COURSE IMPLEMENTATION DATE:	January 1996
COURSE REVISED IMPLEMENTATION DATE:	January 2006
COURSE TO BE REVIEWED:	November 2009
(Four years after UPAC final approval date)	(MONTH YEAR)

OFFICIAL 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 and the material will vary - see course syllabus available from instructor

FACULTY/DEPARTMENT:	**Geography**	
GEOG 352	N/A	4
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	Explanation in Geography: Quantitative Methods	
	COURSE DESCRIPTIVE TITLE	

CALENDAR DESCRIPTION:

This course focuses on the use of numbers as an aid to problem-solving in geographical analysis. Students will be introduced to methods in the collection, description, analysis and mapping of quantitative data. Techniques in the collection and recording of primary and secondary data will be covered and methods of statistical description and inference will be surveyed. The course will also include topics in the spatial display of data, particularly through computer mapping packages. This course makes heavy use of computer software eg, Excel, SPSS and ArcView.

PREREQUISITES: GEOG 253, and one of MATH 104, 106 or PSYC 110, or other acceptable statistics course
COREQUISITES:

SYNONYMOUS COURSE(S)	SERVICE COURSE TO:
(a) Replaces: _____	
(Course #)	(Department/Program)
(b) Cannot take: _____ for further credit.	
(Course #)	(Department/Program)

			TRAINING DAY-BASED INSTRUCTION
TOTAL HOURS PER TERM:	**75**		
STRUCTURE OF HOURS:			LENGTH OF COURSE:
Lectures:	**45**	Hrs	HOURS PER DAY:
Seminar:		Hrs	
Laboratory:	30	Hrs	
Field Experience:		Hrs	
Student Directed Learning:		Hrs	
Other (Specify):		Hrs	

MAXIMUM ENROLLMENT:	**25**	
EXPECTED FREQUENCY OF COURSE OFFERINGS:	**Once every year**	
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

AUTHORIZATION SIGNATURES:	
Course Designer(s):	Chairperson:
Dr. John Belec	*Raymond Welch (Curriculum Committee)*
Department Head:	Dean:
Dr. Sandy Vanderburgh	Dr. Eric Davis
UPAC Approval in Principle Date:	UPAC Final Approval Date: November 25, 2005

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

Provide an understanding of basic descriptive statistics and regression methods as they apply to problem-solving in Geography.
Review quantitative data management techniques through the use of spreedsheets.
Ability to convert geographical questions into testable propositions.
Develop a basic working ability with relevent computer software eg, Excel, SPSS and/or ArcView.
Ability to apply statistical methods to a spatial setting.

METHODS:

Lecture: 2 hours/week
Computer lab: 3 hours/week.

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR (Please check:)   ☒ Yes   ☐ No

METHODS OF OBTAINING PLAR:

Portfolio

TEXTBOOKS, REFERENCES, MATERIALS:

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

David Ebdon, Statistics in Geography 2e, Blackwell, 1985
T.W. Pavkov and K.A. Pierce, Ready, Set, Go: A Student's Guide to SPSS 11.0 for Windows, Mc-Graw Hill, 2003
K. N. Berk and P. Carey, Data Analysis with Microsoft Excel, Thomson, 2004.
R.A.Donnelly, The Complete Idiot's Guide to Statistics, Alpha, 2004.

SUPPLIES / MATERIALS:

N/A

STUDENT EVALUATION:

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

Assignments   30%
Tests   30%
Final Exam   40%

COURSE CONTENT:

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

1.   Week
2.   Exploring the nature of geographical questions and the role of quantitative data.
3.   What is quantitative data and where does it come from: issues of scale, measurement and
        collection.
4.   Samples, sampling, probability and hypothesis testing.
5.   Devising testable propositions in Geography.
6.   How to build and manage a database for geographical analysis.
7.   Applications of descriptive statistics and descriptive spatial statistics in geographical problem
        solving.
8.   Searching for spatial relationships: applications of correlation and regression.
9.   Mapping pattern: overview and capabilities of GIS as an analytical too.
10.   Review of cartographic techniques: from earth to map.
11.   Database methods in GIS.
12.   Choropleth mapping in GIS: regression residuals.
13.   GIS map design issues and techniques.
14.   Putting it all together: the role of spatial techniques in the pursuit of geographical knowledge