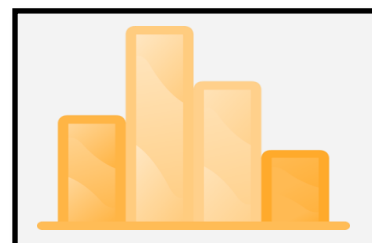Welcome to **STAT 3090**! Review this syllabus to get caught up on all the ins and outs of our class this semester — think of it as a contract between you, the student, and the instructor.

Section Details

Section 037	TTh 11:00 AM —12:15 PM	Edwards 305
Section 038	TTh 12:30 PM — 1:45 PM	Edwards 305

Instructor

Anna Marie Vagnozzi   Office: Martin E1-A

avagnoz@clemson.edu   Office Hours: T 8:00—9:00 AM and W 1:00—2:00 PM (or by appointment)

About Me: I graduated from Campbell University in 2016 (Go Camels!). I love teaching, coffee, jazz, thrift shopping, farmers markets, and hiking. When I'm not doing math, I'm probably curled up with a good book.

General Syllabus

This course will follow the course information and policies established in the **General Course Syllabus**, which can be found on the STAT 3090 Course Page at https://mthsc.clemson.edu/ug_course_pages/STAT3090. Learning outcomes for this course are also available in this document.

E-mail Policy

E-mail is the preferred method of communication for this course. I will generally respond within 24 hours on week days. E-mails sent after 7pm or on weekends are not guaranteed to be answered before the next business day.

Attendance

Attendance will be taken at the beginning of each class period. Students with higher attendance rates tend to perform significantly better in this course! If you accumulate excessive absences, you may be asked to drop the course. Note that if you miss class, **you** are responsible for emailing the instructor, going over any material you missed, and completing homework on time (see late work policy below).

Late Work and Make-Up Exam Policy

In the rare event you need to miss class, make arrangements **in advance** to turn your work in by 11:59 PM on the day the assignment is due. No late work will be accepted for a grade after the key is posted online at 11:59 PM. For policies on make-up exams, see the **General Course Syllabus.**

Classroom Technology

This course uses **Canvas** to post announcements, grades, assignments, lecture notes, and other relevant materials. You are responsible for checking Canvas regularly.

Cell phones, laptops, and other electronic devices are **not** permitted in class unless otherwise specified, as you are expected to "be present" during lectures and activities. If you're expecting an urgent call, let me know before class, set your phone to vibrate, and leave the room to answer the call. I reserve the right to say something if I notice you on your device in class.

Important Dates

August 22	First Class Meeting
August 29	e-Learning Day
September 3	Last Day to Drop Course
September 23	Exam 1
October 14-15	Fall Break
October 21	Exam 2
October 29	Last Day to Withdraw from Course
November 18	Exam 3
November 27-29	Thanksgiving Break
December 9	Final Exam

Additional information on give-back days, assignment due dates, and other important dates can be found in the **Course Calendar.**

e-Learning Day

On **e-Learning Day**, August 29, 2019, a real-time test of the Academic Continuity Plan will be conducted. Our class will be conducted via a video lecture and assignment through Canvas.
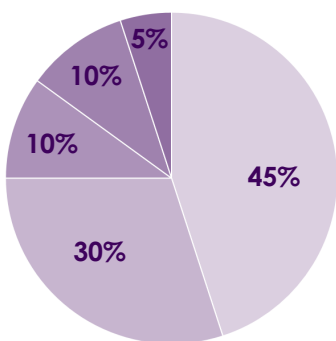
Grading Procedures

- 45% Three Unit Exams (15% Each)
- 30% Final Exam
- 10% JMP Projects
- 10% Hawkes Learning WebTests
- 5% Section Grade

Your **Section Grade** will consist of your attendance grade, in-class learning activities, and homework assignments. For additional details about grading, see the **General Course Syllabus**.

Tips for Success In This Course

- **Come to class!** You gain the most from this course when you come to class ready to engage.
- **Read the syllabus carefully.** If you don't, you might not know important pieces of information that can help you do well in this course. (Like the fact that one of my favorite TV shows is Doctor Who.)
- **If you don't understand, ask.** Whether it's in class or during office hours, ask questions to clarify concepts that are fuzzy to you. Remember that learning is a two-way street. As your instructor, I'm here to help, but *you* are responsible for asking for that help if you're struggling.
- **Stay organized.** I recommend keeping a binder to save all of your work.
- **Use a pencil and paper.** Math is hands-on. Take notes in class and work problems on the board along with me. Even when working online exercises, work out problems on paper.
- **Complete all assignments.** Math takes a lot of practice! Take advantage of *all* the work assigned to boost your grade and better learn the material.
- **Keep a positive attitude!** Students with negative attitudes towards math generally do not do as well in math and statistics courses. The more positive you are as you approach this topic, the better your grades will be — I promise!

STAT 3090 - Introductory Business Statistics – Fall 2019
Course Information and Policies (General Syllabus)

Course Description:

This is an introductory probability and statistics course for business students, particularly those who will take MGT 3100. Topics include descriptive statistics, basic probability, probability distributions, one sample estimation and testing, and regression.

Prerequisites:

MATH 1060 or 2070 or 2100.

Learning Outcomes:

Students can ….

1. Identify and distinguish between types of variables, and know which types of variables are required for statistical techniques
2. Explain and apply measures of central tendency, spread, and relative standing and how these different measures relate to each other in various distribution patterns
3. Apply rules of probability, and extend those principles to discrete and continuous probability distributions
4. Explain and apply the concept of sampling distributions and their role in developing confidence intervals and use in hypothesis testing, correctly utilizing the "t" or "z" or "chi-squared" distribution
5. Identify the correct statistical test to be used for hypothesis testing on one sample scenarios for mean, proportion, and standard deviation
6. Clearly interpret the results of statistical analysis in context of the original research question
7. Correctly and appropriately use correlation and linear regression techniques, including inference on the models

The above outcomes are evidenced by responses to free response questions on homework and exams.

General Education Requirement:

STAT 3090 satisfies the General Education requirement for Mathematics.

You may demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods, using multiple representations where applicable.

Copies of the more challenging problems from homework and tests from this course may be appropriate to submit as evidence of this competency. In particular, the following examples of evidence of math competency might be included:

- Demonstrate knowledge of simulations
- Use statistical models to calculate probabilities of events
- Perform full analysis of a Hypothesis Test
- Use linear regression techniques to determine the relationship between two quantitative variables

Required Textbook:

Discovering Business Statistics, Nottingham and Hawkes,– REQUIRED (eBook or hardcopy)

Technology:

Hawkes Learning System– Online Homework - REQUIRED
JMP (Version 14) - REQUIRED

Calculator:

A scientific calculator is required – TI-83, TI-83+, TI-84 OR TI-84+. These calculators will be acceptable on test days. Calculators will be permitted on unit tests and the final exam. Other similar calculators by Casio or HP may be allowed at the discretion of the instructor.

Websites:

https://mthsc.clemson.edu/ug_course_pages/STAT3090 -- General STAT 3090 site which includes this syllabus, a daily schedule, unit instructional objectives, announcements, and other useful information.

https://clemson.instructure.com/   -- Follow links to your section of STAT 3090 in Canvas
** See your instructor's personal syllabus for information about how Canvas will be utilized.

You are responsible for checking the course website, Canvas and your university e-mail account (userid@clemson.edu) on a regular basis for announcements and class materials.

Academic Integrity:

Course Regulations: http://catalog.clemson.edu
Please read the information concerning *Academic Regulations*.

See the Undergraduate Academic Integrity Policy https://www.clemson.edu/studentaffairs/student-handbook/universitypolicies/academic_integrity.html website for additional information about academic integrity at Clemson.

> *"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning.' Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating or stealing in any form."*

Note that work from other past or current courses may not be used to meet the requirements for this course.   Also note that giving access to an academic website that requires your password (for example WebAssign, Canvas or Hawkes) violates the code of student conduct computer use policy.

A simple definition of plagiarism is when someone presents another person's words, visuals, or ideas as his or her own. The instructor will deal with plagiarism on a case-by-case basis. I will use, at my discretion, the Plagiarism Resolution Form. All infractions of academic dishonesty will be reported to Undergraduate Studies for resolution through that office.

Copyright:

All materials found in this course are strictly for the use of students enrolled in this course and for purposes associated with this course; they may not be retained or further disseminated. Clemson students, faculty, and staff are expected to comply fully with institutional copyright policy as well as all other copyright laws.

Attendance:

You are expected to be regular and punctual in your class attendance. If you must miss class **YOU** are responsible for the notes, assignments, and announcements you missed. Students must provide your instructor with proper documentation for university sanctioned absences. **Students who have more than 6 absences for MWF classes or more than 4 absences for MW and TTh classes are subject to being dropped from the course or receiving a final course grade of F.**

If the instructor does not arrive in the classroom within 15 minutes after the scheduled start time, class is dismissed for the day.

Because privacy regulations stipulate that faculty and staff communicate with students through authorized University channels, use your University email account or Canvas's messaging system to contact me.

Canvas allows you as a student to quickly notify instructors of an absence from class and provides set categories (e.g. court attendance, illness, family illness or death, military duty, hospitalization, university function, religious observance). This does not serve as an excuse from class but allows students to communicate with instructors (all or some, of their choice). Consult with instructors when discussing absences. The Dean of Students' office can also be of assistance.

Inclement Weather:
Any assignments due at the time of a class cancellation due to inclement weather will be due at the next class meeting unless contacted by the instructor. Any extension or postponement of assignments or exams must be granted by the instructor via email or Canvas within 24 hours of the weather related cancellation. In the event of the university closing during a scheduled exam, your instructor will notify you as to the date of rescheduled exam.

Grading:

To earn a passing grade for the course, a student must meet 2 conditions.
First Condition:
(a) A final exam score of 60 or higher, or
(b) An exam average (EXAVG) of 60 or higher computed as

$$EXAVG = 0.6(Average\ of\ Highest\ 3\ of\ 4\ exam\ grades) + 0.4(Final\ Exam)$$

Note: EXAVG is the weighted unit and final exam average in which the lowest unit exam score is replaced with the final exam score if this benefits the student.

If neither of the conditions (a) and (b) above are met, the final course grade is F and the following computation of course average is irrelevant.

Second Condition:
If the first condition is met, the final numerical average for the entire course (CRSAVG) is computed using the following weights

  45% - 3 Unit Exams (15% per exam)
  30% - Final Exam
  25% - Homework = [JMP (10%) + Section Grade (5%) + Hawkes WebTests (10%)]

and the following weighted average formula

$$CRSAVG = 0.45(Average\ of\ Highest\ 3\ of\ 4\ exam\ grades) + 0.30(Final\ Exam)$$
$$+ 0.10(Average\ of\ Minitab\ Excel\ Projects) + 0.05(Average\ Section\ Grade)$$
$$+ 0.10(Average\ of\ Webtests)$$

Final grades will be recorded as follows: (provided that either (a) or (b) in condition one has been met)

CRSAVG   Grade
89.5 – 100   A
79.5 – 89.5   B
69.5 – 79.5   C
59.5 – 69.5   D
Below 59.5   F

> **Note: In rare situations it might happen that a student fulfills the first condition, but the course average calculated in the second condition is below 59.5 resulting in a final course grade of F.**

The grade total displayed in Canvas does not reflect the above grading system and therefore it is likely to be different.

Unit Exams:

All exams *must be taken* on the dates given in the course schedule. You will be given 90 minutes for each exam. Tables and formula sheets will be provided. The unit exams and final exam will be composed of both multiple choice and free response questions. The designated time for STAT 3090 exams is Mondays at 5:45pm – 7:15pm. Students are required to take unit exams and final exam with their section. If you miss an exam, the exam score is zero. The final exam can be used to replace ONE low unit exam score. The Fall 2019 exam dates are: Exam 1 – Sept 23, Exam 2 – Oct 21, Exam 3 – Nov 18. Please add these dates to your calendar now to avoid potential conflicts later. **No rescheduling of any exam will be permitted to accommodate travel arrangements.** You have one week after graded tests are distributed in class to request correction of clerical errors or for grading reconsideration.

In general, make-up exams are not given. However, if a student misses a unit exam or the final exam for a reason that would qualify as an excused absence and can provide the proper documentation, a make-up exam **may** be permitted if the request is made in a timely manner prior to the scheduled exam. Realize that a note simply stating a student was at Redfern on the date of the exam does not qualify as proper documentation. An excused absence for medical reasons will only be granted if a note from a doctor, indicating that the student should not attend work or school on the date of the exam, is provided. All make-up exams must be approved by the course coordinator. There is no guarantee that a make-up exam will be given.

Students may use calculators on the unit exams and the final. Students will not be permitted to use laptop computers on the unit exams or the final exam. The use of a textbook and/or notes is prohibited on all STAT 3090 unit exams and final exam. Formula sheets and scantrons will be provided to students for unit exams and the final exam. Cell phones and other devices such as watches with internet connections will not be permitted during testing.

Students will need their XID number for use on scantrons for all exams. Please bring your ID with you to the exams.

Homework Assignments: Homework assignments may consist of additional problem sets, Hawkes Learning assignments, and section activities. More detail on these assignments is below:

*JMP Assignments***:**

Students will be required to submit 3 projects which focus on applying statistical knowledge and using the statistical software JMP. These projects are to be the student's individual work.

*Hawkes Learning System***:**
Each student will work Web Tests online through the Hawkes Learning System. HLS installation help is available. See posted instructions on Canvas for installing HLS. **To allow for illness, family emergencies, religious holidays, and computer malfunctions, one low (or missing) Web Test grade will be dropped before the final Web Test grade is calculated.**

HLS contains a calendar which will show you when each Web Test assignment is due. HLS also contains an online version of your text, as well as practice exercises for each chapter. Take the time to learn to use the system, paying attention to the amount of study material which is available for you. When working on the HLS, be sure to follow instructions exactly for entering answers. Each HLS Web Test is due on Sunday at 11:59 PM unless otherwise informed. You will have the opportunity to take each Web Test twice. The best score of the two will be recorded. You will have the opportunity to review the Web Test after the due date.

*Section Activities***:**
Section Activities may include in-class activities, quizzes, additional homework problems and lessons from the Hawkes Learning System, participation grade and/or additional worksheets. Please see your instructor's personal syllabus for further details.

Final Exam:
The Final Exam is comprehensive. The Final Exam score may replace the lowest unit exam score, if it helps. (Note: if your Final Exam score replaces your lowest unit exam score, the final will then count for 45% of your total grade.)
The Final Exam for this semester is Monday December 9, 2019 from 7 PM to 9:30 PM. No students are permitted to exempt the final exam.

Student Accessibility Services:
Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments.

Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: http://www.clemson.edu/campus-life/campus-services/sds/. If you have a letter stating specific testing accommodations to which you are entitled, be sure your instructor has a copy of the faculty accommodation letter and a test proctoring form (if needed) **at least a week** before the first exams.

For STAT 3090 there will be a special accommodation room available for students requiring 1.5 or double time on their tests. The tests in these rooms will be administered on the same date and approximate time as the general tests.

Tutoring:

This course is supported by the Academic Success Center tutoring program. The ASC tutors have completed and done well in this course, and they understand the concepts well enough to help you work through questions you have. The ASC tutoring program is certified by the College Reading and Learning Association which means that our tutors are trained to share learning and study strategies during tutorial sessions. While tutors will not complete/correct homework for you or help you on tests or quizzes, they will help you understand and reinforce concepts that you are learning in your classes. For more information visit www.clemson.edu/asc/courses/tutoring/index.html.

Privacy Policy:

This course is designed with your privacy in mind. If, however, you feel that an assignment or technology tool undermines your right to privacy, please contact me immediately. We will work together to determine an alternative assignment that will help you achieve the course learning outcomes.

Academic Grievances:

Students are advised to visit the Ombuds' Office https://www.clemson.edu/administration/ombudsman/index.html prior to filing a grievance. After discussion with the undergraduate academic ombudsman, students should contact Undergraduate Studies (656-3022) for assistance filing official paperwork.

Non-Discrimination:

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid.   This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. If you have questions about Title IX, please contact the Title IX Coordinator, Alesia Smith, who also serves as the Executive Director of Equity Compliance, at 110 Holtzendorff Hall, 864-656-3181 (voice) or 864-656-0899 (TDD). Please consult the University's Title IX policy for full details at http://www.clemson.edu/campus-life/campus-services/access/title-ix/.

Academic Success Center:

The Academic Success Center provides free services, including tutoring, academic coaching, and academic skills workshops, for all Clemson students. Visit the Academic Success Center website http://www.clemson.edu/asc/ for more information on their services and workshops.

Academic Continuity Plan

Clemson has developed an Academic Continuity Plan for academic operations. Should university administration officially determine that the physical classroom facility is not available to conduct classes in, class will be conducted in a virtual (online) format. The University issues official disruption notifications through email /www /text notification/Social Media.

When notified, use one of the following links to navigate to Clemson Canvas where you will find important information about how we will conduct class:

Primary access link: www.clemson.edu/canvas
Secondary access link, if needed: https://clemson.instructure.com/
You can also use the Canvas Student App.

Cooper Library:

Reference librarians are available in person and via text, phone, email, and chat to answer your research questions. Visit Ask a Librarian https://libraries.clemson.edu/ask/ for more information or to get in touch with a librarian.

Technical Support:

If you are having hardware or software problems, CCIT's Service Desk may be able to help you. Contact them at ITHELP@clemson.edu with a detailed description of your problem.

Academic Advising:

Academic advising https://www.clemson.edu/academics/advising/index.html is an ongoing educational process that connects the student to the University. Academic advising supports the University's mission of preparing the student for learning beyond the confines of the academy. Academic advisors represent and interpret University policies and procedures to the student and help the student navigate the academic and organizational paths of the institution.

Registrar:

The Registrar's office http://www.registrar.clemson.edu/html/indexStudents.htm provides information about important deadlines, degree and program requirements, and other key information, including use of iROAR to add, drop, or withdraw from courses.

Success in the Course:

In order to be successful in this course, students must be dedicated to the course work. Studying is critical for a student to master the learning objectives of this course. Students are expected to aggressively participate in their own learning by reading the book, practicing the course skill sets (found on the course website) and seeking help in a timely manner when necessary.

Course Coordinator:

Dr. April Thomas, O-215 Martin Hall, 864-656-3047, athomas@g.clemson.edu

august 2019

sunday	monday	tuesday	wednesday	thursday	friday	saturday
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21 Classes Begin	22 Chapter 1	23	24
25	26	27 Chapter 2 Last day to add course	28	29 Chapter 2 e-Learning Day	30	31
1 WebTest Chapter 1-2 due 11:59 PM	2	3 Chapter 3 Last drop date Assign Project 1	4	5 Chapter 3	6	7

notes

september 2019

sunday	monday	tuesday	wednesday	thursday	friday	saturday
1 WebTest Chapter 1-2 due 11:59 PM	2	3 Chapter 3 Last drop date Assign Project 1	4	5 Chapter 3	6	7
8 WebTest Chapter 3 due 11:59 PM	9	10 Chapter 4	11	12 Chapter 4	13	14
15	16	17 Chapter 4	18	19 Chapter 5 Project 1 due	20	21
22 WebTest Chapter 4 due 11:59 PM	23 Exam 1 5:45 PM	24 Give Back Day	25	26 Chapter 5	27	28
29 WebTest Chapter 5 due 11:59 PM	30	1 Chapter 6 Assign Project 2	2	3 Chapter 6	4	5
6 WebTest Chapter 6 due 11:59 PM	7	8 Chapter 7	9	10 Chapter 7	11	12

notes

october 2019

sunday	monday	tuesday	wednesday	thursday	friday	saturday
29	30	1 Chapter 6 Assign Project 2	2	3 Chapter 6	4	5
6 WebTest Chapter 6 due 11:59 PM	7	8 Chapter 7	9	10 Chapter 7	11	12
13	14 Fall Break	15 Fall Break	16	17 Chapter 8 Project 2 due	18	19
20 WebTest Chapter 7 due 11:59 PM	21 Exam 2 5:45 PM	22 Give Back Day	23	24 Chapter 8	25	26
27 WebTests for Ch 8 (Parts 1-2) due 11:59 PM	28	29 Chapter 9 Withdraw Date Assign Project 3	30	31 Chapter 9	1	2
3	4	5 Chapter 9	6	7 Chapter 10	8	9

notes

november 2019

sunday	monday	tuesday	wednesday	thursday	friday	saturday
27	28	29 Chapter 9 Withdraw Date Assign Project 3	30	31 Chapter 9	1	2
3	4	5 Chapter 9	6	7 Chapter 10	8	9
10 WebTest Chapter 9 11:59 PM	11	12 Chapter 10	13	14 Chapter 10 Project 3 due	15	16
17 WebTest Chapter 10 due 11:59 PM	18 Exam 3 5:45 PM	19 Chapter 10 Section 8	20	21 Chapter 13	22	23
24 WebTest Chapter 10.8 due 11:59 PM	25	26 Give Back Day	27 Thanksgiving Break	28 Thanksgiving Break	29 Thanksgiving Break	30
1	2	3 Chapter 13	4	5 Chapter 13 / Final Exam Review	6	7

notes

december 2019

sunday	monday	tuesday	wednesday	thursday	friday	saturday
1	2	3 Chapter 13	4	5 Chapter 13 / Final Exam Review	6	7
8 WebTest Chapter 13 due 11:59 PM	9 Final Exam 7:00—9:30 PM	10	11	12	13	14
15	16 Deadline to Submit Grades	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

notes