



COURSE IMPLEMENTATION DATE: January 1996
 COURSE REVISED IMPLEMENTATION DATE: September 2012
 COURSE TO BE REVIEWED: January 2017
(six 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 252	GEOGRAPHY	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV 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 presentation of quantitative data. Techniques in the collection and recording of primary and secondary data will be covered and methods of statistical description, inference, and display will be surveyed. This course makes extensive use of computer software. Students are advised to take this course during the same academic year as GEOG 253 and/or GEOG 250, due to the complementarity that exists in these second year techniques courses.

PREREQUISITES:
 COREQUISITES:
 PRE or COREQUISITES: One of MATH 104, MATH 106, or PSYC 110

SYNONYMOUS COURSE(S):
 (a) Replaces: GEOG 352
 (b) Cross-listed with: _____
 (c) Cannot take: _____ for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: 75

STRUCTURE OF HOURS:
 Lectures: 45 Hrs
 Seminar: _____ Hrs
 Laboratory: 30 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: Fall and Winter semeste
(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): John Belec
 Department Head: Ken Brealey Date approved: November 2010
 Supporting area consultation (Pre-UPAC) Date of meeting: November 5, 2010
 Curriculum Committee chair: John Carroll Date approved: November 12, 2010
 Dean/Associate VP: Jacqueline Nolte Date approved: November 12, 2010
 Undergraduate Program Advisory Committee (UPAC) approval Date of meeting: January 28, 2010

LEARNING OUTCOMES:

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

- Apply descriptive statistics and regression methods to problem solving in geography.
- Critically assess both the possibilities and limitations of statistical methodologies in geography.
- Review quantitative data management techniques through the use spreadsheets.
- Convert geographical questions into testable propositions and research designs.
- Develop a basic working ability with relevant computer software.

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

Lecture: 1.5 hours/week

Computer lab: 3 hours/week

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:]

- D.C.Montello and P.C.Sutton, An Introduction to Scientific Research Methods in Geography, Sage, 2006.
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:

STUDENT EVALUATION:

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

Assignments	25%
Tests:	40%
Final exam	35%

COURSE CONTENT:

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

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