



COURSE IMPLEMENTATION DATE: January 2001
 COURSE REVISED IMPLEMENTATION DATE: September 2012
 COURSE TO BE REVIEWED: June 2018
(six years after UEC 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

<u>GEOG 253</u>	<u>Geography</u>	<u>4</u>
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS
<u>Introduction to Geographic Information Systems</u>		
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION:

A geographic information system (GIS) is a configuration of hardware and software that captures, stores, queries, analyzes, and displays geographic information. This course introduces the concepts of representing and managing information related to our world using GIS. Students will be taught GIS software skills useful for managing, analyzing, and mapping geographic information.

PREREQUISITES: None; a first-year COMP course is recommended.
 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:	<u>25</u>	Hrs
Seminar:		Hrs
Laboratory:	<u>50</u>	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: Every semester
(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>March 26, 2012</u>
Department Head: <u>Dr. Michelle Rhodes</u>	Date of meeting: <u>April 13, 2012</u>
Supporting area consultation (Pre-UEC)	Date approved: <u>April 13, 2012</u>
Curriculum Committee chair: <u>Tetsuomi Anzai</u>	Date approved: <u>April 13, 2012</u>
Dean/Associate VP: <u>Dr. Jacqueline Nolte</u>	Date of meeting: <u>June 22, 2012</u>
Undergraduate Education Committee (UEC) approval	

LEARNING OUTCOMES:

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

1. Describe how information related to the world is represented and managed on computers as GIS data
2. Identify the role and usefulness of GIS as a tool for analyzing, managing and communicating geographic information
3. Demonstrate competency in the operation of GIS software, including the latest version of ArcGIS.
4. Compile and present geographic data in cartographic form.

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, 2011. Introduction to geographic information systems, 6th edition, McGraw-Hill (or latest edition)

SUPPLIES / MATERIALS:

STUDENT EVALUATION:

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

Lab assignments (4-5)	25-35%
Written assignments (1-2)	10-20%
Quizzes (5-6)	25-35%
Lab test (1)	10-15%
Exam (1)	25-35%

COURSE CONTENT:

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

1. The origins and definitions of GIS
2. The nature of geographic information: simplifying a complex world
3. Representing geographic information: vector and raster data models
4. GIS data sources and the creation of GIS data
5. GIS data quality and GIS data editing
6. GIS databases: managing and administering vector attribute data
7. Data exploration and data query: using GIS to better understand the Earth and society
8. Spatial analysis: the use of GIS in problem solving issues related to the Earth and society
9. Cartography: creating maps and communicating information using GIS
10. The future of GIS