

# STA 4222 Sample Survey Design

## Fall 2019 Syllabus

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**Instructor:** Stephanie Stine

**Office:** 117B Griffin Floyd Hall

**Phone Number:** (352) 273-2975

**Office Hours:** W 1:00pm – 2:30pm, R 9:30am – 11:00am, or by appointment

**email:** [s.stine@ufl.edu](mailto:s.stine@ufl.edu)

**Teaching Assistant:** Ruoyang Zhang, **email:** [njiandan@ufl.edu](mailto:njiandan@ufl.edu)

**Office Hours:** TBA

**Class Times:** 5<sup>th</sup> Period (11:45am – 12:35pm): MWF in FLO 0100

**Course Website:** <https://elearning.ufl.edu/>

### Course Objective

The objective of this course is twofold: firstly to learn how sample surveys are conducted as well as understanding the most common designs, and secondly how to analyze data collected from surveys.

Weeks	Topics Covered (tentative and subject to change)
1-3	Introduction, Selection Bias, Measurement Error, Questionnaire Design, Sampling and Nonsampling Errors, Simple Probability Samples, Simple Random Sampling.
4-5	Stratified Sampling, <b>Exam 1.</b>
6-8	Ratio and Regression Estimation, Cluster Sampling, Systematic Sampling
9-10	Sampling with Unequal Probabilities, <b>Exam 2.</b>
11-12	Complex Surveys
13-16	Nonresponse, <b>Exam 3.</b>

### Required Supplies

- Required Textbook: *Sampling Design and Analysis* by Sharon L. Lohr, Second Edition
  - While not required, I will also use the following textbooks as additional references.
    - *Sampling* by Steven K. Thompson, Third Edition
    - *Sampling Techniques* by William G. Cochran, Third Edition
- Scientific or graphing calculator

## Computer Software

During the course it may be necessary to analyze the data using software. This will most likely be done through R. This is free software that you can download from <https://www.r-project.org/>.

## Class Expectations

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

In addition, I expect you to:

- Attend all lectures, arriving on time with cell phones switched off or silent.
  - If you miss class for any reason it is your responsibility to get the notes and information you might have missed.
- Ask questions if you do not understand something.
- Inform me of a problem in a timely manner.

## Grading Structure

Current UF grading policies for assigning grade points can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

For this course the methods by which you will be evaluated and your grade determined are given below.

Assessments	% of Grade
3 Exams	75% (25% per exam)
Homework	25%

## Grading Scale

Letter Grade	Grade Points	Percentage of Points Needed
A	4.00	90.0 to 100%
A-	3.67	88.5 to < 90%
B+	3.33	84.5 to < 88.5%
B	3.00	80 to < 84.5%
B-	2.67	78.5 to < 80%
C+	2.33	74.5 to < 78.5%
C	2.00	67.5 to < 74.5%
D	1.00	60 to < 67.5%
E	0.00	Below 60%

## Exams

There will be a total of three exams. You will need to bring your own calculator (you cannot share one with another student) and a pencil. If you are unable to take an exam at the scheduled time, it is your responsibility to get in touch with me one week prior to the exam for arrangements to be made for a makeup. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite under such extenuating circumstances. In case of illness, you must notify me on the day of the exam by 5pm and have a medical excuse. Cell phones must be switched off and out of sight in your backpack during the exam. The exam schedule is below.

Exam	Exam Dates
Exam 1	In Class: Friday September 29 <sup>th</sup>
Exam 2	In Class: Friday October 25 <sup>th</sup>
Exam 3	In Class: Wednesday December 4 <sup>th</sup>

## Homework

Homework will be assigned on a Friday and due at the start of class the following Friday. There will be approximately eleven homework assignments. No late homework will be accepted. While you can discuss the problems with other students, the solutions you submit must be your own, written by you. Copying another student's homework is considered cheating and the minimal punishment will be to receive a grade of 0 on the assignment.

## Instructor Course/Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## **Course Policies**

### **Grading**

Grading will be changed only when an error has been made; negotiation is not appropriate.

### **Incomplete**

Incompletes are only assigned when extraordinary circumstances, arising after more than 2/3rds of the course has been completed, prevent the student from completing the course requirements. Having a failing grade in the course is not a valid reason for requesting an Incomplete.

### **Academic Dishonesty**

University's Honesty Policy: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the STA2023 Course Coordinator. Please note that the minimum disciplinary action would be to receive a grade of zero on the assignment. If there have been more than one case of disciplinary actions filed with the Dean of Students Office, consequences may be more severe.

### **Accommodations for Students with Disabilities**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **Privacy Policies**

Student records are confidential. Only information designated "UF directory information" may be released without your written consent. UF views each student as the primary contact for all communication. If your parents contact me about your grade, attendance or other information that is not "UF directory information" I will ask them to contact you.

## **Campus Resources**

### **Health and Wellness**

*U Matter, We Care:* If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.

*Counseling and Wellness Center:* <https://counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

*Sexual Assault Recovery Services (SARS):* Student Health Care Center, 392-1161.

*University Police Department:* 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

### **Academic Resources**

*E-learning technical support,* 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

*Career Connections Center,* Reitz Union, 392-1601. Career assistance and counseling. <https://career.ufl.edu/>

*Library Support,* <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

*Teaching Center,* Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>

*Writing Studio,* 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>

*Student Complaints On-Campus:* <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>