

COURSE IMPLEMENTATION DATE:	September 1994
COURSE REVISED IMPLEMENTATION DATE:	September 1995
COURSE TO BE REVIEWED:	September 1999
(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:	<b>MATHEMATICS</b>	
<b>MATH 350</b>		<b>3</b>
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	<b>SURVEY SAMPLING</b>	
COURSE DESCRIPTIVE TITLE		

**CALENDAR DESCRIPTION:**

An introduction to the theory and practice of survey sampling. Students will be expected to draw up a sampling frame, design, conduct, analyse and report a small sample survey.

**PREREQUISITES: Math 106 with B or Math 270.**
**COREQUISITES:**

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

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

**MAXIMUM ENROLLMENT:** \_\_\_\_\_

**EXPECTED FREQUENCY OF COURSE OFFERINGS:** \_\_\_\_\_

<b>WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**AUTHORIZATION SIGNATURES:**

Course Designer(s): _____ Math Curriculum Committee	Chairperson: _____ (Curriculum Committee)
Department Head: _____ Barry Garner	Dean: _____ J.D. Tunstall
PAC Approval in Principle Date: _____	PAC Final Approval Date: November 2, 1994

**COURSE NAME/NUMBER****LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:**

The course is designed to enable students to:

1. Have a basic understanding of the practical requirements necessary to undertake a sample survey;
2. Appreciate the particular mathematical viewpoint of the theory of sampling from a finite population, and the differences this forces upon certain mathematical definitions and procedures;
3. Be acquainted with the standard sampling designs and nomenclature, and the customary formulas used to analyse the results.

**METHODS:****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:]

**TEXT:** TBA

Basic References:

1. Survey sampling. L. Kish (John Wiley & Sons, 1965)
2. Statistical design for research. L. Kish (John Wiley & Sons, 1987)
3. Sampling techniques (third edition). W.G. Cochran (John Wiley & Sons, 1977)

**SUPPLIES / MATERIALS:****STUDENT EVALUATION:**

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

Project	10%
Assignments	20%
In-class tests	30%
Final Examination	40%

**COURSE CONTENT:**

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

Simple random sampling: variances, the finite population correction, the standard error, random sampling with replacement, estimation of a ratio, estimates of totals over subpopulations, comparison between domain means.

Sampling proportions and percentages: estimation of proportions in cluster sampling.

Estimation of sample size: the design effect, deff.

Stratified random sampling: proportional and optimal allocation.

The ratio estimator: variance, bias, coefficient of variation, comparison of two ratios, the regression estimator.

Single-stage cluster sampling: equal sized clusters, intraclass correlation, p.p.s. sampling.

Specific techniques: including two-stage sampling, interpenetrating subsamples, repeated measurement. Practical problems: including non-response.