

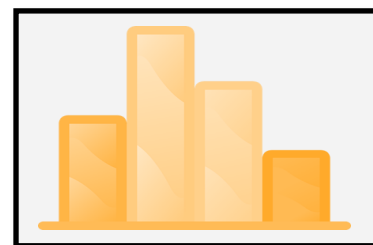
INTRODUCTORY BUSINESS STATISTICS

STAT 3090 SYLLABUS (FALL 2018)

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 011	TTh 8am—9:15am	Martin E005
Section 026	TTh 11am—12:15pm	Martin M204



Instructor

Anna Marie Vagnozzi
avagnoz@clemson.edu

Office: Martin E1A
Office Hours: MW 11:30am—12:30pm (or by appointment)

About Me: I graduated from Campbell University in 2016 (Go Camels!). I love coffee, jazz, thrift shopping, 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 on this document.



E-mail Policy

E-mail is the preferred method of communication for this course. Please send e-mails in a professional manner. I will generally respond within 24 hours on week days. E-mails sent after 5pm 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 going over any material you missed and completing homework on time.

Late Work and Make-Up Exam Policy

I do not accept late work. If you know that you will need to miss a class, you should make arrangements *in advance* to get your work to me on time. For policies on make-up exams, see the **General Course Syllabus**.

Classroom Technology Policy

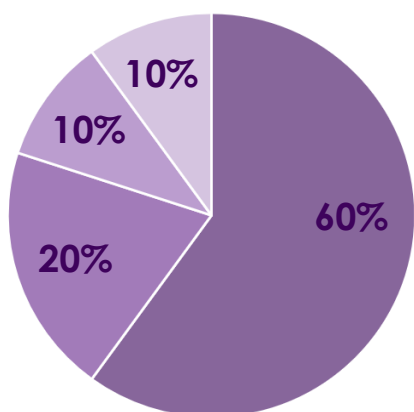
Cell phones, laptops, and other electronic devices are **not** permitted in class, as you are expected to “be present” during lectures and activities. If you're expecting an urgent call, let me know before class, set your phone to vibrate, and leave the room to answer the call.

Important Dates

August 23	First Class Meeting
September 4	Last Day to Drop Course
September 24	Test 1
October 22	Test 2
October 26	Last Day to Withdraw Course
November 5-6	Fall Break
November 19	Test 3
November 21-23	Thanksgiving Break
December 10	Final Exam



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



Grading

10%	Section Grade
10%	Hawkes Quizzes & Minitab/Excel Projects
60%	Three Tests (20% per exam)
20%	Final Exam

Your **Section Grade** will consist of your attendance grade, in-class activities, and homework assignments. For additional details about grading procedures, 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 as an active learner in the classroom.
- **Read the syllabus carefully.** Seriously. If you don't, you might not know super important pieces of information that can help you do well in the course. (Like the fact that one of your instructor's 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!

Let's get ready to learn some statistics!

STAT 3090 - Introductory Business Statistics – Fall 2018

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” 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

For this course we will use some of our assigned free response questions as indication of completion of the general education math competency. Within some sections we will help students upload artifacts to assessment collection system. This will count as a “section” grade for that day for those sections. Students may be responsible for creating a digital copy of the questions.

Required Textbook:

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

Technology:

Hawkes Learning System– Online Homework - REQUIRED

Microsoft EXCEL – REQUIRED

Minitab (Version 18 or Minitab Express) - 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/universypolicies/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:

60% - 3 Tests (20% per exam)

20% - Final Exam

20% - Homework – [Hawkes Quizzes & Minitab/Excel Projects (10%) AND Section Grade (10%)]

To earn a passing grade for the course, a student must have:

(a) A final exam score of 60 or higher, or

(b) A weighted test and final exam average of 60 or higher where the weighted average is computed as

$$WTAVG = \frac{0.20(T1 + T2 + T3 + FE - \min(T1, T2, T3, FE)) + 0.20FE}{.80}$$

Where T1, T2, T3, and FE are score on Test 1-3 and the Final Exam

Note: This formula has the effect of replacing the lowest test score 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 following computation of course average is irrelevant.

If either of the conditions (a) and (b) above are met, the final numerical average (CRSAVG) is computed as

$$CRSAVG = 0.10(HLS/Minitab) + 0.10(Section) + 0.2(T1 + T2 + T3 = FE - \min(T1, T2, T3, FE)) + 0.20FE$$

Where T1 is test 1..., and FE is final exam.

**** Note: Based on these calculations meeting either condition (a) or (b) does not necessarily mean a passing grade in the course.**

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

89.5 – 100 A

79.5 – 89.5 B

69.5 – 79.5 C

59.5 – 69.5 D

Below 59.5 F

The grade totals displayed in Canvas are to be used as a guide. The final course grade is calculated using the above formula which may be different than the final grade calculated in Canvas.

Unit Tests:

All tests ***must be taken*** on the dates given in the course schedule. You will be given 90 minutes for each test. Tables and formula sheets will be provided. The unit tests and final exam will be composed of both multiple choice and free response questions. The designated time for STAT 3090 tests is Mondays at 5:30pm – 7:00pm. Students are required to take unit exams and final exam with their section. If you miss a test, your final exam will be used as your exam score (for only one exam). The Fall 2018 test dates are: Test 1 – Sept 24, Test 2 – Oct 22, Test 3 – Nov 19. 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 (this includes Test 3, which is the Monday of Thanksgiving Break).** 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 tests are not given. However, if a student misses a unit test or the final exam for a reason that would qualify as an excused absence and can provide the proper documentation, a make-up test may be permitted if the request is made no later than 24 hours prior to the scheduled test or 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, can be provided. All make-up tests must be approved by the course coordinator.

Students may use calculators on the unit tests and the final. Students will not be permitted to use laptop computers on the unit tests or the final exam. The use of a textbook and/or notes is prohibited on all STAT 3090 unit tests and final exam. Formula sheets and scantrons will be provided to students for unit tests 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 unit tests and final exam. 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:

Minitab/Excel Assignments:

Students will be required to submit 3 Minitab/Excel Projects. These projects are to be the student's individual work. The projects will require working with Minitab and Excel to do statistical analysis.

Hawkes Learning System:

Each student will work homework/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 homework, 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 from the Hawkes Learning System, projects, reading quizzes, 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 test score, if it helps. (Note: if your Final Exam replaces your lowest test grade the final will then count for 40% of your total grade) The Final Exam for this semester is Monday Dec 10, 2018 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 providing a higher education environment that is free from sexual discrimination. Therefore, if you believe you or someone else that is part of the Clemson University community has been discriminated against based on sex, or 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). The Title IX Coordinator is the person designated by Clemson University to oversee its Title IX compliance efforts. 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.

Writing Center:

Clemson University's Writing Center offers free one-on-one tutoring for all Clemson students. Visit the Writing Center's website <http://www.clemson.edu/asc/> for more information about their services or to make an appointment.

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, athomas@g.clemson.edu

2018

August

STAT 3090

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	31	01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22 Classes begin	23	24	25	26
		Syllabus, Orientation, Chapter 1				
27	28 Last day to add a class	29	30	31	01	02
Week 1: Chapter 1, Chapter 2, Begin Chapter 3						
03	04	Notes:				

2018

September

STAT 3090

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
27	28	29	30	31	01	02 HLS Quiz 1-2 due by 11:59 PM
03	04 Last day to drop without 'W'	05	06	07	08	09 HLS Quiz 3 due by 11:59 PM
Week 2: Chapter 3, Assign Project 1						
10	11	12	13	14	15	16 HLS Quiz 4 due by 11:59 PM
Week 3: Chapter 4, Chapter 5						
17 Project 1 Due	18 Project 1 Due	19	20	21	22	23 HLS Quiz 5 due by 11:59 PM
Week 4: Chapter 5						
24 STAT 3090 TEST 1 5:30-7 PM	25 Give Back Day	26 Give Back Day	27	28	29	30
			Week 5: Chapter 6			
01	02	Notes:				

2018

October

STAT 3090

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
01	02	03	04	05	06	07 HLS Quiz 6 due by 11:59 PM
Week 6: Chapter 6, Chapter 7						
08	09	10	11	12	13	14 HLS Quiz 7 due by 11:59 PM
Week 7: Chapter 7, Chapter 8						
15	16	17	18	19	20	21 HLS Quiz 8 due by 11:59 PM
Week 8: Chapter 8, Begin Chapter 9 (Chapter 9 is not on test 2)						
22 STAT 3090 TEST 2 5:30-7 PM	23 Give Back Day	24 Give Back Day	25	26 Last day to drop with 'W'	27	28
Week 9: Chapter 9						
29	30	31	01	02	03	04
Week 10: Chapter 9, Chapter 10, Assign project 2						
05	06	Notes:				

2018

November

STAT 3090

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
29	30	31	01	02	03	04
Week 10: Chapter 9, Chapter 10, Assign project 2						
05 Fall Break	06 Fall Break	07	08	09	10	11 HLS Quiz 9 due by 11:59 PM
		Week 11: Chapter 10				
12	13	14	15 Project 2 due	16 Project 2 due	17	18 HLS Quiz 10 due by 11:59 PM
Week 12: Chapter 10						
19 STAT 3090 TEST 3 5:30-7PM	20 Give Back Day	21	22	23	24	25
		Thanksgiving Holiday				
26 Give Back Day	27	28	29	30	01	02
Week 13: Chapter 13, Assign Project 3						
03	04	Notes:				

2018

December

STAT 3090

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
26	27	28	29	30	01	02
03	04	05	06 Project 3 due	07 Project 3 due	08	09 HLS Quiz 13 due by 11:59 PM
Week 14: Chapter 13, Review for Final Exam						
10 STAT 3090 - Final Exam - 7:00 - 9:30 PM	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	01	Notes:				