



COURSE IMPLEMENTATION DATE: September 2006
 COURSE REVISED IMPLEMENTATION DATE: September 2010
 COURSE TO BE REVIEWED: January 2014
(four years after UPAC approval) *(month, year)*

OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
 Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

GEOG 353	Geography	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS
GIS Applications		
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION:

This course focuses on the use of Geographic Information Science in problem-solving and decision-making in real world settings. Designed to complement GEOG 253, Introduction to GIS, students will be introduced to additional GIScience techniques and how to use them in a variety of applications.

PREREQUISITES: GEOG 253; recommended: a first-year COMP course, GEOG 352
 COREQUISITES:
 PRE or COREQUISITES:

SYNONYMOUS COURSE(S):

- (a) Replaces: _____
- (b) Cross-listed with: _____
- (c) Cannot take: _____ for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: 75

STRUCTURE OF HOURS:

Lectures: 30 Hrs
 Seminar: _____ Hrs
 Laboratory: 45 Hrs
 Field experience: _____ Hrs
 Student directed learning: _____ Hrs
 Other (specify): _____ Hrs

TRAINING DAY-BASED INSTRUCTION:

Length of course: _____
 Hours per day: _____

OTHER:

Maximum enrolment: 25
 Expected frequency of course offerings: Once every year
(every semester, annually, every other year, etc.)

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only) Yes No
 WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department) Yes No
 TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE: Yes No

Course designer(s): <u>Dr. Scott Shupe</u>	Date approved: <u>November 2009</u>
Department Head: <u>Dr. Ken Brealey</u>	Date of meeting: <u>November 27, 2009</u>
Supporting area consultation (Pre-UPAC)	Date approved: <u>January 2010</u>
Curriculum Committee chair: _____	Date approved: <u>January 2010</u>
Dean/Associate VP: <u>Dr. Jacqueline Nolte</u>	Date of meeting: <u>January 29, 2010</u>
Undergraduate Program Advisory Committee (UPAC) approval	

LEARNING OUTCOMES:

Upon successful completion of this course, students will be able to:

1. demonstrate an understanding of additional foundation GIS concepts and skills beyond those introduced in GEOG 253.
2. apply basic and intermediate GIScience techniques to problems in Geography and other disciplines.
3. negotiate and debate the issues and concerns that influence the successful implementation of a GIS project.
4. demonstrate an acquaintance with the scope of GIS and GIScience throughout modern society.

METHODS: *(Guest lecturers, presentations, online instruction, field trips, etc.)*

The course will be offered in a lecture/lab format.

METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

- Examination(s) Portfolio assessment Interview(s)
- Other (specify):
- PLAR cannot be awarded for this course for the following reason(s):

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

Chang, Kang-tsung, 2010. Introduction to geographic information systems – 5th edition, McGraw-Hill.

SUPPLIES / MATERIALS:

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

Lab assignments and projects	40-60%
Exams	40-60%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

1. GIS refresher: key concepts in theory and practice.
2. Raster Data Analysis
3. Terrain Mapping and Analysis
4. Viewsheds and Watersheds
5. Spatial Interpolation
6. Spatial statistics
7. GIS applications in natural resources and the environment
8. GIS applications in society
9. GIS project management and implementation
10. Issues and future directions in GIS