Florida State University Department of Statistics Fall 2018

Xin Sui

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> STA 1013/0007 Statistics Through Example TR 5:15 PM-6:30 PM OSB 0108

Course Description

Prerequisite: None.

Credit Hours: 3

This course provides students with a background in applied statistical reasoning. Fundamental topics are covered including graphical and numerical description of data, understanding randomness, central tendency, correlation versus causation, line of best fit, estimation of proportions, and statistical testing.

Statistical thinking, relevant ideas, themes, and concepts are emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting data, organizing it, summarizing it, and drawing conclusions from it.

Course Objectives

This course has been approved to meet FSU's Liberal Studies Quantitative and Logical Thinking requirements and is designed to help you become a critical analyst of quantitative and logical claims.

In order to fulfill the State of Florida's College mathematics and computation requirement the student must earn a "C-" or better in the course.

By the end of the course, students will demonstrate the ability to:

 $(1) \ Select \ and \ apply \ appropriate \ methods \ (i.e., \ mathematical, \ statistical, \ logical, \ and/or$

computational models or principles) to solve real-world problems.

(2) Use a variety of forms to represent problems and their solutions.

The above two competencies will be assessed in the Liberal Studies Quantitative Assessment, which includes a written summary of results.

(3) Apply sound concepts of sample selection and experimental design in producing data.

(4) Use statistical thinking in the context of work processes, academic endeavors, and everyday life.

(5) Describe how inferential statistical methods are used to make valid judgments based on the data.

(6) Evaluate the validity of statistical results with skepticism based on sensible considerations.

Required materials:

Calculator: TI-84 Plus or equivalent.

Textbook: There is no required textbook. If you wish to read one, the following book is recommended: Statistical Reasoning for everyday life, 4th ed. by Bennet Briggs Triola. Class notes and lecture slides will be available on canvas website before the lecture.

Final exam date, time, location:

Dec. 13th, Thursday 5:30 - 7:30 p.m. in OSB 0108

Grade structure:

Exams (70%). There will be 3 exams across the semester, including the final exam. The one that the student did best consists of 30% of the grade, while the other two consists of 20% each. Details on the exams will be announced later.

Homework (15%). Homeworks will be given on a weekly basis. The students are expected to

finish them individually. Each homework will be weighted equally.

Attendance (10%). Attendance will be checked at the beginning of every class. Each student is allowed to make up to 3 unexcused absences without affecting the grade.

Liberal Studies Quantitative Assessment (5%). The LSQA will be given in week 7-8. Details will be announced before the assessment.

Participation (5%). The students are expected to show good classroom manners and participate in classroom activities.

Letter	Num.grade	Letter	Num.grade	Letter	Num.grade	Letter	Num.grade	Letter	Num.
									grade
FSU does not award A+		B+	87 – 89.9	C+	77 – 79.9	D+	67 – 69.9		
А	≥93	В	83 - 86.9	С	73 – 76.9	D	63 – 66.9	F	≤59.9
A-	90 – 92.9	B-	80 - 82.9	C-	70 – 72.9	D-	60 – 62.9		

The conversion from numeric grade to letter grade is as follows:

Grading appeal policy:

If you have any question on the grading of exams or homeworks, please contact me within 1 week of receiving the grade to make an appointment.

Penalties for missed assessments:

Any missed assessments (exam, homework and LSQA) will result in a score of 0, however a make-up will be available for full credit (for excused absences) or a 20% penalty (for unexcused absences).

Excused absence make-up policy:

Requests for excused absences (see university attendance policy for the definition of excuses absences) must be sent to the instructor 48 hours prior to the deadline (beginning of the test or the deadline for homeworks) with proof unless it is an emergency. The instructor reserves the right to deny any requests that do not have sufficient supplementary materials. If an unfortunate emergency happens, please stay safe and contact me at your convenience.

Unexcused absence make-up policy:

Homeworks will be accepted 48 hours after the deadline.

Requests for make-up exams, other than the final exam, will be accepted 7 days after the exam (including the day of the exam).

If you missed the final exam, please contact me as soon as possible.

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-polic y.)

Americans With Disabilities Act

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/