

UNIVERSITY COLLEGE OF THE FRASER VALLEY

COURSE INFORMATION

DISCIPLINE/DEPARTMENT: Geography/Economics **IMPLEMENTATION DATE:** 1995/96

Revised: Winter 1997

<u>Geography 452</u>	<u>Field Methods and Techniques</u>	<u>4</u>
SUBJECT/NUMBER OF COURSE	DESCRIPTIVE TITLE	UCFV
CREDITS		

CALENDAR DESCRIPTION: This course will provide students with opportunities to apply the concepts and skills acquired in previous geography courses to specific research problems in the field. Working both in the classroom and in a local area, students will define and formulate research problems, collect and analyse appropriate data, and design and write formal research reports on their findings. Field problems will be drawn from topics in both physical and human geography. Research reports will be expected to reflect an integrated approach to the study of a local region.

RATIONALE: This course further expands our range of core technique offerings in geography. It provides students with an opportunity for advance level field applications and regional analysis/synthesis.

COURSE PREREQUISITES: Geography 352

COURSE COREQUISITES: None

HOURS PER TERM FOR EACH STUDENT	Lecture		hrs		Student Directed Learning		hrs
	Laboratory		hrs		Other - specify:		hrs
	Seminar	22	hrs				hrs
	Field Experience	53	hrs				hrs
				TOTAL		75	HRS

MAXIMUM ENROLMENT: 25

Is transfer credit requested? **9** Yes **:** No

AUTHORIZATION SIGNATURES:

Course Designer(s): Dour Nicol/Sandy Vanderburgh **Chairperson:** D. Gibson
Curriculum Committee

Department Head: David J. Gibson **Dean:** J.D. Tunstall

PAC: Approval in Principle _____ **PAC: Final Approval:** February 25, 1997
(Date) **(Date)**

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SYNONYMOUS COURSES:

(a) replaces N/A
(course #)

(b) cannot take N/A for further credit
(course #)

SUPPLIES/MATERIALS:

Students will be expected to obtain a modest selection of mathematical and cartographic instruments, including a good pocket calculator, drawing instruments for map compilation, clipboard, and other materials relevant for field research. A list of materials and equipment needed, together with suggested suppliers, will be provided early in the course.

TEXTBOOKS, REFERENCES, MATERIALS (List reading resources elsewhere)

Haring, I.L., Lounsbury, J.F., and Frazier, J.W., 1992, Introduction to Scientific Geographic Research, 4th edition, Dubuque, IA: Wm. C. Brown.

Northey, M. and Knight, D.B., 1992, Making Sense in Geography and Environmental Studies: A Student's Guide to Research, Writing and Style, Toronto: University of Toronto Press.

OBJECTIVES:

1. To investigate the role of fieldwork and field research in geography, from both scientific and humanist perspectives, with emphasis on both analysis and synthesis of regional topics.
2. To investigate selected field problems in a given study region and complete associated field reports.
3. To define and describe a major field research problem, suitable for exploring the student's main interest in geography and applicable to the study region selected for the course.
4. To develop an appreciation for the complementary roles of theoretical and applied geography in the explanation and understanding of contemporary geographical research.

METHODS:

Seminar/field experience format. Seminars will introduce topics and field problems, review methods and techniques required and encourage student interaction in problem solving. Field experience will involve students in three weekend field sessions (likely Friday afternoons, all day Saturdays), as well as four-week field camp at the end of the term.

STUDENT EVALUATION PROCEDURE:

On-campus seminar participation	10%	
Field problem assignments or journal		30%
Major field problem report	60%	(evaluated throughout semester)

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A. Field Camp Structure: (several models are workable; this is representative of possibilities)

	January	February	March	April
On-campus seminars (2 hrs.)	4 classes	4 classes	3 classes	-----
Monthly fieldwork (1½ days)	Fri/Sat	Fri/Sat	Fri/Sat	-----
Field camp	-----	-----	-----	Week-10 days

B. Course Topics:

Month 1 Introduction

Week 1	The scope and nature of modern Geography The role of field work in Geography
Week 2	The components of a field research problem
Week 3	Review of field techniques, methods and skills Guidelines for compiling and writing the formal field report Introduction to field applications
Week 4	Review of literature on study area Field reconnaissance of study area
Final weekend	Monthly fieldwork summary and application of above topics

Month II Topics in Physical Geography

Week 1	Introduction to field problems in climatology and geomorphology
Week 2	Multi-scale investigations in weather and climate Field instruments, siting and recording techniques
Week 3	Selected problems in geomorphology: weathering and mass wasting; fluvial processes Field instrumentation. Natural hazard research
Week 4	The biophysical environment and regional analysis Environmental and spatial perspectives
Final weekend	Monthly fieldwork summary and application of above topics

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COURSE CONTENT (contd.)

Month III Topics in Human Geography

- Week 1 Introduction to field problems in Human Geography and Planning
- Week 2 The historical geographical context of the study area
 Archival and in-field investigation of relic landscapes
 Heritage conservation and planning
- Week 3 Investigation of field problems in social and economic geography
 Urban morphology and functional analysis of downtown
 Infrastructure and land-use analysis
 Systematic human geography and regional analysis
 Ecological and spatial perspectives
- Third weekend Fieldwork summary and application of above topics

Month IV Field Course in Chosen Study Area

- Week to 10 days Intensive pursuit of field problems and issues
 Completion of student field assignments
 Completion of major field research reports
 Culminating and synthesizing field seminars on regional perspective

Reading Resources:

- Avery, T.D. and Berlin, G.L., 1992, Fundamentals of Remote Sensing and Air photo Interpretation, 5th edition, New York: Macmillan.
- Campbell, J., 1993, Map Use and Analysis, 2nd edition, Dubuque, IA: Wm. C. Brown.
- Clark, A.H., 1946, "Field Research in Historical Geography," Professional Geographer, 4, 13-23.
- Dickinson, G.C., 1973, Statistical Mapping and the Presentation of Statistics, London: Arnold.
- Dobby, Alan, 1978, Conservation and Planning, London: Hutchinson.
- Gregory, S., 1980, Statistical Methods and the Geographer, 4th edition, London: Longmans.
- Griffiths, J.F., 1966, Applied Climatology: An Introduction, London: Oxford University Press.
- Hammond, R. and McCullagh, P.S., 1978, Quantitative Techniques in Geography, 2nd edition, Oxford: Oxford University Press.

Reading Resources: (contd.)

Hart, J.F. ed., 1968, Field Training in Geography, Commission on College Geography, Technical Paper No. 1, Washington: Association of American Geographers.

Klosterman, R.E., 1990, Community Analysis and Planning Techniques, Savage, Maryland: Rowman and Littlefield.

Monkhouse, F.J. and Wilkinson, H.R., 1971, Maps and Diagrams: Their Compilation and Construction, London: Methuen.

Pratt, S.R., 1959, Field Study in American Geography, Chicago: University of Chicago, Department of Geography, Research Paper No. 61.

Sauer, C.O., 1956, "The Education of a Geographer," Annals, Association of American Geographers, 287-299.

Schaefer, V.J. and Day, J.A., 1981, A Field Guide to the Atmosphere, Boston: Houghton Mifflin.

Shafer, R.J., 1974, A Guide to the Historical Method, revised edition, Homewood, Illinois: Dorsey.

Stoddard, R.H., 1982, Field Techniques and Research Methods in Geography, Dubuque, IA: Kendall/Hunt.

Taylor, P.J., 1977, Quantitative Methods in Geography, Prospect Heights, Illinois: Waveland Press.

Thompson, P., 1978, The Voice of the Past: Oral History, Oxford: Oxford University Press.

Tufte, E.R., 1983, The Visual Display of Quantitative Information, Cheshire, Connecticut: Graphics Press.

White, G.F., 1974, Natural Hazards, New York: Oxford University Press.