

MGT 4052 Syllabus

Systems Analysis and Design MGT 4052, Section A, 3 Credits

Fall 2026

Instructor Information

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General Course Information

Description

An introductory course on the development life cycle of business information systems. It covers analysis and design tools and methodology

Course Learning Outcomes

After completing the assignments related to the content of this course, you will be expected to be able to:

- Explain and carry out all the basic work of systems analysis and design.
- Estimate the cost of creating and implementing a system.
- Create a project and release plan for an IS project and control project scope.
- Collaborate with IT professionals to design a system architecture.
- Collaborate with IT professionals to convert conceptual data models to database specifications.
- Participate in the leading of a project using agile methods, specifically scrum.
- Given constraints, design a system deployment, including using DevOps practices.

In addition, it is *integral to the course* that students, as future graduates of the Georgia Tech Scheller College of Business, demonstrate that they can:

- Work effectively as part of a team, doing their share of the work and giving appropriate feedback to peers
- Convey material in written and oral formats and produce documentation using techniques common in industry and acceptable to the School.

Required Course Materials

Systems Analysis & Design in an Age of Options by Spurrier and Topi – 2nd edition. *You must have the 2nd edition as it is much improved from the 1st.* You can buy access to the on-line version directly through the provided link. Note: We also make extensive use of the “Deeper Dive” optional sections that are only available on-line from the publisher.

Software Requirements Essentials by Wiegers and Hokanson. You have already paid for this book with your tuition and student technology fees. It is available online in Canvas through the *Reading Lists link*.

This is solid down-to-earth introduction to good practice based on decades of experience.

Pre- &/or Co-Requisites

None

Grading Policy

Categories and Weights

Category	Weight	Comment
Tests	40%	There will be several tests. The weight of each item in this category is determined by the number of points offered on each. <i>Everything taught in class, everything on the slides, and everything in the assigned readings after the coverage of the previous test is fair game unless otherwise specified.</i> Tests are not cumulative. All tests are closed book and closed notes. A calculator will be provided through the testing system if one is required. You may <i>not</i> use any information technology that is not specifically authorized during a test.
Comprehensive final exam (optional)	20%	The final exam is comprehensive and optional. Generally, final exam dates and times are available at: http://www.registrar.gatech.edu/students/exams.php If you are satisfied with your performance on the tests, you may choose not to take the final. In that case, your weighted average test score percent will be used to calculate a final exam score for you. <i>If you take the final, it will count.</i> If you take the final exam and your final exam score percent is higher than your weighted average test score percent, your final exam score percent will be used to recalculate your average percent test grade to equal your final exam percent grade. If none of these situations is evident, then your final exam score will just count as your final exam score.

Team design project	20%	<p>You will be graded as a team on your submissions. Peer evaluations of individual contributions may affect individual part grades by large amounts. Also, for every peer evaluation that you do <i>*not*</i> fill out on time, your overall grade for the project will be reduced. <i>You must turn these in on time.</i></p> <p>Peer evaluations of individual contributions may affect individual grades by large amounts, up to an including a grade of 0 on the project.</p>
In-class exercises	20%	<p>There will be several in-class assignments. Instructions will be given for each assignment. The weight of each item in this category is determined by the number of points offered on each. A certain number (3) of the lowest grades in this category will be dropped.</p> <p><i>It is your responsibility to ensure that you uploaded the files you intended to and that they were received. Blank, unreadable, or “wrong file” submissions will receive grades of 0 and no timestamps will be inspected.</i></p> <p>No collaboration is allowed unless specifically mentioned in the instructions. Unauthorized collaboration is considered cheating and will be handled according to the procedures of the <u>Office of Student Integrity</u>.</p> <p><i>It is your responsibility to ensure that you uploaded the files you intended to and that they were received. Blank, unreadable, or “wrong file” submissions will receive grades of 0 and no timestamps will be inspected.</i></p>

Letter grade assignments

- A = 89.50% = 100.00%
- B = 79.50% < 89.50%
- C = 69.50% < 79.50%
- D = 59.50% < 69.50%
- F = 00.00% < 59.50%

IMPORTANT NOTE: *Students taking this course on a pass/fail basis will be assigned an “S” if they would have received the grade of “C” or better had they enrolled in the course on a regular letter-grade basis.*

Posted Letter grades are FINAL unless I failed to record a grade correctly or made a math error. It is common that some students miss a higher grade by a few points no matter where the line is drawn.

Course Policies

Academic Integrity

The Georgia Tech Honor Code is in force. The complete text is on the Honor Advisory Council website: <https://osi.gatech.edu/content/honor-code>

Plagiarism, which includes copying homework, is considered a serious offense. You are not allowed to copy and paste or submit materials created or published by others, as if you created the materials. All materials submitted and posted must be your own original work.

You are expected to be aware of actions that constitute cheating, fabrication or falsifications, multiple submissions of essentially the same work for different classes, plagiarism, and complicity in academic misconduct. Note that academic misconduct includes, "Submission of material that is wholly or substantially identical to that created or published by another person or persons, without adequate credit notations indicating authorship," (plagiarism). Suspected cases of academic misconduct are investigated by the Office of Dean of Students.

Attendance Policy

Attendance is not required, per se. However, in-class activities are designed to be done in groups with other students, and you must be present in the class to participate. No exceptions will be made.

Accommodation for Students with Disabilities

If you have an established accommodation with the Offices of Disability Services, please communicate your approved accommodation to me at your earliest convenience so we can discuss your needs in this course. Any accommodation granted will begin after you present the documentation. Accommodation for a specific event will be considered after the request but before the event. No retroactive accommodation will be made.

If you have a need but have not yet established an accommodation through Disability Services, you should contact Disability Services at 404.894.2563 or dsinfo@gatech.edu or <https://disabilityservices.gatech.edu/>. Disability Services offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health

conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Disability Services.

Should a new disability be identified during the term, I will work with Disability Services to accommodate your needs from that time forward.

Alternative credit

There is no opportunity for alternative credit in this course.

Early/Make-up work

There is no early or make up work for any assignment or activity of the class except for Institute-approved absences or accommodation. Late work, if accepted, must be late because of significant events beyond the student's control such as an Institute-approved absence, death in the immediately family or an emergency medical procedure. See provision for "excused absences" for circumstances under which late work might be accepted.

Official communications

Both the LMS 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 ends in @gatech.edu) that is assigned to you by the Institute. It is your responsibility to have Canvas send emails to your GT address of all announcements posted, to have your Georgia Tech email account active, and to receive and regularly read messages written to that address. If you do not use your Georgia Tech email address, you should have your GT email forwarded to an account that you check several times each day and make sure it is not filtered as spam. That is also your responsibility.

Recordings of class sessions and required permissions

Per Institute regulations, classes, whether in person and on-line, may *not* be recorded by students without the express consent of the instructor (me) unless it is pursuant to an accommodation granted by the Office of Disability services. Class recordings, lectures, presentations, and other materials posted on Canvas are for the sole purpose of educating the students currently enrolled in the course.

Students may not record or share the materials or recordings, including screen capturing or automated bots, unless the instructor gives permission. Digitally proctored exams may require students to engage the video camera, but those recordings will not be shared with or disclosed to others without consent unless legally permitted.

Sharing course material with third parties

You must assume that all class materials are copyrighted either by Georgia Tech or by the publisher of the content whether that be as text, video, or audio. Sharing any such material, e.g., on “Course Hero” or “Chegg”, is a violation of copyright and may be treated accordingly.

Use of Artificial Intelligence, e.g. ChatGPT, Bard, Claude, etc.

Potential employers expect and your own self-education demands that you know how to use Artificial Intelligence (AI) tools skillfully and skeptically. Therefore, my position is to embrace and integrate them into certain course activities with full transparency about their use and to include material in the course concerning the skillful and skeptical use of these tools. That said, using any AI tools during a proctored exam or quiz is never permitted.

Some specific limits on the use of AI in this course:

- The output from generative AI tools MAY NOT be "copied and pasted" directly. As is the case with any reference material, attribution must be given for the direct citation of references, including generative AI, using appropriate documentation standards, e.g., APA version 7. Violations of this policy will be considered subject to the Georgia Tech plagiarism guidelines.
- Class material may not be loaded directly into a generative AI tool without instructor approval.

Verifying canvas submissions

To avoid the risk of non-submission of work, you should go back to the assignments page on Canvas and double-check what was turned. Download a copy of it from Canvas and verify that it is exactly what was intended to submit. *Turning in the correct file and validating that you have done that correctly is solely your responsibility – in short, it is your job to verify it.*

You can submit your homework file(s) multiple times on Canvas until the cut-off time, with the last submission being the one that will be graded. *If you resubmit a homework, make sure each resubmission includes *all* the required files, not just the one(s) you changed.*

Conduct expectations

From time to time, we might discuss a topic that people will differ sharply on. In these cases, *I expect all students to behave in a manner that is a credit to the intellect, maturity, and pragmatism that should characterize students and alumni of the Institute.* Specifically, I expect students to conduct discussions in a manner that clarifies positions, seeks understanding of opposing viewpoints, encourages discovery of agreements, avoids

exaggerating differences, and promotes progress in the most noble political spirit. To paraphrase the German statesman Otto von Bismarck, "*Politics is the art of the possible, the attainable – the art of the next best.*" Given different viewpoints and interests, without high quality discussion, there can be no true politics.

To that end, we must all find within ourselves the ability to accept some things:

- We will accept that we might be emotionally and intellectually uncomfortable.
- We will accept that any justifications we propose to support our positions may be challenged.
- We will accept that our most cherished beliefs may be challenged.

And these are the things we must agree with each other NOT to do:

- We will not make personal attacks or impugn the reputation of those who disagree with us.
- We will not take personally statements that challenge only our beliefs and arguments.
- We will not make outrageous statements designed to provoke a reaction, positive or negative.
- We will not knowingly employ a fallacious argument technique, for example, a "straw man".
- We will not knowingly make false statements or exaggerate.
- We will not try to change the topic in the middle of an argument.
- We will not try to shut down those who disagree with us with witty comments.
- We will not go over our allotted time.
- We will not interrupt or otherwise try to exercise a "heckler's veto".

Finally, we will not encourage anyone who will not behave in accord with these rules.