

SPRING 2009

STAT 406/506: SAMPLE DESIGN

Instructor: Arthur Yeh, byeh@bgsu.edu

Classes: M 11:30-12:30@BAA 2003, WF 11:30 - 12:20@BA 104

Office Hours: TR 1:00 - 2:00 p.m. or other times by appointments, BA 344A, 372-8386.

Text: *Sampling: Design and Analysis* (1999) by Sharon L. Lohr (Duxbury Press).

Additional References:

1. *Sampling Techniques* (1977), 3rd Edition, by Cochran, W. G. (John Wiley & Sons).
2. *Elementary Survey Sampling* (2006), 6th Edition, by Scheaffer, R. L., Mendenhall, W. and Ott, R. L.(Duxbury Press).
3. *Sampling* (2002), 2nd Edition, by Thompson, S. K. (Wiley).

Software Package: *Minitab 15 and R* (whenever applied).

Intended Coverage

1. Introduction (Chapter 1)
2. Simple Random Sampling (Chapter 2)
3. Ratio and Regression Estimation (Chapter 3)
4. Stratified Sampling (Chapter 4)
5. Cluster Sampling with Equal Probabilities (Chapter 5)
6. Sampling with Unequal Probabilities (Chapter 6)
7. Complex Surveys (Chapter 7)

8. Nonresponses (Chapters 8*)
9. Variance Estimation in Complex Surveys (Chapter 9*)

*Optional topics, if time allows.

Grading Policy

Assignment	Points
Homework	$20n$
Project	50
Midterm Exam	100
Final Exam	100
	$250 + 20n$

1. The final letter grade will be determined by the total points accumulated over the semester. The grade distribution is based on the overall performance of the class.
2. No late homework assignment will be accepted without prior notification. However, a 25% deduction of the grade will be applied toward the late assignment.
3. Both exams are open book and open notes. The final exam is cumulative.

Attendance

Students are **required** not only to attend class but to participate in classroom discussions. Students who miss classes are responsible for the materials covered in those missed classes.