

INLS 382.01 - Information System Analysis & Design

Time 5:45 - 8:30 on Thursday

Room Manning 001

Instruction Mode In person, on campus

Instructor Dr. Ryan Urquhart

Office Hours Tuesday 4:30 - 5:45 or via Zoom

Email ryanu@email.unc.edu

Course Overview

This course offers students an opportunity to gain familiarity and fluency with a set of widely used techniques for the design and improvement of information systems. The course may be of value both to students who intend to pursue careers in system development and to those who will be customers or managers of system development projects. The course may also be of interest to those engaged in the design of *business* architecture, who may wish to avail themselves of design techniques developed for information systems.

Central to the course is a semester long project in which students work in small teams to develop a set of requirements and a prototype for an information system which addresses business needs of an actual client. Through this project students have an opportunity to apply the techniques learned in the course as well as to develop important project management and organizational skills.

This class is different from most classes and that is intentional. It focuses on experiential learning. It is meant to be more collaborative, process oriented, and self-directed than seems typical. That is because the class is designed to be a microcosm of how systems organizations operate in the professional world – or at least as much as we can in an academic context. It requires students to be more proactive and it presumes that most of the work goes on inside and outside of class as in organizations, where most of the work takes place outside of staff meetings.

Finally, it is extremely important for students to realize that systems analysis and design is not a subject to be studied only by those who intend to become professional systems developers or consultants. We will all likely be end users of information technology and therefore directly involved in creating systems requirements, if not analysis and design.

Course Goals

By the end of this course, you will be able to

- Identify and document system requirements for projects in various settings.
- Decompose complex systems into simpler components for analysis and modification.
- Analyze the project requirements for these systems in context, working with users to identify constraints and opportunities.
- Apply several project management and systems design techniques to implement new systems as well as to modify existing systems.
- Understand the different software development methods

REQUIRED MATERIAL

Textbooks

For selected topics, we will be reading information from [The Information System Consultant's Handbook: Systems Analysis and Design](#) as well as articles that relate to the subject matter.

Library Services and Course Reserves

Students enrolled in this course have access to the UNC Library System. Visit [Distance Education Library Services](#) to access a wide array of online services and resources including Course Reserves, online databases, online journals, online books, and live help with research and library access. **Most online resources require you to log in with your Onyen and password.** If you have any trouble finding the resource that you need or logging in to a resource, you can contact the library through the contact information at Distance Education Library Services. You can chat live about your problem or send an email to request assistance.

Technology

This class meets three times a week and our class time is a precious resource. The success of the class depends on all of us being fully engaged in the class. I ask that you treat your electronic devices as you would in an important business meeting in which you are highly visible. Laptops should be used only for note taking or other class related matters. If you don't absolutely need your laptop I suggest you keep it closed. Cell phones and tablets should ideally be shut off during class or at least silenced. If you are going to be distracted by a vibrating phone, please turn it off completely. If you have an urgent need to use your device during class time, please be discrete about it. If you have any questions or concerns about this policy please bring them up.

There is another side to this issue, however, for which I must take primary responsibility. My goal and my intention is to keep the class as engaging as possible, to offer adequate breaks and changes in pace and activity to allow us all to stay engaged through what is a big chunk of time at a late hour in the day. If you ever have concerns, feedback, or suggestions about the pace and energy level of the class, please bring them up.

Assignments

Readings will typically be assigned for each class period, and will be listed in the course calendar for the appropriate date. Please come prepared. I expect all students to participate in class discussions. You will not receive maximum participation credit if you are silent all semester.

We will use Sakai for submitting course assignments. If the assignment will only allow attachments, then the assignment should typed using 12 font size and 1.5 spacing. Additionally, it should be saved as a pdf in the following format lastnamefirstinitial_Assignment #. For example, if your name is John Brown and you've completed an individual assignment (e.g. assignment #1), the uploaded file would be "brownj_Assignment#1".

If it's a team assignment, then the person submitting the assignment should use his or her name and include the assignment. For example, "brownj_Milestone 1. *Note: Include your team members name on the title page of the assignment, not the filename.*

Weekly Presentations

Each student will be required to present to class on a pre-determined topic selected from the lecture. Additionally, each student will be required to be a notetaker for someone else presentation. There can be more than one person presenting and taking notes. It's the presenters responsibility to coordinate on who will present what part of the presentation. For your presentation, you are encouraged to reference articles from magazines, newspapers, reputable websites, books, etc. and present it as it relates to the subject matter for that day.

The presentation should be attached as a PDF prior to the start of class (or immediately after) and submitted under the title "Class Participation (Weekly article)". **Failure to do so will result in 50 points being deducted.**

SHORT QUIZZES

We will have at least 2 quizzes. If you do your homework and participate in team assignments, then you will excel on each quiz. I reserve the right to introduce additional quizzes during class, if everyone isn't participating.

SEMESTER PROJECT THEMES

The intent of the semester project is for students to think of how an Information System (IS) can be used to address problems associated with one of the themes listed below. Each project will start with a thorough discussion around the problem to decide how IS will be used as a solution.

- Substance abuse
- Chronic Illness management
- Continue care - senior community
- Reduce violent crime
- Military transition
- Car service transparency
- Short term lease owner
- Coaching (Academic, Family, Youth)

GRADING

The following components of this course will contribute to your grade.

Class Participation: 30% Percent of Final Grade

This involves the weekly article presentations as well as participating in discussions on various topics.

Milestones: 20% Percent of Final Grade

Students will form teams and each team will work on a systems analysis and design project. This project is an integral part of the course, since it allows students to apply the concepts, methodologies, and tools in the context of a real-world application. The project will be divided into 3 Milestones. Milestones are due on the dates indicated in the course schedule.

Milestone #1: Project Proposal

Milestone #2: Business Analysis and System Study – The Current System

Milestone #3: Systems Implementation Presentation

Quizzes: 20% Percent of Final Grade

We will have at least two take-home quizzes during the semester.

Final Exam: 30% Percent of Final Grade

The final exam for this class will be Milestone 3 and an individual quiz, which will consist of a written document and presentation. The presentation will be on the last day of class and the final write-up will be due on the day of the final exam.

Grading Scale

Percentages will be converted to letter grades according to the following scale.

Letter Grade	Percentage	Meaning
A	90–100%	Excellent: Far exceeds standard
B	80–89%	Good: Exceeds standard
C	70–79%	Fair: Meets standard
D	60–69%	Poor: Shows growth but falls below standard
F	0–59%	Failing: Deficient

COURSE POLICY

Communication

We are not limited to communication during the time of the class. If you have ANY questions regarding an assignment, material that we covered in class, or just the field of Information Technology, do not hesitate to send me an email. I would be more than willing to set up a convenient time when we could have a zoom meeting.

Late Submissions

Failure to submit work on time and/or save as a pdf and upload the file correctly will result in 30 pts being deducted from the assignment.

Equality Statement

The instructor is dedicated to establishing a learning environment that promotes diversity of the students including race, class, culture, religion, gender, sexual identity, and physical

ability. It is important that this is a safe classroom environment. We will practice being generous and respectful members of our classroom community. Anyone noticing discriminatory behavior in this class, or who feels discriminated against, should bring it to the attention of the instructor immediately.