UNIVERSITY OF WATERLOO WATERLOO ONTARIO

STATISTICS 332

SURVEY SAMPLING

Course Materials

W. H. Cherry Department of Statistics and Actuarial Science

Statistics 332 is a course about the theory and practice of survey sampling. The course is provided for students in the 4-year Bachelor of Mathematics program; it is one of a number of 300- and 400-level specialist courses intended to develop knowledge of, and skills in, the subject of Statistics. Details are given overleaf.

1998-04-20

NOTE: Please be *sure* you are going to take this course this term – there are *no* refunds on these Course Materials.

University of Waterloo STAT 332 – W. H. Cherry

Content overview for STAT 332 (about 32 lectures):

- Part 1: Introductory review of data-based investigating (about 3 lectures).
- Part 2: Equiprobable (and systematic) selecting from an unstratified population (about 21 lectures).
- Part 3: Design and execution of sample surveys (about 4 lectures).
- Part 4: Equiprobable selecting from a stratified population (about 4 lectures).
- Review (if time permits).

This overview is a list of four major *areas* appropriate for a one-term applied course on survey sampling at a 3rd-year level; some flexibility is possible in the *order* in which individual topics within the areas are covered. A tentative schedule of the course topics and activities, for forty-eight 50-minute classes (in one 2-hour and two 1-hour time slots per week), is as follows:

WEEK	Class	COURSE ACTIVITIES 1st hour 2nd hour		Assignment
#1 (May 04)	M, M	Course outline, Part 1		Assignment 1
	W, F	Part 1, Tutorial 1		
#2 (May 11)	M, M	Figures 2.1 and 2.2		
	W, F	Figures 2.3, 2.4 and 2.5		Assignment 2 Assignment 3
#3 (May 18)	M, M	University holiday		
	W, F	Tutorial 2, Figures 2.6-2.12		
#4 (May 25)	M, M	Figures 2.6-2.12, Tutorial 3		
	W, F	Figure 2.13		Assignment 4
#5 (June 01)	M, M	Video, Tutorial 4, Figure 2.14		
	W, F	Tutorial 5, Figure 2.14		
#6 (June 08)	M, M	Figure 2.14	QUIZ #1	7
	W, F	Figure 2.15		<u> </u>
#7 (June 15)	M, M	Figure 2.15, Tutorial 6		Assignment 5
	W, F	Part 3		
#8 (June 22)	M, M	Part 3, Tutorial 7		
	W, F	Part 3, Video, Figure 2.16		
#9 (June 29)	M, M	Tutorial 8	QUIZ #2	
	W, F	University holiday, Figure 2.16		Assignment 6
#10 (July 06)	M, M	Figure 2.16, Tutorial 9		Assignment 7
	W, F	Figure 2.17		
#11 (July 13)	M, M	Tutorial 10, Figure 4.2		Assignment 8
	W, F	Figures 4.2 and 4.3, Tutorial 11		
#12 (July 20)	M, M	Figure 4.3	QUIZ #3	Assignment 9
	W, F	Figures 4.4 and 4.5, Figure 2.19		Assignment 10
#13 (July 27)	M, M	Tutorial 12, Figure 2.19		
	W, F	Tutorial 13		

COPYRIGHT WARNING

As indicated by appropriate annotations, these Course Materials contain copyright materials that the instructor has obtained permission to reprint and distribute to students for teaching purposes at the University of Waterloo. This permission does *not* extend to other users of the Materials without the written permission of the holder(s) of the copyright.