STA 2023: Introduction to Statistics

Instructor: Megan (Meece) Mocko
117B Griffin Floyd Hall
352-273-2975
Office Hours: 1 to 3pm MWF

Class Time: MTWRF 2nd period (9:30-10:45am)

Email: mmeece@stat.ufl.edu

Tutoring lab: Griffin Floyd Hall Room 104

E-Learning (formerly known as webct):
http://lss.at.ufl.edu/

Tutoring Room Hours:
M through F: 11 to 4pm
W: 11 to 5pm

Course Objective: Graphical and numerical descriptive measures, probability, conditional probability, probability laws, discrete random variables, binomial and normal random variables, sampling distributions, central limit theorem, large and small sample confidence intervals for parameters associated with a single population and for comparison of two populations. Hypothesis testing for large and small samples.

THIS COURSE SATISFIES GENERAL EDUCATION CREDITS IN THE MATHEMATICAL SCIENCES. STUDENTS LEARN HOW TO SUMMARIZE DATA AND HOW TO MAKE APPROPRIATE DECISIONS BASED ON DATA.

Course Website with Current Announcements:
www.stat.ufl.edu/~mmeece/sta2023summer.html

Required Supplies:

- **Lab Workbook** for Statistics: The Art and Science of Learning from Data
- **Statistics: The Art and Science of Learning from Data** Statistics: The Art and Science of Learning from Data by Alan Agresti and Christine Franklin 1st edition, Pearson, 2007. You may purchase the full book or the Volume I portion. If you plan on taking STA 3024, you would be better off purchasing the full book. If you are not planning on taking STA 3024, it is cheaper to just purchase Volume I. *(Note: Some of the USED Volume I textbooks have incorrect tables on the inside front and back covers. You can download the corrected covers from the homepage of E-Learning.)*
- **Scientific Calculator** that has some basic statistical functions: mean and standard deviation. Many inexpensive calculators (around $10 to $15) have these functions; check the manual or look for the following symbols: x-bar and either s or σ. All of the more expensive graphing calculator have them as well, but it is not necessary to buy one of them for this class.
- **H-ITT radio remote** which can be purchased at any of the Gainesville bookstores.

Suggested:

- Minitab computer program: We will be using Minitab output in class. You may want to use the program to help you work out homework problems. Minitab can be found on the CIRCA lab computers, purchased online for $99.99 new at www.e-academy.com/minitab, downloaded for free for 30 days at www.e-academy.com/minitab, or rent a copy of the software for a semester for $29.99 at www.e-academy.com/minitab.
My expectations of you:

- Arrive on time
- Review your notes after each class
- Ask questions if you do not understand something
- Make it your goal to understand everything that we do
- Inform the instructor of a problem in a timely manner

Grading Scale: The exam grading scale will be the following. A: 90-100% of total points, B+: 88-89%, B: 80-88%, C+: 78-79, C: 70-78%, D: 60-69%, and E: 59 and lower. The grading scale is not fixed. If the overall class performance warrants a curve I will give one, but A CURVE WILL NOT BE GUARANTEED. It is the policy of the department of statistics not to give grades of D+.

Assessment: Since the term is only six weeks long, THERE WILL BE A QUIZ AND/OR EXAM EVERY WEEK. There will be a total of 2 exams and 4 quizzes.

Quizzes: The quizzes will be online through E-Learning (formerly Webct). The dates listed below for the quizzes are the tentative dates that they will be posted on the E-Learning website. On the website (and in class), it will be announced when each quiz will be available, and for how long. You will be allowed three attempts for each quiz - each randomly generated so that the questions will not be identical. Each quiz is worth 20 points. Altogether, the quizzes will count 80 points, as much as one exam. Hopefully, they will serve the purpose of improving your grade, as well as be an important tool in learning the material for the course.

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Start Date</th>
<th>Start Time</th>
<th>End Date</th>
<th>End Time</th>
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<tbody>
<tr>
<td>1</td>
<td>Fri. May 16th</td>
<td>11 am</td>
<td>Tues. May 20th</td>
<td>7 pm</td>
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<td>2</td>
<td>Wed. May 21st</td>
<td>11 am</td>
<td>Fri., May 23rd</td>
<td>7 pm</td>
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<td>3</td>
<td>Mon. June 2nd</td>
<td>8am</td>
<td>Wed. June 4th</td>
<td>7 pm</td>
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<tr>
<td>4</td>
<td>Mon. June 16th</td>
<td>8 am</td>
<td>Wed. June 18th</td>
<td>7 pm</td>
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Course Participation: We will be using H~ITT remotes to answer questions in class. These questions can happen at anytime: the beginning, middle or end of class. For each question answered correctly, you will get 2 points. For each question answered incorrectly, you will get 1 point. You will not get any credit for questions that you did not answer (no makeups, no excuses). The lowest ten percent of questions will be dropped. These drops are for any reason that your answers are not recorded including your batteries are dead, you didn’t log in properly, you were not there. You will need to register your remote at http://www.phys.ufl.edu/~hitt/ . Choose the course, STA 2023, and follow the rest of the instructions. Print out and read the guide “Using the H~ITT RF Remote”. Should you lose a remote and have to purchase a new remote, you will need to go back to this website to register your new remote number. We will start practicing with the remotes in class on Tuesday, May 13th. After your answer has been received, the remote number appears on screen. It is your responsibility to find your remote number on screen and to make sure that it appears after each question. You will also receive an email
after class that states how many questions there was that day and how many questions you got right. If you are having trouble using your remote, ask for help immediately. Treat your remote with care. Do not smash it, throw it, step on it, flush it, etc. I recommend putting the remote in a plastic bag and bringing an extra set of batteries with you to class. Bringing a friend’s remote to class is a violation of the honor code and will not be tolerated.

**Labs:** There will be one lab during the semester. The class will be divided into 6 groups. Between the period of June 5th and June 12th, each of those groups will meet one time in the lab and three times in class. Only those with legitimate with valid and well-documented excuses will be allowed to makeup the lab. If you believe that your case warrants a makeup, please contact torazgat@stat.ufl.edu.

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<td>Groups 1 through 3</td>
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<td>Groups 4 through 6</td>
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<tr>
<th>Attend Lab</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
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<tbody>
<tr>
<td>OFF</td>
<td>Group 5 &amp; 6</td>
<td>Group 4 &amp; 6</td>
<td>Group 4 &amp; 5</td>
<td>Group 2 &amp; 3</td>
<td>Group 1 and 3</td>
<td>Group 1 and 2</td>
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**Exams:** The exams will be multiple-choice and will tentatively be given in class on the dates listed below and will be worth 100 points each. It is your responsibility to bring calculator, pencil and a photo ID. In case of conflict or illness, if a student is unable to take an exam at the scheduled time, they must get in touch with the lecturer, Megan Mocko, a week prior to the exam for any 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, the instructor must be notified on the day of the exam by 5pm and must receive a medical excuse. A grade of zero is the minimum punishment of any type of dishonesty on an exam. You can only use functions on the graphing calculator that are native to the calculator. Typing in notes into the calculator is considered cheating and a grade of zero on the exam is the minimum penalty for such an occurrence.

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<thead>
<tr>
<th>Exam 1</th>
<th>Material Covered</th>
<th>Dates</th>
<th>Possible Points</th>
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<tr>
<td></td>
<td>Handbook: Pgs 1 – 49</td>
<td>Wed. May 28th (in class)</td>
<td>100</td>
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<td>Textbook: Ch. 1 – Ch. 6 Sec. 3</td>
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<th>Exam 2</th>
<th>Material Covered</th>
<th>Dates</th>
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<tr>
<td></td>
<td>Handbook: Pages 50 – 123</td>
<td>Fri. June 20th (in class)</td>
<td>100</td>
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<td>Textbook: Ch. 6 Sec 4 – Ch. 9 Sec. 5</td>
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| Quizzes | 80 |
| Class Participation | 20 |
| Lab | 20 |

| Total | 320 |
Homework: A list of suggested homework problems are listed on webct. Homework will not be collected. It is my belief that doing the homework problems and asking any questions you may have about them is essential for performing well in this course. You cannot learn statistics if you do not practice statistics. If you do not understand a homework problem or have any questions about the material, please visit the tutoring lab. Answers to the odd-numbered problems are available in the back of the text. An Instructor’s Guide with Solutions to all homework problems is available on Reserve at the Marston Science Library and in the Tutoring Room.

Getting Help:
Students should be able to get their statistical questions answered in the following ways:

- before, after or in class, from your instructor
- in the tutoring lab in Griffin Floyd Room 104
- during office hours from the instructor
- for many classes, not just statistics, at the tutoring lab in the Basement of Broward Hall – a schedule of their hours can be obtained by calling 392-2010 or by accessing www.teachingcenter.ufl.edu
- as a last resort, by getting (and paying) a private tutor. A list of private tutors from the Statistics Department can be obtained from the secretary in Griffin-Floyd 102.

Hurricane Policies
The summer semester overlaps with the hurricane season.

- If a hurricane approaches the coast of Florida, but classes are not canceled at the University of Florida. The course will continue as scheduled. You are required to keep up with the lectures and quizzes. If you believe that your situation requires special consideration, please send an email or call the instructor immediately.

- If a hurricane approaches the coast of Florida, and classes at the University of Florida are canceled, the lectures and quizzes will be suspended until the university re-opens. The University will announce this closure on the University of Florida homepage. Any announcements about the course will be posted at the course website: www.stat.ufl.edu/~mmeece/sta2023summer.html.

Course Policies
Email: Email would be answered within one working day or sooner. I do not answer email in the middle of the night nor on the weekends. However, please refer to the class syllabus and the class website to try and find the answers for yourself. Questions regarding the material covered in class, and homework problems should be asked in person. Statistical questions often require formulas or pictures, which can make it very hard to communicate by email.
**Attendance:** Exams will be based on the assigned homework problems and the examples that are done in the class. If you miss class for any reason it is your responsibility to get any notes and information you might have missed from another student. Additionally, you should turn your cellular phones off and refrain from eating, drinking, reading newspapers, doing homework for other classes, and excessive talking. Laptops should not be brought to class.

**Instructor’s Honor Code:** We the members of the University of Florida community pledge to hold ourselves and our peers to the highest standards of honesty and integrity. We adhere to the University of Florida rules and guidelines for handling instances of academic dishonesty. Please refer to the Office for Students Services for detailed information about the current policies.

**Grading:** Grading will be changed only when an error has been made; negotiation is not appropriate. **There is no appeal process.**

**Incomplete:** Incompletes are only assigned when extraordinary circumstances, arising after the date for dropping the course, prevent the student from completing the course requirements. Having a failing grade in the course is not a valid reason for requesting an Incomplete.

**Accommodations for students with disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the students who must then provide this documentation to the Instructor when requesting accommodation.

**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.