UNIVERSITY COLLEGE of the FRASER VALLEY

PAC FORM #2

COURSE IMPLEMENTATION DATE:[January 1996]
COURSE REVISED IMPLEMENTATION DATE:[January 2002]
COURSE TO BE REVIEWED:[January 2006]
(Four years after implementation date)

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 material will vary - see course syllabus available from instructor

FACULTY/DEPARTMENT: GEOGRAPHY

GEOG 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: GEOG 251 or 253, and one of MATH 104, 106 or PSYC 110, or acceptable statistics course

COREQUISITES: None

SYNONYMOUS COURSE(S)

(a) Replaces: N/A
(Course #)

(b) Cannot take N/A for further credit
(Course #)

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 ENROLMENT: 25

EXPECTED FREQUENCY OF COURSE OFFERING:

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 X**

AUTHORIZATION SIGNATURES:

Course designer(s): John Belec

Chairperson: *(Curriculum Committee)*

Department Head: Doug Nicol

Dean: Virginia B. Cooke

PAC Approval in Principle Date:

PAC Final Approval Date: November 28, 2001

GEOG 352

COURSE NAME / NUMBER

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:

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

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR YES X NO _____

METHODS OF OBTAINING PLAR:

Application to the department: Course challenge, presentation/assessment of portfolio.

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

Statistical Problem Solving in Geography, McGrew & Munroe
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%

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") e.g., scale, projection, surveying
3	Building a database 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