COURSE DESCRIPTION
This is an introductory course to statistics. The purpose of this course is to introduce statistical methods of describing, summarizing, comparing, and interpreting data to include probability distributions, sampling, estimation, confidence intervals, and hypothesis testing.

LEARNING OBJECTIVES FOR THE COURSE
After completing Math 115, students should have a basic understanding of proper statistical techniques. These techniques include ways for setting up a well-defined study, methods for organizing and displaying data, and how to summarize data by using descriptive statistics. In later chapters, students will learn the basic concepts of probability, and probability distributions. In addition, students will learn to estimate population parameters (mean and proportions) using confidence intervals and evaluate a claim about a population using statistical hypothesis testing.

REQUIRED COURSEWARE
Online Option: Students can also purchase access online through mystatlab.com. Students will have two purchase options online: (1) Life of edition access or (2) One semester (18-weeks) access. Students should keep in mind that if they purchase one semester access and have to repeat the course, they will have to purchase access again!
**Students will have access to an ebook based on A First Course in Statistics, 12th edition by McClave/Sincich.

CALCULATOR
You will be provided a TI-30XS Multiview calculator for your tests. NO OTHER calculator may be used during testing. However, student will need to have their own scientific calculator during class and for homework and quizzes. Students that plan on purchasing a calculator are advised to purchase a TI-30XS Multiview, in order to become familiar with the calculator before testing, but this is not a requirement.

ATTENDANCE POLICY
Attendance is mandatory and will be taken through the Automated Attendance System in the room. You may scan from 10 minutes prior to class until 10 minutes after class begins. It is the student’s responsibility to make sure his/her attendance record is correct. There is no such thing as an “excused” absence in this class, other than having to miss class for an official University function. Students are allowed five (5) absences. One percentage point (1%) will be deducted from the student’s final course average for each absence above the limit.
Attendance (and identity) fraud is a form of academic dishonesty (and it is illegal); students engaging in fraud will fail the class and will be reported to the university for further disciplinary action. If you sign in and leave, you will fail the class and you will be cited for academic fraud. Random attendance checks will be made in the form of roll call, sign in sheets, or pop quizzes at some point in class. If a student has been scanned into class using his or her student identification card but is not present for random attendance checks, then that student will be found to have fraudulently attended class. Note that students who do not attend class within the first two weeks of the semester may be dropped from the roll.

ELECTRONIC DEVICES
All electronic equipment should be turned off during class unless given permission by the instructor. This means cell phones, smartwatches, laptops, ipods, ipads, etc. should be silenced and put away. The instructor may dismiss you from class if you are observed using any such electronics.
MATH 115 GRADING SCALE

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Necessary for Grade</th>
<th>Grade</th>
<th>Percentage Necessary for Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
<td>C+</td>
<td>76% - 77.99%</td>
</tr>
<tr>
<td>A-</td>
<td>88% - 89.99%</td>
<td>C</td>
<td>70% - 75.99%</td>
</tr>
<tr>
<td>B+</td>
<td>86% - 87.99%</td>
<td>C-</td>
<td>68% - 69.99%</td>
</tr>
<tr>
<td>B</td>
<td>80% - 85.99%</td>
<td>D</td>
<td>60% - 67.99%</td>
</tr>
<tr>
<td>B-</td>
<td>78% - 79.99%</td>
<td>F</td>
<td>below 60%</td>
</tr>
</tbody>
</table>

Notes:  
- Please note that there will not be a curve, nor will there be any “grade bumps” in this course!
- An “I” grade will not be given without the permission of the Department of Mathematics

MYSTATLAB HOMEWORK (15% of final grade)

- Online homework will be assigned through www.mystatlab.com.
- Online homework assignments may be done as many times as needed before the due date, with only the best score counting toward the student’s grade.
- Online homework must be submitted by 11:59 pm on the due date to get full credit. Due dates will not be extended. **Homework assignments may be completed after their due dates until Friday, December 6 for half-credit.**
- No homework assignments will be dropped or replaced. Be sure to complete all homework assignments, preferably before the due date.
- When working an assignment after the due date, only work problems that you have previously gotten wrong OR not attempted. Working problems that you got correct prior to the due date will actually lower your score.

QUIZZES (10% of final grade)

- You must complete the “COURSE AGREEMENT CONTRACT” in MyStatLab before you have access to any quiz or test.
- There will be nine (9) quizzes during the semester.
- There will be a 50-minute time limit on each quiz and each attempt. Each quiz and each attempt must be taken before the due date. See course calendar for due dates.
- The lowest quiz grade will be dropped at the end of the semester.
- Quizzes will be taken using MyStatLab. Quizzes can be taken at the location of your choosing.
- You will be allowed two (2) attempts per quiz, with only your best score recorded. Both attempts must be taken before the due date.

TESTS (50% of final grade)

- You must complete the “COURSE AGREEMENT CONTRACT” in MyStatLab before you have access to any quiz or test.
- There will be four (4) major tests during the semester. The test questions will be similar in format to the examples in class, homework problems, and quizzes.
- Please see the course calendar for lessons covered and testing dates.
- Tests will be taken through MyStatLab website in the Mathematics Lab located in the Jackson Avenue Center (JAC A01). **Students that receive SDS accommodations will test in Hume 221. An appointment will be required for each test. See other TESTING PROCEDURES & POLICIES below.**
- Tests will have a one-hour (60 minute) time limit.
- You must arrive at the correct answer to receive credit. Partial credit will only be awarded in rare circumstances.
• There will be absolutely NO make-up tests given for ANY reason. If a test is missed for ANY reason, a grade of zero (0) will be given.
• We understand that students may encounter illness or unforeseen circumstances, so this is why this class employs a **Drop Grade Policy**. At the end of the semester the lowest score of the four regular tests will be dropped. While the Drop Grade Policy also applies to students who take all tests, the Drop Grade Policy is designed to protect students who must miss a test due to unforeseen circumstances. The final exam cannot be dropped.
• Any student who must miss a scheduled test because of an official University function must reschedule and take the test at a time **BEFORE** the test is scheduled to be given (this includes the final exam). NO OTHER rescheduling will be allowed. Signed documentation on University letterhead is required.

### FINAL EXAM (25% of final grade)
- There will be a REQUIRED comprehensive final exam (covering the entire semester).
- There will be a two-hour (120 minute) time limit on the final exam.
- The final exam will be taken through MyStatLab website in the Mathematics Lab located in the Jackson Avenue Center (JAC A01). *Students that receive SDS accommodations will test in Hume 221*. An appointment will be required for the final. See other TESTING PROCEDURES & POLICIES below.
- You must arrive at the correct answer to receive credit. Partial credit will only be awarded in rare circumstances.

### BONUS PRACTICE TESTS (Add up to 3% to final grade)
- There will be a total of five (5) practice tests during the semester. In addition to gaining essential practice, you will receive **BONUS POINTS** based on your practice test scores.
- Please see the course calendar for due dates/times.
- Practice tests are untimed (you should time yourself to get used to a clock—about 90 minutes should be the max).
- You have an unlimited number of attempts for each practice test, with only your best score recorded.
- Practice tests must be submitted by the posted deadlines to receive credit.
- Your practice test **average** can add up to a total of three (3) percentage points to your overall course grade.
- Practice tests can be completed at the location of your choosing.
• Students in this course will take their tests and final exam through MyStatLab website in the Mathematics Lab located in the Jackson Avenue Center (JAC A01).

• Please note that students receiving SDS testing accommodations will test in the Hume Hall Stats Lab (Hume 221). Only students that have received accommodations through Rebel Access, will have permission to test in Hume 221.

• You must know your MyStatLab log in information. Proctors in the Math Lab will not have access to this information.

• Students will be provided with a yellow TI-30XS Multiview calculator for their tests. You will also be provided with a formula sheet and scratch paper. You can bring your own pencil/pen.

• Students MUST make an appointment to take a test or the final exam. The Math Lab will send out an email when it’s time to schedule your appointment. NO APPOINTMENT = NO TEST

• Test scheduling is done at https://mathlab.olemiss.edu/test-scheduler/.

• Videos on how to schedule and reschedule your appointment can be found at mathlab.olemiss.edu.

• If you have issues with the appointment website or questions about your appointment, please email mathlab@olemiss.edu. I have no control over this website and cannot help you with your appointment issues.

• You must have your OleMiss student ID to enter the lab for testing. NO ID = NO TEST

• Students must be on time for their appointment (it’s recommended that you show up 10 minutes before your appointment). If a student is more than 5 minutes late, their appointment may be cancelled.

• As you enter the testing lab, you must turn in your phone and smartwatch to the desk workers before entering the lab. Also personal calculators, any other electronic equipment, and your bags must be stored in one of the storage bins before entering the testing area. Having a cell phone, smartwatch, or personal calculator out for any reason will be considered cheating.

• The Jackson Center parking lot is one of the "Park and Ride" lots. This means that students with other parking decals (such as dorm/fraternity/sorority decals) will not be able to park at the Jackson Center until after 5pm. UPD will give tickets if students with other decals park in the lot before 5pm.

• If you do not have a commuter or park & ride parking sticker, you may utilize the OUT Shuttle (Bronze Line). Please see http://www.oxfordsms.net/visitors/transit/bus-routes-a-schedules.html. The Bronze Line runs every 5-10 minutes between JAC and Paris-Yates Chapel. Other stops on the website.

MYSTATLAB/PEARSON CUSTOMER SUPPORT:

Problems involving the MyStatLab courseware should be directed to their technical support department.

• The Pearson Customer Support Office is open Monday – Friday from 11 am until 7 pm (central time). Students may call 1-800-677-6337 to receive assistance with the software.

• Help can be found 24 hours a day online at support.pearson.com/getsupport. Students can chat with an agent as well as search for answers to their questions.

• It is highly recommended that you do not use Safari as your internet browser for this software. MyStatLab does not work well with Safari…please use Google Chrome or Firefox.

MATH/STATS TUTORING

Mathematics tutoring will occur in the J.D. Williams Library Commons. The Commons is on the bottom floor of the J.D. Williams Library. No appointment is necessary. A deskworker is stationed near the reference desk and can point you in the direction of a tutor.

Tutoring Hours: Monday – Thursday 10am – 7pm
                   Friday 10am – 2pm
ACADEMIC MISCONDUCT:
The following statement is the policy of the Department of Mathematics on cheating.

OFFENSES: Cheating on any exam or quiz, theft or attempted theft of exam questions, possession of exam questions prior to the time for examination, the use of a cell phone/smartwatch, the use of a personal calculator, or the use of websites or software other than mystatlab on tests shall all be offenses subject to appropriate penalties. Furthermore, the presence of any mathematics/statistics (notes, review tests, etc.) during tests shall be subject to the appropriate penalty.

PENALTIES: The penalty for commission of any offense set out above is a zero (0) on the exam in question, and a recommendation of failure in the course to the Academic Discipline Committee. Furthermore, if you are found guilty of cheating, then the penalty could also include, subject to the approval of the Chancellor, dismissal or suspension from the University. Please note that any grade of zero (0) given for cheating will not be replaced if the Academic Discipline Committee does not follow the recommendation of course failure.

COURSE WITHDRAWAL DEADLINE: Monday, October 7
After the Course Withdrawal Deadline, courses dropped will be recorded on University records and the grade of W will be recorded if the student is not failing the course at the time of withdrawal; otherwise, the grade of F will be recorded. After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergency, as determined by the academic dean. Dropping a course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student is changing his/her major.

ADA AND STUDENT DISABILITY SERVICES
Disability Access and Inclusion: The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at https://sds.olemiss.edu to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at 662-915-7128 so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students.

Please note that students receiving testing accommodations will test in the Hume Hall Stats Lab (Hume 221).

Students are encouraged to meet with their instructor to discuss approved accommodations.
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<thead>
<tr>
<th>Lesson</th>
<th>Sections</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1</td>
<td>1.1 - 1.6</td>
<td>Fundamental Elements of Statistics; Types of Data; Collecting Data</td>
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<tr>
<td>2</td>
<td>2.1 – 2.2</td>
<td>Tabular &amp; Graphical Methods</td>
</tr>
<tr>
<td>3</td>
<td>2.3</td>
<td>Numerical Measures of Central Tendency; Weighted Mean</td>
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<tr>
<td>4</td>
<td>2.4 – 2.5</td>
<td>Measures of Variability; Chebyshev’s Rule &amp; the Empirical Rule</td>
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<tr>
<td>5</td>
<td>2.6 – 2.7</td>
<td>Numerical Measures of Relative Standing; Box Plots; Detecting Outliers</td>
</tr>
<tr>
<td>6</td>
<td>3.1 – 3.4</td>
<td>Introduction to Probability Concepts</td>
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<tr>
<td>7</td>
<td>4.1 – 4.2</td>
<td>Types of Random Variables; Discrete Probability Distributions</td>
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<tr>
<td>8</td>
<td>4.4 – 4.5a</td>
<td>Continuous Probability Distributions; The Normal Distribution</td>
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<tr>
<td>9</td>
<td>4.5b</td>
<td>Finding the Random Variable Given Area Under the Normal Distribution</td>
</tr>
<tr>
<td>10</td>
<td>4.8 – 4.9</td>
<td>Sampling Distribution &amp; The Central Limit Theorem</td>
</tr>
<tr>
<td>11</td>
<td>5.1 – 5.2</td>
<td>Confidence Intervals for Population Mean, μ</td>
</tr>
<tr>
<td>12</td>
<td>5.4</td>
<td>Confidence Intervals for Population Proportion, p</td>
</tr>
<tr>
<td>13</td>
<td>5.5</td>
<td>Determining the Minimum Sample Size</td>
</tr>
<tr>
<td>14</td>
<td>6.1</td>
<td>An Introduction to Hypothesis Testing, Type I and II error.</td>
</tr>
<tr>
<td>15</td>
<td>6.2 &amp; 6.4a</td>
<td>Conducting a Test of Hypothesis for a Population Mean (Using Rejections Regions)</td>
</tr>
<tr>
<td>16</td>
<td>6.3 &amp; 6.4b</td>
<td>Conducting a Test of Hypothesis for a Population Mean (Using p-value).</td>
</tr>
<tr>
<td>17</td>
<td>6.6</td>
<td>Conducting a Test of Hypothesis for a Population Proportion</td>
</tr>
</tbody>
</table>

Test 1 will cover lessons 1-5  
Test 2 will cover lessons 6-9  
Test 3 will cover lessons 10-13  
Test 4 will cover lessons 14-17  
The Final Exam will cover all lessons, lessons 1-17.