MGT 2210 Syllabus

Information Systems & Digital Transformation, 3 Credits

Summer 2026

Instructor Information

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General Course Information

Description

Information and knowledge are critical resources in modern organizations. Advances in information technology—particularly in artificial intelligence (AI), data analytics, and digital platforms—have made information systems the backbone of business operations, decision-making, and competitive strategy.

This course introduces students to the foundations of information systems and their business value, with a strong emphasis on AI-driven digital transformation. Students will examine how data, analytics, machine learning, and generative AI are reshaping organizations and industries, alongside core information systems concepts such as infrastructure, platforms, and cybersecurity. The course integrates conceptual frameworks with hands-on experience using modern data, analytics, and AI tools, preparing students to be informed users and managers of AI-enabled information systems.

Course Learning Outcomes

Upon successful completion of this course, students will be able to:

- Explain the role of information systems in modern organizations and how IS enables and drives digital transformation.
- Analyze how digital transformation reshapes firms and industries, including platforms, digital ecosystems, and social computing.
- Apply data analytics and data mining techniques to support decision-making, and interpret foundational machine learning models.
- Recognize the business applications, opportunities, and risks of advanced AI, including deep learning and generative AI.
- Evaluate emerging technologies such as blockchain, Web3, and cybersecurity frameworks in a business context.

Required Course Materials

Textbook: Gallaugher, John (2025). Information Systems: A Manager's Guide to Harnessing Technology (v10.1). Flatworld Knowledge. ISBN: 979-8-88794-635-1. Any format is acceptable.

Software (provided or freely available): Microsoft Excel for Office 365 (desktop version), MySQL Workbench, Orange data mining software, and Gemini (https://gemini.google/students).

Grading Policy

Final grades are based on points earned across weighted course components as shown below. Canvas automatically applies component weights to compute the overall grade. The grade shown during the semester is a progressive estimate and may be incomplete if assignments are ungraded or missing.

Letter grade scale: A: 89.5–100% | B: 79.5–89.49% | C: 69.5–79.49% | D: 59.5–69.49% | F: below 59.5%. Consistent with Georgia Tech policy, final course grades are awarded on a scale of A–F with no +/- grades.

Components

Course Component	Percentage	Max Points
Mini-Exercises	10%	100
Discussion – your future with AI	5%	50
Homework	20%	200
Large Language Models	8%	80
Test 1 (incl. computer check)	20%	200
Test 2	15%	150
Final Exam	22%	220
Total	**100%**	**1000**

Description of Graded Components

Mini-Exercises: Smaller hands-on assignments, available through canvas.

Discussion: The discussion will focus on your contributions to a canvas discussion board on your future with AI.

Homework: Homework focuses on developing practical digital and analytics skills aligned with the course learning outcomes. There are four separate Homework assignments.

Large Language Models: A team-based AI assignment in which students investigate the mechanics of Large Language Models.

Tests (Test 1 + computer check; Test 2): Tests are administered in class via Canvas and are proctored using an Institute-approved system. All tests are closed book and closed notes. A required computer check test must be completed before Test 1.

Final Exam: The final exam is mandatory, held during the official final exam period, and lasts 95 minutes. It covers previously untested material only.

Course Policies

Attendance

This is an online, asynchronous course. Lectures will be pre-prepared and available via canvas.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

Generally, late work will not be accepted, nor work incorrectly submitted. Missed deadlines due to illness, family emergencies, interviews, or similar circumstances will be supported by an Institute-Approved Absence, a Dean of Students letter, or appropriate medical documentation and handled in accordance with Georgia Tech policy. An IAA does not allow students to miss any deadlines during an online semester

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. All submitted work must be original, and AI tools may be used only when explicitly permitted by the instructor for a specific assignment.

Accommodations for Students with 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 needs and to obtain an accommodations letter. Please also email 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.

Additional Criteria for Successful Completion

To successfully complete this course, students must: (1) earn a final weighted score of at least 59.5% across all course components, and (2) sit the final exam in person on campus during the officially scheduled final exam period. Students who do not take the final exam cannot successfully complete the course except under the limited exceptions recognized by Georgia Tech policy (such as a Dean of Students letter or the middle-of-three-exams rule).

Campus Resources for Students

Graduate Student Academic and Professional Success Resources

A list of resources for graduate students is available on the Office of Graduate and Postdoctoral Education website, including academic resources, student services, and professional development opportunities.

Student Well-Being

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness-related resources is maintained by the Office of the Vice President for Student Engagement and Well-being at students.gatech.edu/student-resource-guide.