

MGT 4370 A – Managing Process Innovation

Fall 2026

Instructor:	Bob Myers
Office:	College of Business Room 4156
Phone:	(404) 385-4474
Email:	Bob.Myers@scheller.gatech.edu
Office Hours:	By Appointment
Course Text:	1. <i>Modern Approaches to Manufacturing Improvement</i> by Alan Robinson 2. <i>The Goal</i> by Eliyahu Goldratt 3. Harvard Course Pack - https://hbsp.harvard.edu/import/1405356
Prerequisite:	MGT 2251- Introduction to Management Science

Course Description:

Regardless of where one goes to work, the ability to solve problems, innovate or improve a process (make it better, faster, cheaper, easier) is a valued skill. In industry, proponents of a particular method tend to view their method as the solution to every problem. In reality, certain methods are better for certain problems. The purpose of this course is to expose students to the most prominent problem solving/process improvement techniques used in industry today. It will be done by providing the theory behind each technique followed by a case study that illustrates it and then an actual project to gain some exposure using the technique. By the end of the course, students will not only understand these prominent techniques but they will have practiced and used many of the tools and techniques. Also incorporated into the course are how to present results for maximum impact and managing resistance to change.

Course Objectives/Learning Outcomes:

- Explore prominent improvement techniques used today.
- Understand and apply the DMAIC model (Six Sigma) to a group project.
- Analyze a live product line and then apply the appropriate tools to evaluate and recommend solutions to improve.
- Identify all forms of waste in a process.
- Calculate improvements in terms of benefits and costs in a format for upper management.
- Explore behavioral responses to change.

Grading Policy:

Grading for the course will be based on **2 tests, a final, several quizzes, and 3 projects**. Final course grades will be assigned according to the following weights:

Tests:	12.5% each (2 total)
Final Exam:	25% total
Quizzes:	10% total
Projects:	10% project 1,2 20% project 3

Grades will be assigned as follows:

A	90-100 points
B	80-89.99 points
C	70-79.99 points
D	60-69.99 points
F	Below 59.99 points

If you have an issue or a concern with your grade for a test 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 test or assignment (and not only the specific question you are contesting).

Laptops:

Laptops are expected for every class. Bet you didn't expect to see that. We will often do exercises, take data, play online simulations, etc... Quizzes will also be administered online. Not bringing a laptop is coming unprepared.

Test/Exam Policies:

Students missing a scheduled test/exam due to an official Georgia Institute of Technology event must **prearrange an alternate time** to take the test. Other excused absences (for health reasons, etc.) must be documented and provided. The tests are not comprehensive. The final is comprehensive. All test/exams are closed book, closed notes, and exclusively individual efforts. To help students understand the material and prepare the exams, practice problems may be assigned. **Cell phones, PDA's, laptops, cameras, tablets, and any other electronic or transmitting devices are not permitted during the exam at any time. These devices must be powered off and out of sight during exams.** If there is an emergency situation

that requires a transmitting device to be active, please contact the proctor prior to the exam. Students must have desks clear of all items during the 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/>.

Special Accommodations:

Students requesting academic accommodations based on a documented disability are required to register with the Office of Disability Services. Please obtain a form from their office and turn it in to me at the beginning of the semester. The Office of Disability Services is located in the Smithgall Student Services Building, Suite 123. The phone number is 404-894-2563.

<http://disabilityservices.gatech.edu/content/4/contact-us>

Quizzes:

Short quizzes will be given at the beginning **or** end of some classes and should take no longer than 5 minutes to complete. Quizzes should be anticipated for every class, and may consist of questions from the previous class, the current class, in class activities, or assigned readings. I may even tell you exactly what the questions will be ahead of time. If you arrive to class late or leave early, you may not have enough time to complete the quiz, so full attendance and timeliness is highly recommended.

Projects:

Projects will vary in scope and requirements. In addition, some will be group projects, and some will be individual projects. Additional details on each project will be given in class before the project starts.

Honor Code:

I take the honor code very seriously, and perceived violations will be pursued to the furthest extent possible! Students are responsible for the information contained in the Georgia Institute of Technology Honor Code (available at <http://www.honor.gatech.edu>). For any questions or concerns involving any Academic Honor Code issues, please consult me.

Attendance/Absences:

Attendance is strongly advised (as much as I would like to see you in every class, I cannot control that). Note there may be material mentioned in class, which is not covered in the text. If you miss a class, please ask your classmates about any minor schedule change and hints on upcoming quizzes discussed in that class. See additional info at <https://studentlife.gatech.edu/content/class-attendance>.

Class will be in-person unless otherwise necessary. If COVID or other issue requires, we will shift to remote learning. You should be prepared to attend either mode as needed.

Students who are absent 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. Exercising one's rights under this policy is subject to the Georgia Tech Honor Code.

Students *representing the Institute* (not themselves) as part of a competition or conference, or who are fulfilling a mandatory military deployment, or who are hospitalized, or attending the funeral of an immediate family will generally be allowed to make up work at the instructor's discretion.

Although it is recognized that occasionally it may be necessary for students to be absent from scheduled classes for personal reasons, students are responsible for all material covered in their absences, and they are responsible for the academic consequences of their absences. Work missed for foreseeable events, personal choices, and "things that just happen" will generally not be eligible for make-up. Being ill, doctor appointments, interviews, incarceration, weddings, conflicts with part- of full-time work needs, activities in other classes, research activities, and participation in other extracurricular activities are generally not eligible for make-up.

Classroom Etiquette/Community Behavior:

It is expected that you are courteous and professional to both your instructor and classmates. This requires that some basic rules of respectful behavior be followed. The following **are not acceptable**: (1) **talking among students** except when we are working on cooperative class exercises, (2) reading or working on anything except the material in this class, (3) putting your head down on your desk (**sleeping**), (4) using digital devices (e.g., **texting**) except when specifically allowed to do so as calculators, or (5) allowing your **cell phone to ring** during class. **Anyone who participates in any of these unacceptable behaviors will be required to leave the classroom** -- NO EXCEPTIONS.

One of the most important things is to start the class on time. Students should make every effort to be at class on time and, if late, find a seat quickly and disturb the class as little as possible. In order to arrive on time, please make sure that you allow 30 minutes between this class and classes on main campus.

The desire is to create a focused environment during our time together. A free-flowing discussion among the class will occur frequently. Your participation will enhance this learning for both you and the class. Please do not hesitate to contribute. My goal is for you to learn and grow, it is not to chastise or criticize if you say something bad. The only bad thought or question is the one not spoken.