Syllabus

Course: STAT 3187, Introduction to Sampling, Fall, 2016
Time: TR, 2:20-3:35 pm.
Classroom: Monroe Hall, Room 115

Instructor: Tapan Nayak
Office Address: Rome Hall, Room 760A
Phone: (202) 994-6549
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Office hours: TR 4:00 – 5:00 pm. Additional times are available by appointment.

Course description
This course introduces some basic concepts and tools that are used in the design and analysis of sample surveys. Topics include simple random, stratified, systematic, cluster, and multistage sampling; sample size calculation; calculation of estimates, standard errors and confidence intervals; control of sampling and non-sampling errors.

Course prerequisite: Stat 1051 or equivalent (one stat course).


Learning Focus: Disciplined logical thinking and understanding relevant concepts and arguments.

Learning Approach: Engaged, active learning. Think, write and talk in complete sentences. Describe the context clearly. Arguments should be coherent and make good sense. Take ownership of what you write or say. Avoid mechanical “plug-in numbers in formulas” mode. Before you use a formula, you must explain why that formula is appropriate.

CLASS POLICIES: Students are expected to
1. Attend all classes and engage in class discussion.
2. Review and revise class notes after every class.
3. Bring the textbook and a calculator to every class.
4. Turn off cell phones during classes; absolutely no texting. Laptops can be used only for classwork.

Learning outcomes
As a result of completing this course, students will be able to:
1. Describe and explain key concepts and methods in survey sampling.
2. Design surveys, including sample size calculations.
3. Analyze survey data – calculate estimates, standard errors and confidence intervals.
4. Evaluate and compare survey designs.
Average minimum amount of work expected per week:
Students are expected to spend a minimum of 7.5 hours per week, including 2.5 hours of classroom instruction and a minimum of 5 hours of out-of-class work.

**GRADING:** HW 20%; Quizzes 25%; Midterm Exam 25%; Final Exam 30%.

**Notes:**
1. All quizzes will be unannounced. Quizzes may cover material discussed in the same class. **No make-up quiz will be given;** do not ask for make-up quizzes. Lowest quiz grade will be discarded.
2. Late HW will be accepted only with a valid excuse. HW and the final exam will include teamwork.
3. The midterm exams will be given on **Thurs., Oct. 20, 2016 (tentative).**

**University Policies:**

**University Policy on Religious Holidays**
1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance.
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations.
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities.

**Support for Students Outside the Classroom**

**Disability Support Services (DSS)**
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: [gwired.gwu.edu/dss/](http://gwired.gwu.edu/dss/)

**Mental Health Services 202-994-5300**
The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. [counselingcenter.gwu.edu/](http://counselingcenter.gwu.edu/)

**Academic Integrity Code**
Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For the remainder of the code, see: [studentconduct.gwu.edu/code-academic-integrity](http://studentconduct.gwu.edu/code-academic-integrity)