the class. You can call me at 630-7122 (leave a voice mail message) or email me at [sue@methodist.edu](mailto:sue@methodist.edu). A failure to notify me will result in an unexcused absence. Note: Certain emergencies such as military deployment, accidents, or certain family emergencies are exceptions to this rule.

**PARTICIPATION:** Students are expected to come to class prepared to answer questions, ask questions, and engage in class discussions. When called upon, students are expected to respond in an intelligent manner.

**NOTE TAKING:** Students are highly encouraged to take notes during class meetings.

**HONOR CODE:** In the pursuit of academic studies at Methodist College, every student has the responsibility of obeying the Honor Code, which prohibits cheating (including plagiarism), theft, and academic misrepresentation. The Honor Code is printed in the academic catalogue (The student handbook copy contains errors.) Each student is responsible for becoming familiar with the Honor Code. All work submitted to professors must be in compliance with the rules of the Honor Code.

Cheating and/or plagiarism will result in the student receiving a zero for the requirement in question. Additional disciplinary action may be taken. **ALL** Honor Code infractions are reported to the Honor Board for the purpose of identifying repeat offenders.

**PERSONAL DEMEANOR:** I hold certain expectations. 1) I expect all students to act in a

manner that exemplifies the high ideals and standards of Methodist College and the Justice Studies Program (i.e. no cursing or obscene language). 2) I expect every student to respect other student viewpoints during class discussions (i.e. no verbal bashing). 3) I expect every student to use computers only when requested to and for the expected purpose (i.e. no email or surfing or working on other assignments). 4) I expect every student to display honesty in relationships with fellow students and with this professor (honesty is the best policy).

### **DISABILITY SERVICES**

Students requiring accommodations due to disabilities must bring the appropriate documentation to the Center for Personal Development no later than the first week of classes during which the accommodations are required. Together the student and the Center will decide upon the modifications to be implemented. The student must provide an authorization letter to the instructor.

If you are a student with a disability, and would like to be considered for specific accommodations, please contact the Director of Disability Services at 630-7402 as soon as possible. Accommodations cannot be made retroactively.