UNIVERSITY COLLEGE of the FRASER VALLEY

COURSE IMPLEMENTATION DATE: January 1996
COURSE REVISED IMPLEMENTATION DATE:
COURSE TO BE REVIEWED: January 2000
(Four years after implementation date) (MONTH YEAR format)

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**

GEOGRAPHY 352		**4**
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS

QUANTITATIVE METHODS IN GEOGRAPHY
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

This course introduces geography students to methods in the collection, description, analysis and mapping of 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.

PREREQUISITES: **Geography 201 or 202, and one of Geography 241 or 242**
COREQUISITES:

SYNONYMOUS COURSE(S)
(a) Replaces: _____ *(Course #)*
(b) Cannot take: _____ *(Course #)* for further credit.

SERVICE COURSE TO:
_____ *(Department/Program)*
_____ *(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: _____

MAXIMUM ENROLLMENT: **25**
EXPECTED FREQUENCY OF COURSE OFFERINGS: _____

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): John Belec
Chairperson: J.D. Tunstall, Ph.D. *(Curriculum Committee)*
Department Head:
Dean:
PAC Approval in Principle Date:
PAC Final Approval Date: May 3, 1995

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

1. promote an awareness of spatial data and methods of organization to answer geographic questions;
2. develop analytical skills that have application in real world settings;
3. develop a critical understanding of the abilities and limitations of statistical methods in geography;
4. introduce students to basic operations of a microcomputer and packaged statistical and mapping software.

METHODS:

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

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

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

METHODS OF OBTAINING PLAR:

TEXTBOOKS, REFERENCES, MATERIALS:

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

TEXTS: 1. Statistical Problem Solving in Geography. McGrew & Munroe
2. Workbook/lab manual – prepared in-house

SUPPLIES / MATERIALS:

STUDENT EVALUATION:

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

Assignments: 6 x 6% =	36%
Tests 3 x 8% =	24%
Exam =	40%
	100%

COURSE CONTENT:

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

WEEK	1	Introduction: "What are geographical data/questions? Case Studies of current research, including faculty
	2	Review of cartographic techniques ("from earth to map") eg., scale, projection, surveying.
	3	Building a data base for geographical analysis; spatial data encoding.
	4	Data: types, sources, limitations, primary vs secondary;
	5	Data sampling; spatial and aspatial
	6	Searching for spatial relationships: (a) bivariate statistics, measures of association;
	7	Searching for spatial relationships: (b) correlation and regression, inference;
	8	Searching for spatial relationships: (c) measures of spatial tendency, spatial auto correlation
	9	Thematic mapping and data manipulation
	10	Cartographic design and production
	11	The logic of geographical information systems.
	12	The logic of geographical information systems.
	13	Practical applications of GIS.
	14	Putting it all together: the role of spatial techniques in the pursuit of geographical knowledge.