

ST 715: Theory of Sampling
Fall 2008
<http://courses.ncsu.edu/st715>

Instructor: Dr. Pam Arroway, Department of Statistics

Class time: Section 001 11:45am-1pm, Patterson 208

Contact information:

- ❖ Outside of class time, email is the best way to reach me: pam_arroway@ncsu.edu
- ❖ My office is located in 202 Patterson Hall. (check a [campus map](#) if you need to)
- ❖ I am happy to meet with students at times other than office hours. I post “walk-in hours” on my door each week which are open to students, but change from week to week. These are also available at <http://www.stat.ncsu.edu/people/arroway/admin/walkin.pdf>
- ❖ To set up an appointment, please talk to me before or after class, send an email or *as a last resort* call me at 515-1955. I do not check my voice mail very frequently.

TA: Justin Shows (jhshows@ncsu.edu)

Office Hours: To Be Announced

Required materials: Sampling: Design and Analysis by Sharon Lohr.

Course Description: *Prerequisites: ST 422 and ST 512.* Principles for interpretation and design of sample surveys. Estimator biases, variances and comparative costs. Simple random sample, cluster sample, ratio estimation, stratification, varying probabilities of selection. Multi-stage, systematic and double sampling. Response errors.

Tentative List of Topics:

- Simple Probability Samples
- Ratio and Regression Estimation
- Stratified Sampling
- Cluster Sampling
- Sampling with Unequal Probabilities
- Other selected topics

Homework: Ten or so homework assignments. Homework must be electronically prepared, not handwritten.

Tests: There will be 1 midterm exam which will be closed book, closed notes. Tables will be provided as necessary. You may not use a cell-phone, PDA, laptop or any web-enabled device as a calculator on a test, even if the internet access is disabled.

The exam will be **October 16** in our regular classroom. Make-ups may be available on a VERY limited basis. Notify me at least 48 hours in advance of the test unless it is an emergency. If there is an emergency, notify me as soon as possible after the test. If the absence is a university excused absence, you will be allowed to make up the exam or your final course grade will be adjusted.

Project: A project will be assigned. Details will be given in a separate handout.

Final Exam: The final exam is **Thursday, Dec. 11th at 8am** in our regular classroom. The final exam will be comprehensive. You may not use a cell-phone, PDA, laptop or any web-enabled device as a calculator on a test, even if the internet access is disabled.

Final Course Grade: Final course grades will be calculated based on the following points:

Homework	25% pts
Midterm Exam	25% pts
Project	25% pts
<u>Final exam</u>	<u>25% pts</u>

The following letter-grades are guaranteed (final course grades will be rounded to the nearest integer):

98-100%	A+	78-79%	C+
92-97%	A	72-77%	C
90-91%	A-	70-71%	C-
88-89%	B+	68-69%	D+
82-87%	B	62-67%	D
80-81%	B-	60-61%	D-
		59% or lower	F

I reserve the right to curve grades up at my discretion at the end of the semester.

Students with disabilities: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. http://www.ncsu.edu/provost/offices/affirm_action/dss/.

Academic Integrity: *Cheating will not be tolerated.* You may work together on homework assignments, but simply giving answers to another student or receiving answers from another student is cheating. No collaboration of any sort is allowed during the midterm or the final exam. Using notes, the textbook or another student during a test or exam is cheating. See the university's policy on academic integrity at http://www.ncsu.edu/provost/academic_policies/integrity/reg.htm.