Course modality: Face-to-Face/F2F (in-person in a classroom)
You are EXPECTED TO WEAR a face-covering or mask at all times.

Instructor: SungHee Park
Instructor email: sp17s@my.fsu.edu
Time and Location: M/We/Fr 8:00 - 8:50 am, TUL_B001
Office Hours: Mon. 10:30 - 11:30 AM and Tues. 1:00 - 2:00 PM, or by appointment
Office: OSB 201 E [Location link]
Course Website: Course website is available through canvas: canvas.fsu.edu

Course Description

- Prerequisites: 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 for STA 1013, 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**

- **Textbook:** No book is required.

- **Class notes:** Class notes will be posted on Canvas. You should either print them before class or have them available on a computer. I will post it before the class.

- **Calculator:** Scientific or Graphing Calculator (Preferably TI-84 Plus or equivalent is necessary)

**Course Topics**

- Terminology/ Initial ideas

- Sampling: simple random sample, systematic, stratified, cluster, convenience

- Visualization of data: histograms, stem plots, bar charts, pie charts

- Summary Statistics

- Empirical Rule

- Normal Distribution

- Central Limit Theorem

- Probability: random process, four rules, probability models, addition rule for mutually exclusive events

- Random variable

- One-sample mean: obtain and interpret z-intervals, carry out and interpret results of z-test, interpret p-value
• One-proportion: z-intervals and z-tests
• Correlation
• Simple Linear Regression

Exam Schedule

• Quiz 1: Friday, Sep. 10, TUL_B001
• Quiz 2: Friday, Oct. 01, TUL_B001
• LSQA: Friday, Oct. 15, TUL_B001
• Quiz 3: Friday, Nov. 05, TUL_B001
• Quiz 4: Friday, Nov. 19, TUL_B001
• Final exam: Wednesday, Dec. 08, 7:30 am - 9:30 am, TUL_B001

Grade Composition

• In-Class Quizzes: $15 \times 3 = 45\%$
• Final Exam: 35 \%
• Attendance: 10 \%
• LSQA: 10 \%

STA 1013 has been certified as meeting FSU’s Liberal Studies requirements in the area of Quantitative and Logical Claims. In order to maintain that certification, we must administer the appropriate Liberal Studies Quantitative Assessment (LSQA). It is a common assessment (not the final exam).

Your lowest grade of quizzes will be dropped at the end of the semester, but LSQA can not be dropped. So if you missed LSQA strongly recommend you to make it up.
Grading

Grade cutoffs will be established at the end of the course, but will not be stricter than the following cutoffs.

<table>
<thead>
<tr>
<th>Average</th>
<th>Letter</th>
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<tbody>
<tr>
<td>\leq 94%</td>
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<tr>
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<tr>
<td>\leq 83%</td>
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<tr>
<td>\leq 80%</td>
<td>B-</td>
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<tr>
<td>\leq 77%</td>
<td>C+</td>
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<tr>
<td>\leq 73%</td>
<td>C</td>
</tr>
<tr>
<td>\leq 70%</td>
<td>C-</td>
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<tr>
<td>\leq 67%</td>
<td>D+</td>
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<tr>
<td>\leq 63%</td>
<td>D</td>
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<td>\leq 60%</td>
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Missing Quizzes

There will be no late work allowed in this course. Also, Make-ups will not be given unless the student has an official document for an excused absence; see the University Attendance Policy for more information. No documentation will be accepted any later than one week after the absence.

Email

- Please check your @my.fsu.edu email every day.
- Always include your full name, course code and section number when you email us.
- Send test-related questions at least 24 hours before the test is due to begin
- Be aware that email sent from outside the FSU domain may not get through to us, so if you email us and you don’t get a response within two days, please try to meet us in person before class, or after class, or during office hours.
Attendance, Absence and Drop/Withdrawal

- First day attendance is mandatory per university regulations.
- Drop/Withdrawal deadlines are given in the University's academic calendar at the following hyperlink.
  Fall 2021 Academic Calendar
  (Last day to drop a course without receiving a grade is October 8th.)

For Our Health

The Florida State University expects all the students, faculty and staff to wear a face-covering or mask in the building on campus at all times. Please click the following two hyperlinks to get to the related information.

- State University System of Florida Health Policies for the 2021-22 Academic Year
- Message from the University Administration on the Fall Semester Expectations for Campus

Tentative Pacing Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Aug. 23 - Aug. 27</td>
<td><strong>First Day Attendance</strong></td>
<td>Terminology</td>
<td>Terminology</td>
</tr>
<tr>
<td>Week 2</td>
<td>Aug. 30 - Sep. 03</td>
<td>Sampling</td>
<td>Sampling</td>
<td>Sampling</td>
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<tr>
<td>Week 3</td>
<td>Sep. 06 - Sep. 10</td>
<td><strong>Labor Day</strong></td>
<td>Visualization</td>
<td>Quiz 1</td>
</tr>
<tr>
<td>Week 4</td>
<td>Sep. 13 - Sep. 17</td>
<td>Visualization</td>
<td>Visualization</td>
<td>Summary Statistics</td>
</tr>
<tr>
<td>Week 5</td>
<td>Sep. 20 - Sep. 24</td>
<td>Summary Statistics</td>
<td>Summary Statistics</td>
<td>Summary Statistics</td>
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<tr>
<td>Week 6</td>
<td>Sep. 27 - Oct. 01</td>
<td>Empirical Rule</td>
<td>Normal Distribution</td>
<td>Quiz 2</td>
</tr>
<tr>
<td>Week 7</td>
<td>Oct. 04 - Oct. 08</td>
<td>Normal Distribution</td>
<td>Normal Distribution</td>
<td>Central Limit Theorem</td>
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<tr>
<td>Week 8</td>
<td>Oct. 11 - Oct. 15</td>
<td>Central Limit Theorem</td>
<td>Preparation for LSQA</td>
<td>LSQA</td>
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<tr>
<td>Week 9</td>
<td>Oct. 18 -Oct. 22</td>
<td>Central Limit Theorem</td>
<td>Probability</td>
<td><strong>Homecoming</strong></td>
</tr>
<tr>
<td>Week 10</td>
<td>Oct. 25 - Oct. 29</td>
<td>Probability</td>
<td>Probability</td>
<td>Random Variable</td>
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<tr>
<td>Week 11</td>
<td>Nov. 01 -Nov. 05</td>
<td>Random Variable</td>
<td>Random Variable</td>
<td>Quiz 3</td>
</tr>
<tr>
<td>Week 12</td>
<td>Nov. 08 -Nov. 12</td>
<td>One-sample mean</td>
<td>One-sample mean</td>
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<td>Week 13</td>
<td>Nov. 15 -Nov. 19</td>
<td>One-sample mean</td>
<td>Correlation</td>
<td>Quiz 4</td>
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<tr>
<td>Week 14</td>
<td>Nov. 22 -Nov. 26</td>
<td>Correlation</td>
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<td>Thanksgiving Holiday</td>
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<tr>
<td>Week 15</td>
<td>Nov. 29 -Dec. 03</td>
<td>Simple Linear Regression</td>
<td>Simple Linear Regression</td>
<td>Simple Linear Regression</td>
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Course Policies

Make-Up Policy  Make-ups are for being unable to submit an assessment during its availability. Make-ups will not be given due to undesired performance on an assessment. If you are unable to submit an assessment during its availability, then please email me immediately. You will have until Friday of the following week to make up the missed assessment unless you have a documented reason for being unable to do so. You will be allowed three make-ups without providing documentation, but you must provide documentation for all further make-up opportunities. If you do not complete a make-up according to the above guidelines, then the missed assessment will receive a grade of zero.

No make-ups will be given after the Last Day of Class. If you are unable to submit the Final Exam during its availability, then you must email me immediately.

Grades  Assessments that are not submitted will receive a grade of zero. When a make-up is submitted, the zero will be replaced with the earned grade.

Email & Communication  Please turn on the course notifications in Canvas by going to “Account/Notifications/” and checking the “Notify me right away” option for all of items under “Course Activities.” You may expect a response to your email within two work days (one work day in Summer).

Sexual Misconduct and Title IX Reporting  As an instructor, I am obliged to report all instances of sexual misconduct that I become aware of to the University’s Title IX Director; I cannot hold such information confidential. If you would like to discuss your situation in confidence, you may contact the Victim Advocate Program (https://dos.fsu.edu/vap/), Counseling & Psychological Services (https://counseling.fsu.edu/), the Employee Assistance Program (https://eap.fsu.edu/), University Health Services (https://uhhs.fsu.edu/), or pastoral counselors.

Final Exam Rescheduling Policy  You may not take the final exam before final exams week. Individual students who need to reschedule the final exam for a different time during final exams week will need to

1. talk to me about it first and get my permission to reschedule,

2. fill out the “Request to Reschedule Final Examination” form at
https://artsandsciences.fsu.edu/sites/g/files/upcbmu321/files/2020-09/Request_to_Reschedule_revised.pdf
and get it approved by the Dean of Arts and Sciences office, and

3. let me have the approved form by the last day of classes.

If you experience a documented emergency that prevents you from observing the above deadline, contact me as soon as you are able to, and we will take it from there.
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://fsa.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy)

Americans with Disabilities Act  Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic sRoyalBluedards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

1. must register with and provide documentation to the Office of Accessibility Services (OAS);

2. must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,

3. should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services 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

Office of Accessibility Services
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
oas@fsu.edu
https://dsst.fsu.edu/oas/
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.

Confidential Campus Resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

<table>
<thead>
<tr>
<th>Victim Advocate Program</th>
<th>Counseling and Psychological Services</th>
<th>University Health Services</th>
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</thead>
<tbody>
<tr>
<td>University Center A, Rm. 4100</td>
<td>Askew Student Life Center, 2nd floor</td>
<td>Health and Wellness Center</td>
</tr>
<tr>
<td>(850) 644-7161</td>
<td>942 Learning Way</td>
<td>(850) 644-6230</td>
</tr>
<tr>
<td>Available 24/7/365</td>
<td>(850) 644-8255</td>
<td><a href="https://uhs.fsu.edu/">https://uhs.fsu.edu/</a></td>
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<tr>
<td>Office Hours: M-F 8-5</td>
<td><a href="https://counseling.fsu.edu/">https://counseling.fsu.edu/</a></td>
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<tr>
<td><a href="https://dsst.fsu.edu/vap">https://dsst.fsu.edu/vap</a></td>
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