

MGT 3501 - Operations Management

Fall 2026

Instructor: Tim Martin, PE
Office: 4143
Phone: (404) 385-3267
Email: tim.martin@scheller.gatech.edu
Teaching Assistant: afox67@gatech.edu

Class Times: 9:30 – 10:45 Mon/Wed Room TBD
Office Hours: Mon/Wed 8:00 – 9:30 or By Appointment

Course Text: *Operations and Supply Chain Management*, 15th Edition, by Chase, Jacobs, and Aquilano, 2005: McGraw-Hill/Irwin, New York, NY.

Note: While we use the latest edition, you have the opportunity to buy a used text if you prefer. The 12th, 13th, and 14th editions are sufficient.

Prerequisite: MGT 2251- Introduction to Management Science

Course Description:

This course introduces you to the strategic design, operating issues, and decisions involved in managing the business and operational processes essential to delivering products and services to customers, within the new expectation of sustainability. Operations management consist of business functions that guide and control value-adding transformation processes in which resources are transformed into goods or services. Operations management tools help business organizations improve their transformation processes in order to better match supply with demand and gain a competitive advantage.

The course aims to provide you with a conceptual framework and a set of analytical tools to enable you to better understand why processes behave as they do. Given this understanding, you will be positioned to involve yourself in an organization's defining strategic decisions: those relating to key processes affecting your, and your organizational unit's performance. Further, you will be able to articulate the set of processes that most closely match and enhance your organization's competitive posture. This understanding is necessary to maintain improvements in an organization's critical competitive dimensions such as cost, delivery, flexibility, quality, and sustainability.

The course is designed to introduce you to what every general manager or consultant should know about the field. Therefore, an important goal of this course is that you understand the fundamental concepts, opportunities, and challenges that are needed to evaluate all aspects before making a decision.

Course Objectives:

- Analyze, and identify opportunities to improve service and manufacturing processes
- Apply managerial principles and analytic methods to support reduce process variability and improve process outcomes
- Analyze the trade-offs within sustainable operations and develop strategies to align them for all stakeholders to develop practical solutions to sustainability problems
- Enable students to understand why the principals discussed are important to a business and how they are to be implemented using best practice techniques.

Grading Policy:

Final course grades will be assigned according to the following weights:

Business Analysis:	15%
(2) Exams:	40% (20% each)
Quizzes/Assignments:	20%
Final Exam:	25%

If you have an issue or a concern with your grade in an exam, quiz or assignment, please provide a detailed, written request for re-grade within a week of receiving your grade. I will reserve the right to re-grade the entire exam or assignment (and not only the specific question you are contesting).

Grade distribution is as follows: A – 90 to 100. B – 80 to 89. C – 70 to 79. D – 60 – 69. F – 59 & below.

Business Analysis:

Allowing students to apply the course material in a real-world scenario is a critical strategy to ensuring long-term memory retention. To do so, students will be put into groups and each group will select a firm that provides a product & service. Throughout the semester, assignments will require the students to apply class topics to how the firm currently executes that topic, evaluate their effectiveness, and make recommendations based on their learnings.

Quizzes:

Short quizzes will be assigned ~once per week and should take no longer than 5-7 minutes to complete pertaining to prior lectures. The quizzes are designed to be a low-stakes learning opportunity. Makeup quizzes will not be given. All quizzes will be completed in Canvas.

Assignments:

Short assignments will be given throughout the course. Topics and types of assignments will vary. Makeup assignments will not be given.

Exam Policies:

Exams will be given this semester to test the student's knowledge. Topics covered on the exam will be lectures and lessons learned from the case studies, documentaries and simulations. Makeup exams will not be given. Students missing a scheduled exam due to an official Georgia Institute of Technology event must prearrange an alternate time to take the exam. All other cases will receive a grade of zero for the missed exam. Lockdown browser or Honorlock may be required in order to take the exam. Make sure it is installed and works properly before starting the exam (we will take a practice quiz early in the semester to test). Per Georgia Tech's policy, any cheating will result in, at minimum, a penalty of twice the potential advantage from cheating. All cases of alleged cheating will be referred to the Dean of Student Affairs for disciplinary action. I strongly encourage all students to visit the website of the Office of Student Integrity at <http://www.osi.gatech.edu/index.php/>.

Late Policy

Students missing an assessment due to an official Georgia Institute of Technology event must prearrange an alternative time to submit the assessment. All other cases will follow the following policy:

Quizzes: There are no makeup's available for missed quizzes.

Current Event Post: There is no makeup available for missing the current event discussion post.

Assignment Exercises: Students can submit assignment exercises late, with the following penalty applied to their grade. 0 to 6 hrs late → Max grade of 95%. 6 hrs to 24 hrs late → Max grade of 90%. 24 hrs to 48 hrs late → Max grade of 80%. After 48 hours, no late submissions will be accepted.

Exams: Students must contact the professor before the exam starts to be eligible for the late submission policy. The professor may allow a make-up exam, if the time frame does not give the student an unfair advantage of additional study time. Alternatively, the missed exam score will be replaced by the student's final exam score. If a student fails to notify the professor prior to the exam, the student will receive a grade of zero for the missed exam.

Class Attendance/Participation:

Attendance and participation are not required. However, quizzes and many assignments will be performed during class sessions. In addition, bonus points will be awarded for those students that do participate consistently that will be used at the end of the semester to determine if a grade improvement is possible. Key points will be made in the classes that will benefit students during the assessments and exams, so attendance is recommended. Our class is designed to be 100% in-person. No live streaming or recordings will be available.

* Laptops and cell phones will not be permitted in class.

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. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Official Communications:

Both Canvas and the class email distribution list are used to post information on class changes, upcoming assignments, grades, etc. Communications will be sent to the Georgia Tech student email that is assigned to you by the Institute. It is your responsibility to have the Georgia Tech email account active and to receive and regularly read messages written to that address.

Accommodations for Disabilities:

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

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.