Fall 2026

Management Statistics MGT 2250

Section B: Thursdays 3:30-4:45pm, SCOB, room #TBD

Instructor : Koushyar Rajavi, PhD
Office Hours : (via Zoom) Fridays 2:00-3:30PM and by appointment
E-mail : koushyar.rajavi@scheller.gatech.edu
TA : TBD

Course Description: The course is divided into four modules. The first module "Variation" introduces basic terminology, summary statistics, and graphical summaries. The second module "Probability" presents the concept of a random variable (idealized description of the data in applications). The third module "Inference" covers statistical inference (the process of inferring properties of an entire population from those of a subset known as a sample). The fourth module "Regression" introduces linear regression models (an important tool in business for assessing profitability, setting prices, identifying anomalies, and generating forecasts).

Text: Statistics for Business: Decision Making and Analysis, Robert Stine & Dean Foster, 3rd Edition. Publisher: Pearson, ISBN: 9780321921772.

MyLab Statistics: MyLab Statistics is an electronic platform from Pearson (the publisher of our book) that includes our materials in the form of an e-book. All homework assignments, midterms, and the final exam will be taken on MyLab Statistics, thus all students must register for MyLab Statistics. The registration instructions for MyLab Statistics can be found under the "Basics" module on Canvas.

Technical Support

1. Pearson technical support.

You can contact Pearson Support using link https://support.pearson.com/getsupport/s/

If you are having technical issues with Pearson while completing assignments, please complete the following as it may resolve your issue: delete your cache and cookies, check your browser settings, turn off Pop-up blockers. If you continue to have trouble, please use this link above to access Pearson Technical Support.

2. Canvas offers 24/7 technical assistance to all Georgia Tech faculty, staff, and students. The easiest way to contact Canvas Help is by Chat (Links to an external site.), the Canvas Hotline at 1(877) 259-8498 or email at support@instructure.com.

3. Microsoft Excel. Georgia Tech students can, for free, install Office 365 Pro Plus (which includes Excel) on to up to 5 PCs or Macs after logging in at http://office365.gatech.edu. Also, Georgia Tech students have free access to Lynda.com, a professional site dedicated to software tutorials; they have ample tutorials on how to use Excel. Sign in at http://lynda.gatech.edu.

Hybrid Format of Teaching

While the lectures will be delivered in the remote mode via pre-recorded videos, students will be able to enhance their learning experience and solidify skills via in-person classes.

All lectures will be asynchronous and posted online for every module on Canvas. You are expected to watch all lecture videos for a module by the date specified on the syllabus. Each video lecture contains examples and practice questions that I will discuss and you are expected to follow along and replicate the instructions laid out by me. There are also additional practice questions that will be available to you, as well as the solution to them. The examples and practice questions would help you in better understanding the topic. After watching lecture videos and going through additional practice questions, you should start working on the assignment related to that topic. Students can (and should) consult each other when completing the assignment.

Important note: if you think the online asynchronous format for lectures is not the ideal learning format for you, please register in another section of MGT2250.

We will meet on campus on Thursdays. The face-to-face (f2f) meetings are **optional**, i.e., you will not be penalized for not attending them. The structure of the f2f classes is similar to Q&A/Review Sessions. In each f2f class, I will respond to student questions and concerns about topics the students had to study in the weeks before class. I will also go through some practice questions that have been posted on Canvas. Therefore, the f2f classes a) are NOT substitutes for lecture videos, and b) can only be helpful if you have watched the videos and spent time on the assignment.

Before each f2f class, please study the last page of the syllabus to see what will be discussed in the f2f meeting (i.e., the topic, practice questions, etc.). Depending on whether you have problems understanding the topic and based on your performance on the related assignment, you should have a good idea on whether you need to attend the next f2f meeting or not. The f2f classes will **not** be recorded.

All course content will be available online on Canvas. Homework assignments, midterm exams, and the final exam will all be online via Canvas and MyLab Statistics.

Office Hours will be held online via Zoom meetings. Students will have the opportunity to sign up for a 15-minute appointment during the specified office hours (via this link: https://tinyurl.com/y56ovmny). The students who sign up for the office hours can meet with me during the office hours by joining the Zooms meeting (via this link: https://gatech.zoom.us/j/97752297210?pwd=th6f4Y0OD3eRFvwW6Z0iLJWHx3Z8Cn.1). If the office hours do not work for you or that you need more than 15 minutes, please email me and we will find another time to meet. Also, if you prefer to meet in person than to meet me via Zoom, please email me and we will find a time to meet in my office (room 4218).

Determination of Grade in Course:

Your grade in the course will be based on:

(1) the sum of the two highest test scores and the average of all three test scores (see example below);

(2) the highest 11 out of 12 homework assignments;

(3) final exam;

(4) 14 weekly summaries describing what you learned

and yield a total of 585 points. The letter grade corresponding with your total points earned is as follows:

A 526 *points and above*;

B 468-525 *points***;**

C 409-467 *points;*

D 351-408 *points**;***

F 350 *points and below*

Example: Student has the scores 70, 82, and 90 for test 1, test 2, test 3 respectively. The average, therefore, is (70+82+90)/3=80.6.

Based on the syllabus, the lowest score of 70 would be replaced by 80.6 Thus, this student would have 80.6+82+90=252.6 points NOT 70+82+90=242 points.

1	Tests (Three Midterm Exams)	300
2	Homework Assignments	110
3	Final Exam	140
4	Weekly Summaries	35
	Total	**585**

Note: requests for extra credit work in pursuit of a higher course grade will be denied.

Component of Grade	Points	Date	Chapters Covered
Weekly Summaries (WS)	35	Due on Mondays at 11:30 pm every week (first WS due on 08/25; last WS due on 11/24)	
Ch.3 Homework 1	10	Due by 09/01 11:30 pm	2, 3
Ch.4 Homework 2	10	Due by 09/08 11:30 pm	4
Ch.5 Homework 3	10	Due by 09/15 11:30 pm	5
Ch.6 Homework 4	10	Due by 09/22 11:30 pm	6
Ch.9 Homework 5	10	Due by 09/29 11:30 pm	9
Ch.12 Homework 6	10	Due by 10/06 11:30 pm	12
Ch.12 Homework 7	10	Due by 10/13 11:30 pm	12
Ch.15 Homework 8	10	Due by 10/20 11:30 pm	15
Ch.16 Homework 9	10	Due by 10/27 11:30 pm	16
Ch.16 Homework 10	10	Due by 11/03 11:30 pm	16
Ch.19 Homework 11	10	Due by 11/17 11:30 pm	19
Ch.21 Homework 12	10	Due by 11/24 11:30 pm	21
Test 1	100	Test 1 in-class (online via MyLab Statistics) 09/18 (R)	4, 5, 6
Test 2	100	Test 2 in-class (online via MyLab Statistics) 10/16 (R)	9, 12
Test 3	100	Test 3 in-class (online via MyLab Statistics) 11/06 (R)	15, 16
Final Exam	140	**12/04 (R) 2:40-5:30 PM** In-class (online via MyLab Statistics)	4,5,6,12,15,16, 19,21
Total	**585**		

Lowest one homework score will be dropped

Lowest test score will be replaced by the average of three test scores: ((test1+test 2 +test 3)/3)

Homework: All homework assignments are posted at MyLab Statistics.com and are due by the deadline specified above. **NO LATE HOMEWORK WILL BE ACCEPTED**. Students are welcome to work on homework assignments in groups. Cooperation is not only allowed but encouraged. However, each student must make an individual submission. Emergencies, illness may occur. So, to account for this, *I will drop one lowest homework score (10 points) at the end of the semester*. There will be NO make-up homework as a result.

Practice Questions on MyLab Statistics: You can find Practice Questions for chapters 4, 5, 6, 9, 12, 15, 16, 19, 21 in the "Quiz" section of MyLab Statistics. They are good exercises for warm-up, but they are not enough to master the material. These practice conceptual questions found under the "Quiz" section of MyLab Statistics do not count toward your final grade.

Weekly Summaries of What You Learned:
To ensure that students stay on track and follow the course materials for each week, you are required to submit a document establishing that you watched the lecture videos for that week. You have flexibility regarding the format of the document. Here are some suggestions: 1) a one-page summary of what was discussed in the lecture videos of that week, 2) the excel sheet you used when you were trying to work on the practice questions discussed in the lecture videos for that week, 3) a photo of the summary notes you take when watching lecture

videos (if you write in a notebook) or the text file in which you summarize the key points of each lecture. There will be a submission slot available on Canvas for each week (due Monday 11:30 pm of each week) in which you can upload the document. Each submission will be worth 2.5 points, hence a total of 35 points. Late submissions will be penalized by 0.5 point per each day of delay.

Tests and Final Exam:

- Each of the Tests and Final Exam require **independent work** and is taken online at Pearson's platform.
- Students must have laptops with Excel for every testing period.
- Formula sheets will be provided to students every test (will be posted on Canvas; you should print them for the exam).
- No questions will be answered during the testing periods.
- **Re-grade requests:** All re-grade requests must be submitted via **e-mail** no earlier than 2 hours and no later than 6 days after the test was taken. Your e-mail must explain how you've arrived at your answer and why you believe your answer is correct.
- **Grading:** Every test in online MyLab Statistics multiple choice test is subject to MyLab Statistics's rules of grading. **NO PARTIAL CREDIT IS GIVEN IF**:
  - you got incorrect solution in the beginning and it impacted the solution of the entire problem.
  - you made rounding mistake or computation mistake.
  - you incorrectly interpreted a question/questions.
  - a value from one answer is used in solving subsequent problems and if the first value is wrong, your answers to the problems will be considered wrong no matter how correct your problem-solving process is. MyLab Statistics judges your answers only. You may, however, receive partial points if the question asks multiple inputs and some of your inserted values are correct.
  - you mistakenly selected an incorrect choice even though your computations in your Excel solution is correct. I only collect my students' Excel solution through Canvas. I will not check your Excel solution.

➢ Partial credit ***might*** be given if you lose points for the following reasons:

- when entering the x- and y-position for a point, you forgot to include parentheses. MyLab Statistics considers x- and y-coordinates given without parenthesis as incorrect. For example,
  - 2, 3 is not the correct answer. The correct answer is (2, 3).
- you entered number x, where $-1 < x < 1$ and forgot 0. For example, .63 is not the correct answer. Correct answer is 0.63.
- you lost points because of a minor type (entering "," instead of "." for decimal points)

- **Replacing the Lowest Score of Test 1, Test 2 and Test 3 in the overall grade computation**

  I will replace your lowest test score as min={score of test 1, score of test 2, score of test 3} by ***the average of your all three test scores*** *(score of test 1 + score of test 2 + score of test 3)/3 when I compute your overall grade.*

- ***Final Exam***

  If for very important reason (s) with proper documentation you won't be able to take a final exam, you will get incomplete grade for this course.

Additional rules for test 1, 2 and 3 and the final exam will be announced by email prior to every test and final exam.

Honorlock Proctoring: All three midterm exams and the final exam will be taken online through Canvas and Pearson MyLab, with remote proctoring provided by Honorlock. Honorlock will record your webcam, and screen activity during each exam to ensure academic integrity. While testing, you will only be allowed to access Pearson MyLab and Microsoft Excel, which you are expected to use for all exams. All other websites, programs, or applications will be blocked by Honorlock's secure browser.

Students must use Google Chrome browser and install the Honorlock Chrome extension (a quick, one-time step) to access the exams. To start an exam, log into Canvas, navigate to the exam, and click "Launch Honorlock." Follow the setup instructions (verify your ID, enable your webcam and microphone), and then proceed to the Pearson MyLab exam link.

Ensure your laptop meets Honorlock's technical requirements (updated Chrome browser, working webcam and microphone, and stable internet connection). A short practice test will be available early in the semester so you can familiarize yourself with Honorlock and test your setup.

Quick Start with Honorlock (Exam Instructions)

1. **Use Google Chrome** – Honorlock works best with Chrome. Install Chrome if you don't have it.
2. **Install the Honorlock Extension** – The first time you click **"Launch Honorlock"** in Canvas, you will be prompted to add the Honorlock Chrome extension (one-time installation – see the tip below).
3. **Start the Exam from Canvas** – Navigate to the exam in Canvas, click **"Launch Honorlock"**, and follow the prompts to verify your ID and enable your webcam and microphone.
4. **Excel is Allowed** – Microsoft Excel is the only application you may use during the exam. All other programs will be blocked.
5. **Exam Access** – After setup, you will be automatically directed to the Pearson MyLab exam page.

Tip: Complete the practice test early to ensure your Honorlock setup, webcam, and Excel access work correctly before exam day.

Makeup Policy: Students are required to take the test on the day/time it is scheduled. There will be NO makeup tests except for absences required by Georgia Tech (with proper documentation). If you miss one mid-semester test and notify me with an approved (at my discretion) absence, I will substitute it with the final exam grade. If you miss more than one mid-semester test, you will receive a zero for the additional mid-semester tests you miss. Missing the final exam will result in a grade of 0 for the final exam.

Class Participation: Attending f2f classes is optional. If you are attending an f2f meeting, you will need to complete a name tent and place it in front of you for f2f meetings.

Email Communication: I will make every effort to respond to emails received on weekdays within 24 hours of receipt; emails received on weekends and holidays may result in a longer response time. Please include your course and section information (e.g., **MGT 2250 Section B**) in the subject line of your emails.

Academic Integrity: Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please see The Georgia Institute of Technology Catalog at http://www.catalog.gatech.edu. Refer specifically to section XVII entitled "Academic Honor Code" at https://catalog.gatech.edu/rules/17/ for the principles, policies, and procedures governing issues of academic integrity. The University takes charges of academic misconduct seriously and actions that can be taken in response to misconduct include failure of the course and a permanent record in the student's file. I take academic honesty very seriously and will report any situations of misconduct.
I encourage you to review the Code directly at this link: http://osi.gatech.edu/content/honor-code

Special Accommodations: Any student requesting accommodations as a result of a disability should be referred to the Office of Disability Services. Once referred, the Disability Services staff will work with that student to arrange for appropriate accommodations. The student will then receive an accommodation letter detailing their necessary accommodations and should make arrangements to meet with each instructor to review this letter. Please obtain a letter from the Office of Disability services and turn it in to me in the beginning of the semester. The Office of Disability services is located in the Smithgall Student Services Building, Suite 220. The phone number is 404-894-2563. http://disabilityservices.gatech.edu/

Schedule of Classes

This is a tentative sequence of chapters. During the semester minor changes may occur.

	Module 1 Variation (Ch. 2, 3, 4, 5, 6)	
Week 1 08/21 (R)	Course Introduction and Syllabus Review (in-class – attendance required) **2. Data** (online videos) 2.1 Data Tables. 2.2 Categorical and Numerical Data. 2.3 Recoding and Aggregation.2.4 Time Series	Ch.2
Week 2 08/28 (R)	**3. Describing Categorical Data.** 3.1 Looking at Data. 3.2 Charts of Categorical Data. 3.3 The Area Principles. **4. Describing Numerical Data.** 4.1 Summaries of Numerical Variables. 4.2 Histograms. 4.3 Shape of Distribution.	Ch.3 Ch.4
	Homework 1 due by 09/01 11:30pm	
Week 3 09/04 (R)	**4. Describing Numerical Data.** 4.1 Summaries of Numerical Variables. 4.2 Histograms. 4.3 Shape of Distribution. **5. Association between Categorical Variables.** 5.1 Contingency Tables. 5.2 Lurking Variables. 5.3 Strength of Association	Ch.4 Ch.6
	Homework 2 due by 09/08 11:30pm	
Week 4 09/11 (R)	**6. Association between Quantitative Variables.** 6.1 Scatterplots. 6.2 Association in Scatterplots. 6.3 Measuring Association. 6.4 Summarizing Association with a Line.	Ch.6
	Homework 3 due by 09/15 11:30pm	
Week 5 09/18 (R) 09/18 (R)	***Module 2 Probability*** *(Ch. 9, 12)* **9. Random Variables.** 9.1 Random Variables. 9.2 Properties of Random Variables. 9.3 Properties of Expected Values. **Test 1 (online via MyLab Statistics) (COB#202)**	 Ch. 9 Ch.4,5,6
	Homework 4 due by 09/22 11:30pm	
Week 6 09/25 (R)	**9. Random Variables.** 9.1 Random Variables. 9.2 Properties of Random Variables. 9.3 Properties of Expected Values. **12. The Normal Probability Model.** 12.1 Normal Random Variable. 12.2 The normal model. Standardizing 12.3 Percentiles.	 Ch.9 Ch.12
	Homework 5 due by 09/29 11:30pm	

Week 7 10/02 (R)	**12. The Normal Probability Model.** 12.1 Normal Random Variable. 12.2 The normal model. Standardizing 12.3 Percentiles.	Ch.12
	Homework 6 due by 10/06 11:30pm	
Week 8 10/09 (R)	***Module 3 Inference*** *(Ch. 13, 15, 16)* **13. Samples and Surveys.** **15. Confidence Interval.** 15.1 Ranges for Parameters. 15.2 Confidence Interval for the Proportion. 15.3 Interpreting Confidence Intervals.	 Ch.13 Ch. 15
	Homework 7 due by 10/13 11:30pm	
Week 9 10/16 (R)	**15. Confidence Interval.** 15.1 Ranges for Parameters. 15.2 Confidence Interval for the Proportion. 15.3 Interpreting Confidence Intervals.	Ch.15
10/16 (R)	**Test 2 (online via MyLab Statistics) (COB#202)**	Ch.9,12
	Homework 8 due by 10/20 11:30pm	
Week 10 10/23 (R)	**15. Confidence Interval.** 15.1 Ranges for Parameters. 15.2 Confidence Interval for the Proportion. 15.3 Interpreting Confidence Intervals. **16. Statistical Tests.** 16.1 Concepts of Statistical Tests. 16.2 Testing the Proportion.	Ch.15 Ch.16
	Homework 9 due by 10/27 11:30pm	
Week 11 10/30 (R)	**16. Statistical Tests.** 16.1 Concepts of Statistical Tests. 16.2 Testing the Proportion. 16.3 Testing the Mean.16.4 Significance Versus Importance.	Ch.16
	Homework 10 due by 11/03 11:30pm	
Week 12 11/06 (R)	**19. Linear Patterns.** 19.1 Fitting a Line to Data. 19.2 Interpreting the Fitted Line. 19.3 Properties of Residuals.	Ch.19
11/06 (R)	**Test 3 (online via MyLab Statistics) (COB#202)**	Ch. 15,16
Week 13 11/13 (R)	**19. Linear Patterns.** 19.1 Fitting a Line to Data. 19.2 Interpreting the Fitted Line. 19.3 Properties of Residuals. **21. The Simple Regression Model.** 21.1The Simple Regression Model. 12.2 Conditions for SRM. 21.3 Inference in Regression.	Ch.19,21
	Homework 11 due by 11/17 11:30pm	

Week 14 11/20 (R)	**Final Exam Review**	
	Homework 12 due by 11/24 (11:30pm)	
Week 15 11/27 (R)	*Thanksgiving Break: Official University Holiday*	Ch.21
Cumulative Final Exam (ch. 4, 5, 6, 12, 15, 16, 19, 21) Date: Thursday 04 December, 2:40-5:30PM **(COB#202)**		

Schedule of in-person classes:

Date	**Class Content**
08/21	Discussing Syllabus and Course Expectations (attendance required)
08/28	No on-campus class; live online session with Pearson representative to help students in getting started with Pearson's MyLab. Zoom link: https://gatech.zoom.us/j/94879911094?pwd=TFeALHI7NksHzagaPAw4CnigZRiHwn.1
09/04	Practice examples in chapters 3, 4, and 5, discuss students' problems in HWs #1,#2 & discuss students' questions/issues
09/11	Midterm 1 practice (the questions that will be practiced in class will be posted on Canvas before the session)
09/18	**Midterm 1**
09/25	Review of Midterm 1 & discuss students' problems in HWs #3,#4 & discuss students' questions/issues
10/02	Practice examples in chapters 9 and 12 & discuss students' problems in HW #5 & discuss students' questions/issues
10/09	Midterm 2 practice (the questions that will be practiced in class will be posted on Canvas before the session)
10/16	**Midterm 2**
10/23	Review of Midterm 2 & discuss students' problems in HWs #6, #7, #8 & discuss students' questions/issues
10/30	Midterm 3 practice (the questions that will be practiced in class will be posted on Canvas before the session)
11/06	**Midterm 3**
11/13	Review of Midterm 3 & discuss students' problems in HWs #9,#10 & discuss students' questions/issues
11/20	Review of Final Exam (the questions that will be practiced in class will be posted on Canvas before the session) & discuss students' problems in HWs #11, #12
11/27	No class (Thanksgiving)