

PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

GIS WEB APPLICATIONS
GIS 2410

Class Hours: 3.0

Credit Hours: 3.0

Laboratory Hours: 0.0

Date Revised: Fall 00

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

Provides the opportunity for students to use the latest Internet mapping tools to deliver GIS and Location Based Services via the Internet. Students will be trained to deliver GIS applications on the Internet using a variety of tools and emerging raster and vector standards.

Entry Level Standards:

Students should have knowledge and experience working in the Windows operating system environment, including the use of the Microsoft Office software components. Students should also have the ability to use a standard keyboard and maintain a rate of 10 words per minute. Students should also have mathematics, writing, and verbal skills at the college level.

Prerequisite:

GIS 1010 or consent of GIS coordinator

Textbook(s) and Other Course Materials:

TBA

I. Week/Unit/Topic Basis:

TBA

II. Course Objectives*:

- A. Understand methods and systems to successfully design and maintain GIS web applications. I, II, IV
- B. Understand the opportunities for web applications to serve client GIS needs. I, II, IV
- C. Understand the use of the Internet for communicating a variety of map and spatial information. I, II, IV

*Roman numerals after course objectives reference goals of the GIS program.

III. Instructional Processes*:

Students will:

- 1. Use spatial elements, measurements, locations and references to develop graphic and numerical awareness of the real world. Understand how information in the form of maps and numbers connect to the physical world. *Numerical Literacy Outcome, Transitional*

Strategy

2. Be familiar with the basic procedures and the overall quality of GIS databases. *Numerical Literacy Outcome, Problem Solving and Decision Making Outcome*
3. Participate in open discussions regarding the strengths and weaknesses of GIS procedures and what improvements might be made in future releases. *Active Learning Strategies, Communication Outcome, Transitional Strategy*
4. Use the Internet and electronic mail to communicate effectively between the instructor, other students, and for information gathering. *Technological Literacy Outcome, Information Literacy Outcome*
5. Internalize the work ethic by demonstrating regular attendance, punctuality, dependability, cooperation with teachers and peers, and professionalism. *Personal Development Outcome*

*Strategies and outcomes listed after instructional processes reference Pellissippi State' s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Demonstrate understanding of Internet and GIS technologies to facilitate rapid and efficient development of a GIS component in a web site. A, B, C
2. Create an operating web site using a commercial GIS map server. A, B, C
3. Create an operating web site using scaled vector graphics. A, B, C
4. Demonstrate a high level of web user interface design competence. A, B, C
5. Demonstrate an understanding of advantages and disadvantages of various commercial GIS internet map servers. A, B, C
6. Complete a GIS project for the student' s portfolio that will be evaluated and critiqued by an outside committee. A, B, C

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures: 65% of grade

Four tests will be administered (three tests plus the final) counting for approximately 65% of the final grade.

B. Laboratory Expectations: 35% of grade

Students will be assigned group and/or individual projects. The ability to work with others, the ability to make efficient use of equipment, and the level at which students perform will contribute to the grade.

C. Field Work:

N/A

D. Other Evaluation Methods:

N/A

VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.

B. Academic Dishonesty:

Plagiarism, cheating and other forms of academic dishonesty are prohibited. A student guilty of academic misconduct, either directly or indirectly through participation or assistance, is immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions that may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F for the exercise or examination or to assign an F in the course.

C. Use of Equipment:

Any act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring, or unauthorized use of property/equipment belonging to Pellissippi State is subject to disciplinary sanction.