

The University of North Carolina at Greensboro
 Bryan School of Business and Economics
 Department of Information Systems and Supply Chain Management

ISM 301
Systems and Process Analysis
COURSE SYLLABUS
Fall 2021

Professor:	Nikhil Mehta, Ph.D.
Email:	n_mehta@uncg.edu <i>E-mail is the best way to communicate with me.</i>
Office:	439 Bryan Building
Class Times and Meeting Location:	<p>Section 01A: Tuesday (11:00 am to 12:15 pm in Bryan 121) Thursday (Online)</p> <p>Section 01B: Tuesday (Online) Thursday (11:00 am to 12:15 pm in Bryan 121)</p> <p>Section 02: Online (Asynchronous)</p>
Office hours:	Tuesday: 2:00 pm – 3:00 pm, and by appointment.

Required Text

Rosenblatt, Henry. J., *Systems Analysis and Design*, 10th Edition, Cengage Learning.
 ISBN: 978-1-285-63319-0 (e-book); ISBN: 978-1-285-17134-0 (print)
 Additional readings may be posted on Canvas.

Required Software

Use Lucidchart or a similar diagramming software to create various diagrams. Download the Basic version (free) from (www.lucidchart.com)

Other Suggested Readings

Schach, Stephen R., *Object-Oriented and Classical Software Engineering*, 5th Edition, McGraw-Hill, 2002
 Alan Dennis, Barbara Haley Wixom and David Tegarden, *Systems Analysis & Design with UML Version 2.0* (2005) (ISBN- 0-471-34806-6), John Wiley and Sons, Inc.
 Martin, J., and Odell, J., *Object-Oriented Analysis and Design*, Englewood Cliffs, NJ: Prentice-Hall, Inc., 1992.

Course Description

Systems Analysis is concerned with the mechanisms for creating conceptual blueprints of systems that support management strategies and enable business processes. This area of study encompasses technical, economic, social, organizational, and political elements. *ISM 301* will help students focus on system and process concepts such as system boundaries, feasibility assessments, performance measures, information

modeling, process re-engineering, systems quality, and value added. Students will acquire the knowledge and skills necessary to collect data, analyze the data and create knowledge, and use analysis methodologies and tools to formalize their blueprints. The course emphasizes the skills necessary to "ask the right questions", analyze systems and process information requirements, model systems requirements using standard systems methodologies and techniques, and communicate resultant analyses to others using well-understood conceptual representations. *ISM 301* adopts a mix of structured analysis as well as object-oriented analysis approaches to demonstrate the role of systems analysis. Other topics, such as computer-aided software engineering (CASE), prototyping, JAD/JAR, and system architecture and system security will also be examined.

Course Policies and Expectations

- ISM 301 is a pivotal course in the study of Information Systems, and course learning will rely equally on textbook content and information not available in the textbook. You are responsible for accessing all information, announcements, and course material available on Canvas.
- **It is important for you to realize from the outset that there are components of this course that are far less structured than what you are normally accustomed to. This means that you are expected to take the initiative and responsibility in these areas.**
- There will be regular chapter quizzes during the semester. Each quiz will have 10 to 20 multiple choice/true-false type questions. Quizzes can only be taken once. Each quiz is due as per the course schedule. You have to take the quiz yourself without any help from any other person or any other source of information, online or offline. Failure to comply with these policies will connote an academic honesty violation.
- Team activities will be given during the semester to enhance your learning experience. You are expected to complete these team activities and submit deliverables as per the course schedule.
- Exams will be available on Canvas for a specific period, as per the schedule. You can take the exam only once. You have to take the exam yourself without any help from any other person or source of information, online or offline. Failure to comply with these policies will connote an academic honesty violation.
- **You have to take the online exams and quizzes via a monitoring app that would require you to turn on your webcam. The app would also lock your browser, monitor your Internet use, and record your test-taking environment. These recordings will be viewed by the instructor and may be shared with other experts to make informed decision about possible violations of academic honesty. Violations may result in severe penalties including failing the exam/quiz and failing the course. This is not an exhaustive list of penalties.**
- You are responsible for technology-related issues, such as Internet connection or having a webcam. If you encounter problems accessing quizzes/exams/activities due to Canvas-related issues, contact me immediately, with evidence (such as screenshots). Any canvas-related problem reported after the deadline will not be considered as a valid excuse for missing course deliverables (quizzes/exams/activities).
- As a rule, make-up assignments/activities/quizzes/exams will not be allowed. Missing course deliverables due to illness, summons to jury/military duty, or any other compelling reason should be backed by the appropriate documents (e.g., doctors' note, etc.) in order to qualify for an accommodation. Students should communicate to the professor **before** missing the course deliverables to discuss the circumstances.
- Teamwork is one of the critical skills required in this course. It is important that teams manage themselves to accomplish shared goals. In the most effective teams, interactions are managed between ALL team members rather than between any two members. To facilitate healthy team interaction, teams are encouraged to take this collective approach to managing team member expectations and

within-team conflict. Teams should strive to be democratic and fair-minded, rather than allow unilateral decision-making.

- **One problem that occasionally plagues teams is free-riders - team members who exploit the work of others while contributing little themselves.** In team activities, free-riding should not be tolerated. In case all other members of a team agree that a member is habitually failing to contribute his/her fair-share, teams can move to fire that member from the team. **Justification for this decision must be provided by all team members with supporting evidence, such as failure to participate in more than one team activities without notice or explanation, missed deadlines for scheduled deliverables, poor quality work, or inadequate effort leading to poor team performance.** This decision must represent the consensus of the entire team. The issues leading to firing a team member should be discussed with the instructor prior to the team taking action. Fired members will receive no credit for subsequent work by their team.
- Most communications will be done through email and/or Canvas announcements. Students are expected to check e-mail regularly and know how to use a Canvas. Requirements for assignments/activities and various soft-copy documents may be distributed electronically.
- Email is also the best way to communicate with me. **In your emails, always state your name, course number, and section number.** You may not receive a response if this information is missing.

Course Objectives and Learning Outcomes

ISM 301 aims to develop the following knowledge and skill sets:

KNOWLEDGE SETS	SKILLS-SETS
1. Business and Strategic Information Systems	1. Requirements Modeling
2. Automate Business Processes	2. Data Gathering
3. Request for Proposals, Procurement Processes	3. Data and Process Modeling (Data Flow Diagrams; Modular Design; Decision Tables)
4. Requirements Analysis	4. Object Modeling
5. The Nature of Problem-Solving	5. Create Data Design
6. Analysis Methodologies	6. Presentation Skills (verbal and written)

Learning Outcomes

Employ a systems approach and a system development method to understand business problem.

LO 2.1 Analyze information system need for a business problem; explore the complexities of understanding and defining requirements and generate a system request.

LO 2.2 Produce appropriate results through the analysis of the software development

Instructional Methodology

A mix of lecture, readings, guest lectures, project activities, and case studies may be used.

Performance Evaluation and Grading

Exam 1	100
Exam 2	100
Chapter Quizzes (10)	100
Project Activities	160
Peer Evaluation*	40
Total	500

***Peer evaluations may HEAVILY influence individual student's 'project activities' grade. Members of the same team may end up earning different project grade.**

While every effort is made to assign grades as objectively as possible, it is not possible in a course such as this for the grading to be entirely objective. Therefore, some portion of your grade may be determined by the subjective evaluation of the instructor. The final grade will be determined using the following percentage scale:

	B+	87 – 89.9%	C+	77 – 79.9%	D+	67 – 69.9%
A	B	83 – 86.9%	C	73 – 76.9%	D	63 – 66.9%
A-	B-	80 – 82.9%	C-	70 – 72.9%	D-	60 – 62.9%
					F	<60%

COURSE CONTENT and PERSPECTIVES

Oral & Written Communications Content:

Much of your time in ISM 301 will be spent looking at the theory and practice of analysis. Students may be required to participate in web-based discussions of questions or issues. Effective written communication is stressed through written assignments, e-mail communications, and team activities.

Technology Applications:

Discussion of information technology is a major component of the course and, although this is not a programming course, technology is used as a tool in ISM 301. Knowledge of a spreadsheet, and a word processor is assumed. Students are also expected to actively learn graphics diagramming to complete project activities.

Ethical Perspectives:

The importance of ethical considerations in the management and use of technology by business will be addressed because systems analysts frequently must use their professional judgment to make difficult decisions. Specific ethical issues such as confidentiality of data and databases, software licensing and copyright protection (among others) may be discussed.

Global Perspectives:

Global aspects of business and technology, such as software development outsourcing, are also discussed in this course.

Demographic Diversity Perspectives:

Many information systems deal with and about an increasingly diverse workplace. A by-product of this course is to learn how to respect diverse perspectives.

Political, Social, Legal, Regulatory, and Environmental Perspectives:

Coverage of political, social, regulatory, and environmental perspectives is limited to the context of business issues in general and newsworthy developments that are both business-related and technology related.

STATEMENT OF STUDENTS' RIGHTS AND RESPONSIBILITIES

As a student of this course, you have explicit rights and responsibilities. This syllabus is a contract. If you are enrolled in this course after week 1, I assume you have read, understood, and "signed" this contract.

You have the right to expect:

1. Your professor to be prepared for the course, to start class promptly at the designated time and to end class at the designated time. For online format, your professor to be prepared for the course and to make course material available promptly.
2. Your professor to teach all scheduled classes, or arrange for a qualified substitute if it is necessary to miss class because of illness or University approved commitments.
3. Clear statements of course expectations, policies, testing and grading practices and student performance.
4. Your professor to offer clear information about office hours to discuss assignments or to assist you with course matters.
5. Knowledgeable assistance from your professor regarding assignments and course content.
6. Professional behaviors reflecting equitable treatment, ethical practices and respect for your rights.
7. Opportunities to challenge ideas and defend your beliefs in a professional manner.
8. To be challenged to grow both academically and professionally. This means the professor may disagree with some responses or comments. Use such exchanges to grow intellectually.
9. Information regarding career opportunities related to ISM programs.
10. Your professor to abide by University policies.
11. Fairness and clarity in evaluation of your performance.
12. Adequate opportunity to appeal any perceived violations of the above rights.

You have specific responsibility to:

1. Plan your study and work schedule appropriately to allow sufficient time to do quality work in the course.
2. Attend all class sessions and be prepared to participate actively in class discussions. For online format, access all course material.
3. Complete all assignments by due dates and in a professional manner.
4. Understand and follow course policies as explained in class and in the syllabus.
5. Practice ethical behaviors and display respect to the rights of others.
6. Work effectively and cooperatively as a team member.
7. Timely contact your team members and discuss circumstances that may prevent you from achieving acceptable team performance.
8. Timely contact your instructor and discuss circumstances that may prevent you from achieving acceptable performance.
9. Understand and follow the school and course policies, including the UNCG Academic Integrity Policy (<https://osrr.uncg.edu/academic-integrity/>), and report observed violations of these policies.
10. **Ensure that submitted work is your own and not plagiarized from other sources, such as other teams, the Internet, etc. This is not an exhaustive list of the sources. When in doubt regarding this issue, it is your responsibility to check with the professor for clarification. Otherwise, I will assume that you have understood this policy. Also see the Academic Integrity Policy below.**

Academic Integrity Policy

All students are expected to follow the UNCG Academic Integrity Policy (<https://osrr.uncg.edu/academic-integrity/>) in completing coursework. I assume that by submitting your work in this course you conform to the Academic Integrity Policy. Violations may result in severe penalties and/or charges including failing the course. Assignments may be checked (Turnitin, manual review, etc.) for plagiarism. Assignments that fail plagiarism review or give other evidence of academic dishonesty will be awarded a zero grade, and additional penalties may be brought against the individual student/team, such as failing the course. **You must**

formally indicate on all deliverables that you have abided by the UNCG Academic Integrity Policy.

Disability Services

If you have a learning or physical disability, please contact the UNCG Office of Disability Services in Suite 208 EUC to request a special accommodation. The Disability office will contact your instructor once your request is approved. You are responsible for making arrangements for special accommodations for each and every test in advance of the scheduled test date. Please provide your instructor at least a 48-hour notice when requesting testing accommodations.

COVID-19 Statement

As we return for fall 2021, the campus community must recognize and address continuing concerns about physical and emotional safety, especially as we will have many more students, faculty, and staff on campus than in the last academic year. As such, all students, faculty, and staff are required to uphold UNCG's culture of care by actively engaging in behaviors that limit the spread of COVID-19. Such actions include, but are not limited to, the following:

- [Following face-covering guidelines](#)
- Engaging in proper hand-washing hygiene when possible
- Self-monitoring for symptoms of COVID-19
- Staying home if you are ill
- Complying with directions from health care providers or public health officials to quarantine or isolate if ill or exposed to someone who is ill.

Instructors will have seating charts for their classes. These are important for facilitating contact tracing should there be a confirmed case of COVID-19. Students must sit in their assigned seats at every class meeting and must not move furniture. Students should not eat or drink during class time.

To make it easier for students to hear their instructor and/or read lips and if conditions permit, instructors who are fully vaccinated and who can maintain at least six feet of distance from students may remove their masks while actively teaching if they choose, but will wear a mask at all other times while in the classroom, including during the periods before and after class

A limited number of disposable masks will be available in classrooms for students who have forgotten theirs. Face coverings will also be available for purchase in the UNCG Campus Bookstore. Students who do not follow masking requirements will be asked to put on a face covering or leave the classroom to retrieve one and only return when they follow the basic requirements to uphold standards of safety and care for the UNCG community. Once students have a face covering, they are permitted to re-enter a class already in progress. Repeated issues may result in conduct action. The course policies regarding attendance and academics remain in effect for partial or full absence from class due to lack of adherence with face covering and other requirements.

For instances where the Office of Accessibility Resources and Services (OARS) has granted accommodations regarding wearing face coverings, students should contact their instructors to develop appropriate alternatives to class participation and/or activities as needed. Instructors or the student may also contact [OARS](#) (336.334.5440) who, in consultation with Student Health Services, will review requests for accommodations.