# MGT 2255 Syllabus

Quantitative Analysis for Business, Section O, 3 credits, Fall 2026

## Instructor Information

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## General Course Information

**Course Description:** MGT 2255 is a course focused on the decision-making processes and strategies of businesses. In the course, we will look at how businesses may employ quantitative concepts and techniques in their decisions, to optimize outcomes. Software tools such as Microsoft Excel will be used extensively throughout the semester during the business cases, and assignments. We will apply quantitative-analytical skills to a wide range of areas such as Supply Chain and Operations Management, Information Technology Management, Finance, Marketing, Accounting, and Strategy. The material is approached from a managerial rather than technical perspective with a focus on how to apply decision technology and how to interpret the results for guiding management action. This is not a course in mathematics. The focus is on the basic structure and logic of the models, not on their mathematical details and proofs.

**Course Learning Outcomes:** Upon successful completion of this course, students will be able to:

1. Apply quantitative methods to business decision-making.
2. Build and solve business models using Excel.
3. Analyze decision, optimization, project, and queuing problems.
4. Interpret regression results and other analytical outputs.
5. Communicate data-driven recommendations in business contexts.

**The primary pre-requisite for MGT 2255**: Quantitative Analysis for Business at Georgia Tech is MGT 2250 (Management Statistics). Other acceptable substitutes for MGT 2250 include ECON 2250, ISYE 3030/3770, MATH 3215/3670, or BMED 2400

**Required Course Materials:** ISBN 9780135319321; MyLab Operations Management with Pearson eText Access Code for Quantitative Analysis for Management. The e-book is embedded in MyLabOM, and registration instructions are available on Canvas. Students will complete all homework assignments and take all tests, including the final test, through MyLabOM.

**Course Delivery:** This course will be taught fully online in an asynchronous format. That means you can work on class activities at your own pace during the day, but you must follow the schedule for assignments and participation. For Monday, Wednesday, and Friday Classes: each session will be online and asynchronous. Students are expected to watch the videos, read the slides, notes and book chapters, and complete practice activities (such as Excel-based business cases, Canvas video quizzes, multiple choice quizzes) posted on Canvas. For Monday, Wednesday, Friday you must submit your Participation Quiz by 10:00 PM on the same day. Most homework assignments are also due on Mondays and Wednesdays by 10:00 PM.

Please note: Recording, sharing, or distributing course materials, including screen captures or use of automated tools, is strictly prohibited without the instructor's explicit permission.

**Tips for learning new topics:**

1.Read the textbook
2.Participate in all asynchronous online-class activities
3.Review the recorded lectures, all slides posted on Canvas
4.Review Excel solution of problems posted on Canvas and make similar templates for solving 5.
5.Homework problems and test problems
6.Review practice test questions and problems
7.Review test bank questions and problems
8.Solve all homework problems and submit Excel solution (if you are asked) on Canvas

**Grading Policy**

Your grade in the course will be based on the following:

1.Class participation: 36 points
2.Three test scores: 300 points
3.13 homework assignments: 130 points
4.Final test: 120 points
5.Project Management essay: 18 points
6.Three practice tests: 60 points
7.13 online quizzes: 26 points

The points that can be earned from each of those components are given in the table below and yield a total of 690 points. The letter grade corresponding with your total points earned is as follows:

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A: 621 points and above;(90%)
B: 552-620 points;(80%)
C: 483-551 points; (70%)
D: 414-482 points; (60%)
F: 413 points and below

**Incomplete Grade:** If serious circumstances arise and appropriate documentation is provided, a student who misses more than one test or the final exam may receive an incomplete grade for the course.

## Description of Graded Components

**Homework Policy:** Homework assignments should be completed through Pearson platform, MyLabOM. In addition to submitting your answers on MyLabOM, you must also upload your Excel solutions for some Homework assignments. Failure to submit the required Excel file to Canvas will result in a minimum 50% penalty and may result in a score of zero. 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 and illness may occur. To account for this, I will drop the lowest homework score at the end of the semester.

**Online Canvas/Kaltura Video Quizzes:** Throughout the semester, students will complete online Canvas/Kaltura video quizzes for significant course topics. These quizzes are posted on Canvas under Assignments. In each quiz, students will watch a short instructional video designed to explain important ideas, difficult concepts, and problem-solving methods. After watching, students will answer embedded questions and, in some cases, write a short response about what they learned. These

video quizzes are intended to help students review key material, strengthen conceptual understanding, and prepare for homework, tests, and the final test. Feedback from previous students has been very positive, and many students found these quizzes especially helpful as tutorials and study tools. Students are strongly encouraged to use them as their own guided practice and concept review before tests and the final exam.

**Project Management Essay:** The Project Management Essay must be submitted through Canvas and should be typed on standard 8½ × 11 paper. No late submissions will be accepted. This is an open-book, open-notes assignment, but it must be completed independently.

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**Tests and Final Test:** All tests and the final test will be administered in MyLabOM as closed-book, closed-notes, online tests. A formula sheet will be provided for each test and posted on Canvas three weeks before the test date. Students are not permitted to use calculators, AI tools, or any other unauthorized resources during the test period. Any additional instructions or requirements related to homework assignments, quizzes, tests, and the Project Management Essay will be communicated by email prior to the due date.

**Excel Solution Requirement for Tests and Homework:** For every test, final test, and required homework assignment, students must submit a very detailed Excel solution for all assigned problems, as instructed by the professor. The Excel file must clearly show the complete problem-solving process, including setup, formulas, intermediate steps, and final answers. Students must also use FORMULATEXT in Excel, when required, to display the formulas used in their computations. The purpose of this requirement is to demonstrate the student's own analytical work and understanding of the methods used in the course. Failure to submit the required detailed Excel solution, including clearly shown computations and formulas, will result in a score of zero for that test or homework assignment.

## Course Policies

**Email Communication:** I will make every effort to respond to emails received on weekdays within 24-36 hours of receipt; emails received on weekends and holidays may result in a longer response time. Please include your first and last name as well as the course and section (e.g., MGT 2255, section O) in the title of your emails.

**Honor Code Statement for Pearson Online Tests:** A signed Honor Code Statement should be uploaded to Canvas during the first week of Fall 2026 term. A template will be provided to you on Canvas to fill out and upload.

**Academic Integrity:** Georgia Tech values trust, honor, and academic integrity. Students are expected to uphold the highest ethical standards, and any suspected violations of the Academic Honor Code will be reported and addressed according to Institute policy.
For information on Georgia Tech's Academic Honor Code, please see The Georgia Institute of Technology 2026-2027 Catalog at http://www.catalog.gatech.edu. Refer specifically to section 18b entitled "Academic Honor Code" at http://www.catalog.gatech.edu/rules/18b.php for the principles, policies, and procedures governing issues of academic integrity.
**Special Accommodations:** 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 404-894-9786. http://disabilityservices.gatech.edu/. *I want every student to feel supported in this course, and I will be glad to work with you to address your learning needs and help you succeed.*
**Student-Faculty Expectations Agreement**: At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.
**Class participation**: Class participation is an important part of this course and is built through active learning activities completed during asynchronous Monday, Wednesday, Friday sessions. Students earn 1 participation point for each of the 36 non-testing class periods. For most asynchronous classes students should submit an Excel file with their asynchronous- class work, called an *"in-class quiz" on Canvas* by the posted deadline. Timely submissions, and active engagement with course activities will help you build confidence in quantitative analysis and strengthen your Excel skills throughout the semester.
**GaTech Attendance Policy:** Students who miss work because of participation in approved Institute activities (such as field trips and athletic events) will be permitted to make up the work missed during their absences. Approval of such activities will be granted by the Student Academic and Financial Affairs Committee of the Academic Senate, and statements of the approved absence may be obtained from the Office of the Registrar. Students who are absent because of participation in a particular religious observance will be permitted to make up the work missed during their absence with no late penalty, provided the student informs the course instructor of the upcoming absence, in writing, *within the first two weeks of class,* and provided the student makes up the missed material within the timeframe established by the course instructor. Please, use this link to read GaTech's class attendance policy http://www.catalog.gatech.edu/rules/4/#.
**Extensions, Late Assignments, & Re-Scheduled/Missed Exams**: Late homework will be penalized accordingly. Make-up exams are given for illness, approved Institute activities or religious observances. Additional rules for tests 1, 2 and 3 and the final exam will be announced by email prior to every test and final exam.
**MGT 2255 section O AI Learning Policy:** Artificial intelligence tools such as Microsoft Copilot, ChatGPT, and similar technologies may be used in this course to support personalized learning, review concepts, generate additional practice, clarify steps in problem solving, improve writing, and strengthen understanding of business analytics and Excel-based methods. Used appropriately, AI can be a valuable learning partner. In this course, students are encouraged to use AI to deepen their understanding and to develop the knowledge and skills needed to become confident experts in their fields.

At the same time, AI must support learning, not replace it. Students are responsible for mastering the course material and for producing their own academic work. All submitted work must reflect the student's own understanding, judgment, and effort.

For every homework assignment and every test, students must submit an Excel solution showing their work for all required problems, as instructed by the professor. The Excel file should clearly demonstrate the student's problem-solving process, formulas, setup, and analysis. Submission of answers without the required Excel solution will not receive credit. If the required Excel solution is not submitted, the score for that homework assignment or test will be reduced to 0.

Students may use AI tools to study, practice, and prepare for class; however, they may not use AI in any way that violates the instructor's directions, the testing rules, or Georgia Tech's Academic Honor Code. Unauthorized use of AI during graded assessments, submission of AI-generated work as one's own, or failure to demonstrate one's own Excel-based analysis may be treated as a violation of academic integrity.

The goal of this policy is not to discourage the use of new technology, but to ensure that students use AI responsibly and ethically. AI should help students learn more effectively, think more critically, and build lasting professional expertise. In MGT 2255, Excel-based problem solving, independent thinking, and academic honesty remain essential parts of student success.

## Core IMPACTS

This course supports the development of core competencies in quantitative reasoning, critical thinking, problem solving, and effective communication. Through business applications and Excel-based analysis, students learn to evaluate alternatives and make informed decisions. These skills prepare students for professional success in business and related fields.