# ST 715 Course Syllabus

## Section 1

### FALL 2014

### 3 Credit Hours

### Course Description

This course is designed to introduce the basic theory and methods of finite population sampling. It prepares the student to design and analyze standard surveys and data collection based on probability sampling.

### Learning Outcomes

1. Students will learn to design sample surveys: simple random samples, stratified random samples, cluster random samples, unequal probability samples.

2. Students will learn to analyze data collected from surveys, illustrated calculations are in SAS and R

### Course Structure

Lecture and discussion

### Instructors

**Dennis Boos** (boos) - Instructor  
Email: boos@stat.ncsu.edu  
Phone: 919-515-1918  
Fax: 919-515-1169  
Office Location: 5222 SAS Hall  
Office Hours: Wednesdays 11-12

**Yiqing Tian** (ytian7) - Teaching Assistant  
Email: ytian7@ncsu.edu  
Phone: none  
Office Location: 1101 SAS Hall  
Office Hours: Tuesdays 10-11, 1101 SAS Hall

### Course Meetings

**Lecture**  
**Days:** MW  
**Time:** 8:45am - 10:00am  
**Campus:** Main  
**Location:** 1108  
*This meeting is required.*

### Course Materials

#### Textbooks

**Sampling: Design and Analysis** - Sharon Lohr  
**Edition:** second  
**ISBN:** ISBN-10: 0495105279  
**Cost:** $161.28 used  
*This textbook is required.*

#### Expenses
North Carolina State University Course Syllabus
ST 715 - 1 - Theory Of Sampling Applied To Survey Design

None.

Materials
None.

Requisites and Restrictions

Prerequisites
ST 512

Co-requisites
None.

Restrictions
None.

General Education Program (GEP) Information

GEP Category
This course does not fulfill a General Education Program category.

GEP Co-requisites
This course does not fulfill a General Education Program co-requisite.

Transportation
This course will not require students to provide their own transportation. Non-scheduled class time for field trips or out-of-class activities is NOT required for this class.

Safety & Risk Assumptions
None.

Grading

Grade Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Mid-Term</td>
<td>35%</td>
<td></td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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</tbody>
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Letter Grades
This Course uses the Following (Non-Standard) Letter Grading

- A+
- A
- A-
- B+
- B
- B-
- C+
- C
- C-
- D
- F
Requirements for Credit-Only (S/U) Grading
Performance in research, seminar and independent study types of courses (6xx and 8xx) is evaluated as either “S” (Satisfactory) or “U” (Unsatisfactory), and these grades are not used in computing the grade point average. For credit only courses (S/U) the requirements necessary to obtain the grade of “S” must be clearly outlined.

Requirements for Auditors (AU)
Information about and requirements for auditing a course can be found at http://policies.ncsu.edu/regulation/reg-02-20-04.
At least a 50% grade on homework

Policies on Incomplete Grades
If an extended deadline is not authorized by the Graduate School, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) by the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at http://policies.ncsu.edu/regulation/reg-02-50-03. Additional information relative to incomplete grades for graduate students can be found in the Graduate Administrative Handbook in Section 3.18.F at http://www.fis.ncsu.edu/grad_publicns/handbook/

Late Assignments
As a rule, I do not accept late homework, but exceptions can be negotiated.

Attendance Policy
For complete attendance and excused absence policies, please see http://policies.ncsu.edu/regulation/reg-02-20-03

Absences Policy
Attendance is expected

Makeup Work Policy
None.

Additional Excuses Policy
None.

Academic Integrity

Academic Integrity
Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at http://policies.ncsu.edu/policy/pol-11-35-01

Academic Honesty
See http://policies.ncsu.edu/policy/pol-11-35-01 for a detailed explanation of academic honesty.

 Honor Pledge
Your signature on any test or assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

Electronically-Hosted Course Components
There are no electronically-hosted components for this course.

Accommodations for Disabilities
Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Services Office.
Non-Discrimination Policy
NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at http://policies.ncsu.edu/policy/pol-04-25-05 or http://www.ncsu.edu/equal_op/. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

Course Schedule
NOTE: The course schedule is subject to change.

Lecture MW 8:45am - 10:00am — Day 1 — 08/20/2014 - 08/20/2014
Introduction