



**Middle Georgia**  
State University

School of Computing  
Department of Information Technology

## SECTION 1 - GENERAL COURSE INFORMATION

Course Title:	Systems Analysis Design
Course Prefix and Number:	ITEC 3155
Course CRN#:	26555
Semester & Session:	Spring 2026- 02
Campus Location:	Macon PSC 256
Meeting Days:	M/W
Meeting Time:	11 am to 12:15 pm

## INSTRUCTOR'S INFORMATION

Name:	Dr. Angela C. Munoz	
E-mail Address:	Angela.munoz@mga.edu	
Office Location:	Macon PSC 325	
Office Phone Number:	(478) 471-3621	
Tentative Office Hours:	Monday	9 am to 11 am, 2 pm to 4 pm
	Wednesday	9 am to 11 am, 2 pm to 4 pm

## SECTION 2 - DETAILED COURSE INFORMATION

Course Prerequisite:	At least a C in either <a href="#"><u>ITEC 2215</u></a> or <a href="#"><u>ITEC 2201</u></a>
Credit Hours:	3 credit hours
Course Description:	Using the object-oriented approach, students will analyze and define, using UML, the system requirements of the organization. Students will participate in either a simulation or case study in order to experience the operational flow of organizational systems. The technology independent logical model showing the requirements for the system will be created.

**Student learning outcomes:** Upon completion of this course the students will be able to:

- Apply Systems Development Life Cycle (SDLC) Methodologies
- Perform Effective Requirements Gathering
- Create UML-Based System Models
- Design Logical Data Models
- Evaluate System Architectures
- Develop Testing and Deployment Strategies
- Collaborate and Communicate Effectively
- Assess Ongoing Maintenance and Emerging Trends

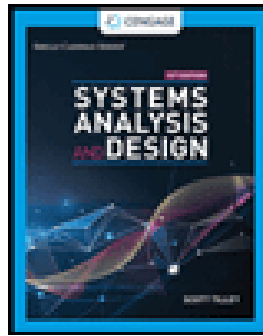
This course will cover the following topics:

**Topics:**

- Introduction to Systems Analysis and Design
- Systems Development Life Cycle (SDLC) and Methodologies
- Project Management Fundamentals for Systems Projects
- Requirements Elicitation and Analysis
- Object-Oriented Analysis and Modeling (UML)
- Data Modeling and Database Design
- System Architecture and Design Patterns
- Implementation, Testing, and Deployment Strategies
- Maintenance and Post-Implementation Considerations
- Emerging Trends (IoT, AI, Cloud Computing) and Future Directions

**Required course materials:**

- **Title: Systems Analysis and Design (12th)**
- **Bookstore Link: [Systems Analysis and Design | MGA Bookstore](#)**



- Author: Tilley, Scott
- ISBN 13:9780357117811
- Publisher: Cengage Learning

**Technology Requirement:**

- Microsoft Word
- Microsoft PowerPoint
- Camera & Microphone
- **Access to Lucidchart**

**Library/Learning Resources:** As a Middle Georgia State University student, you have complete access to GALILEO (Georgia Library Learning Online), a virtual library of licensed commercial databases. It provides access to over 100 databases indexing thousands of periodicals and scholarly journals. There are over 10,000 journal titles available in full-text. Additional GALILEO resources include e-books, government documents, reference collections, and video databases. The Middle Georgia State University library also has core collection with locally purchased resources to support this graduate course. Currently the exclusive holdings for the B.S. / M.S. in Information Technology graduate courses are as follows: e-Journals = 1,661, Print Books = 1,164, e-books = 4,325, and DVDs = 66. The following are examples of online databases that support this undergraduate course. They are available to you through GALILEO and/or institutionally funded subscriptions:

- ACM Digital Library

- Computer Source
- Computing (ProQuest)
- Academic Search Complete
- Research Library (ProQuest)
- Wilson Omnifile: Full-Text Mega Edition
- Google Scholar
- Films on Demand

Tutoring is available free of charge on all MGA campuses for currently enrolled students. To view center contact information, subjects tutored, and tutor availability, go to the SSC website at <http://www.mga.edu/student-success-center/>. SSC tutoring sessions may be scheduled online and face-to-face through the “Book an Appointment” link on the Student Success Center website. Other services at the SSC include online academic workshops and a robust website with resources for academic assistance. The centers also have computer workstations, printing, and Internet access.

## SECTION 3 - COURSE ASSESSMENT INFORMATION

In this course, Online Systems Analysis and Design, students are assessed through a combination of projects, quizzes, and discussions designed to measure both theoretical understanding and practical application of system analysis and design concepts. Each component targets distinct learning outcomes and fosters a comprehensive learning experience.

### Projects

The mini-project assignments and the final project serve as cumulative demonstrations of the knowledge and skills gained throughout the course. These projects are designed to:

- Develop Practical Skills: By incrementally creating requirements documents, UML diagrams, data models, and final system architectures, students gain hands-on experience.
- Encourage Critical Thinking: Students must apply analysis and design principles to solve real or hypothetical business problems.
- Promote Collaboration and Reflection: Although work may be done individually, peer reviews and group discussions allow for broader perspective-taking and iterative improvement.

Each project component builds upon the previous one, culminating in a final submission that demonstrates a holistic understanding of systems analysis and design processes, from requirements elicitation through maintenance planning.

### Quizzes

Quizzes are short, formative assessments administered throughout the course to ensure that students keep pace with weekly learning objectives. Key features include:

- Frequent Knowledge Checks: Quizzes typically follow lecture modules and assigned readings to confirm comprehension of terminology and core concepts.
- Immediate Feedback: Quick turnaround on grades and explanations helps students correct misunderstandings and reinforce learning.

- Cumulative Review: Occasional cumulative quizzes may be used to connect multiple topics (e.g., comparing various SDLC methodologies or relating data modeling to system design).

By integrating quizzes at various intervals, the course ensures continuous engagement and prevents last-minute cramming, thus promoting deeper retention of the material.

## Discussions

Weekly discussion activities are conducted in an asynchronous online forum to facilitate idea exchange, analysis, and reflection. Discussion prompts focus on:

- Real-World Applications: Students relate theoretical concepts (e.g., requirements gathering, UML diagrams) to workplace or industry scenarios.
- Critical Analysis: Learners debate methodologies (e.g., Agile vs. Waterfall) or architectural choices and propose evidence-based arguments.
- Peer Learning: Discussion threads promote collaboration by allowing students to read, respond, and build on each other's perspectives.

Through these discussions, students sharpen their communication and problem-solving skills, fostering a deeper, more contextualized understanding of course concepts.

## CRITERIA FOR DETERMINING THE FINAL COURSE GRADE

Final grades are computed based on percentages as follows:

### Grading Summary

10 % Quizzes  
20 % Discussions  
30 % Assignments  
40 % Final Project  
  
100 % of final grade

### Grading Policy

Letter Grade	Description	Grading Scale
A	Excellent work	90 to 100
B	Good work	80 to 89.9
C	Satisfactory work	70 to 79.9
D	Passing work	60 to 69.9
F	Failing work	Below 60

## SECTION 4 - INSTRUCTOR-SPECIFIC POLICIES

### Professional Communication

All emails from the instructor will be sent to your "Official" college email address. It is the student's responsibility to check their college email account at least 3 times per week. Please use your MGA email account to send emails to the instructor (**do NOT use D2L**). The best way to contact the instructor is by email or request a time to meet via email/MS Teams. The instructor will respond to all emails within 24 hours during the work week (Monday-Friday) and 48 hours on weekends (Saturday-Sunday).

### Course Design

This is a deadline class. All material for this class is due at 11:59 p.m. on Sunday. No late work will be accepted. All assignments will be uploaded to Turnitin.com by the professor.

Late material will be considered only with an excused notification, verified by the professor or the CSI department chair. The instructor will discuss the completed assignments with any student in attendance after 24 hours has passed, and a written argument with bullet points has been turned into the professor. The bullet points should professionally discuss the reasons for a grade change or extension. All students are required to upload his or her daily threads and assignments, midterm, and final to the online platform/ gradebook. All students are required to keep a full copy of all their work, including the notes, research tools, raw images, audio clips, on a backup server, or the school's server, and where possible and legal a back-up hard drive. I would suggest that each student creates a digital archive of all raw material, research and images/videos on a personal hard drive or DVD weekly and or after each assignment's finalization. There will be no excuses for lost information, damaged hard drives, or stolen information and data. All students are responsible for the data collection and storage.

## AI USAGE POILICY FOR COURSEWORK

To maintain a culture of integrity and respect, the use of generative AI tools in this course follows a traffic light model:

- **Green Light:** You are free to use generative AI tools in any way you see fit for your coursework. Any AI-generated content must be properly cited. Example: "Feel free to use generative AI tools for idea generation, writing assistance, or research. Ensure that any work not originally created by you is properly cited."
- **Yellow Light:** You may use generative AI tools in specific, instructor-approved ways. Ensure that any AI-generated work is cited. Example: "You are encouraged to explore AI tools for brainstorming or research. However, all writing and final submissions must be your own. AI-generated content must be cited appropriately."
- **Red Light:** Generative AI tools are not allowed for any part of your coursework. Example: "All work in this class must be entirely your own. The use of AI tools is prohibited at any stage of the work process unless specifically authorized."

**Note:** If no specific signal or light is given for an assignment, you may assume a **Green Light** approach. However, always cite AI-generated content and use these tools responsibly.

## SECTION 5 - TENTATIVE COURSE SCHEDULE AND OUTLINE

The schedule below contains class activities, assignments, and deadlines. Note that the course schedule is "tentative" and subject to change based on student and/or pedagogical needs. All changes will be announced and posted on the course website.

Date	Readings	Activities	Due Date
Week 1: Jan 12-Jan 18	Syllabus and Orientation Module 1 Chapter 1	Course Kickoff <ul style="list-style-type: none"> <li>Entry Quiz</li> <li>Sample Assignment Submission</li> </ul> Discussion 1	Jan 18
Week 2: Jan 19-Jan 25	Module 2 Chapter 2	Analyzing the Business Case <ul style="list-style-type: none"> <li>Assignment 1</li> </ul>	Jan 25
Week 3: Jan 26-Feb 1	Module 3 Chapter 3	Managing Systems Projects <ul style="list-style-type: none"> <li>Discussion 2</li> </ul>	Feb 1
Week 4: Feb 2-Feb 8	Module 4 Chapter 4	Requirements Modeling <ul style="list-style-type: none"> <li>Quiz</li> </ul>	Feb 8
Week 5: Feb 9-Feb 15	Module 5 Chapter 5	Data and Process Modeling <ul style="list-style-type: none"> <li>Discussion 3</li> </ul>	Feb 15

Week 6: Feb 16-Feb 22	Module 6 Chapter 6	Object Modeling • Assignment 3	Feb 22
Week 7: Feb 23-Mar 1	Module 7 Chapter 7	Development Strategies • Discussion 4	Mar 1
Week 8: Mar 2-Mar 8	Module 8 Chapter 8	User Interface Design • Quiz	Mar 8
Week 9: Mar 9-Mar 15	Module 9 Chapter 9	Data Design • Discussion 5	Mar 15
Week 10: Mar 16-Mar 22	Module 10 Chapter 10	System Architecture • Assignment 5	Mar 22
Week 11: Mar 23-Mar 29	Spring Break	Spring Break	Mar 22
Week 12: Mar 30-Apr 5	Module 11 Chapter 11	Managing Systems Implementation • Quiz	Apr 5
Week 13: Apr 6-Apr 12	Module 12 Chapter 12	Managing Systems Support and Security • Final Team Project Draft Review	Apr 12
Week 14: Apr 13-Apr 19	Module 13 Systems Analysis Toolkit-Part A	Systems Analysis Toolkit-Part A • Final Team Project Presentation	Apr 19
Week 15: Apr 20-Apr 26	Module 14 Systems Analysis Toolkit-Part B	Systems Analysis Toolkit-Part B • Final Team Project Paper	Apr 26
Week 16: Apr 27-May 3	Module 15 Systems Analysis Toolkit-Part C	Systems Analysis Toolkit-Part C • Final Team Project Peer Review	May 3
Week 17: May 4-May 10	Module 16 Systems Analysis Toolkit-Part D	Systems Analysis Toolkit-Part D • Final Reflective Assignment Due	May 10

## SECTION 6 – INSTITUTIONAL POLICIES

Students are responsible for reading, understanding, and adhering to all Middle Georgia State University student policies, including those linked on the Institutional Policies page. <https://www.mga.edu/center-excellence-teaching-learning/syllabi-policies.php>

### STUDENT ATTENDANCE & WITHDRAWAL POLICY

The instructor is required to report “no-shows” or students who do not show up the first day of class. Therefore, all students enrolled in the course must verify their enrollment. This can affect financial aid, and you may be dropped from the class. Your instructor will notify you as to how to verify your enrollment before the beginning of the term to ensure that you are not reported as a “no-show”.

Students are encouraged to read the withdrawal policy found at <https://www.mga.edu/registrar/registration/drop-add.php> before dropping/withdrawing from the class.

Students who wish to withdraw from the University must complete the Withdrawal Form, obtaining the required signature from the advisor, and submitting it to the Office of the Registrar at the Macon campus or the administrative offices at other campuses. Withdrawal is not complete until all withdrawal procedures have been properly executed. <https://www.mga.edu/registrar/>

Students may withdraw from the course and earn a grade of “W” up to and including the midterm date, which occurs on **April 8, 2026**. After this date students who withdraw will receive a grade of “WF.” <https://www.mga.edu/academics/calendars/index.php>

### **DELAYED OPENING OR CLOSING OF THE UNIVERSITY**

If class is unable to occur for an opening or closing of the university, go to the online webpage of the course for additional instructions. If there are no additional instructions provided on the course homepage news section, then just plan to meet at the normal next regularly scheduled meeting for the course. Knight Alert can be used to check or <https://www.mga.edu/police/alert/index.php>

### **STUDENT USE OF AI IN COURSEWORK**

To maintain a culture of integrity and respect, generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.