

INLS 582: Systems Analysis

This course, offered by the UNC School of Information and Library Science, will introduce the basic concepts underlying systems analysis, focusing on **Contextual Inquiry** and data modeling, and the application of those analysis techniques in the analysis and design of organizational Information Systems. We will also introduce you to Agile, Lean-Six-Sigma methodologies, and tools.

Course objectives include:

- Develop an understanding of the role of information systems in modern organizations.
- Become familiar with a variety of information systems analysis and problem-solving approaches.
- Gain practical experience with information systems analysis; while working on a group project.
- Continue the development of your professional skills, such as technical writing, working with clients.

Credits: 3 Hours

Instructor: Lukasz Mazur

Office: 206 Manning Hall

Office Hours: By Appointment Only

Phone: 919-616-9702 (cell)

Email: lmazur@med.unc.edu

The required textbook for this course is the following: Beyer, H. & Holtzblatt, K. (2nd edition). Contextual Design: Design for Life. San Francisco: Morgan Kaufmann. An online/free version of this textbook is available with UNC-Chapel Hill library. You can also download book chapters from the Resources tab in Sakai < Textbook.

Sakai: We will use Sakai in this course to assign and submit assignments, return grades, share lecture notes, and provide access to other class resources. Please be sure that you can access the Sakai site for this course. You can reach Sakai by visiting <https://www.unc.edu/sakai/>. In addition to the textbook, we'll read case studies and articles from a variety of other sources.

Grading

Grades for all assignments will be returned via Sakai. Semester grades will follow the standard UNC grading system as outlined by the Office of the University Registrar. Under the COVID19 guidelines, this class will follow Pass/Fail grading.

Your grade for this course will be based on your project, problem definition, quizzes, and assignments. The approximate breakdown within those categories is as follows:

- 50% - Project (including information gathering plan)
- 30% - Problem definition
- 20% - Peer evaluation

Resources

- **Model Drawing Software:** You will need a graphics tool for drawing models for several assignments. You can select software that you are most comfortable with. Most models can be developed using basic software packages.

Assignment Submission Instructions

Format Requirements for Your Assignments

All assignments must be prepared and submitted electronically as PDF files via Sakai. For detailed instructions, including the required header, please refer to the "SubmittingAssignments.pdf" document posted to the Resources section of Sakai.

Drawings for All Models

Many of the assignments for this course involve the creation of models from various perspectives. Hand-drawn models are acceptable. Final models for the class project should be done in an electronic format.

Electronic Submission via Sakai

All assignments must be submitted electronically via Sakai. Sakai will record the time of your submission, and the time recorded by Sakai will be used to determine if a submission was turned in on time.

Course Design and Approach

Systems Analysis is all about problem-solving.

- What is the information system doing now?
- What should it be doing?
- What needs to change to make it do the right thing?
- How can we best implement the changes?

These are the fundamental questions whether you're fixing a broken system, adding new functionality to an existing system, or designing an entirely new system. The purpose of this course is to help you gain the knowledge, tools, and skills you need to answer these questions and design effective information systems.

The material we cover includes the theories that help explain information systems and people's interaction with them, tools and techniques for analysis and design, and best practices for systems analysis projects. Readings include book chapters, case studies, and documentation for specific modeling techniques. **A major part of the work for this class is analyzing an information system problem and designing a solution.** This group project gives real-life experience in information system problem-solving.

Preparation

The schedule describes what you should do to prepare for each class meeting (**attached below**). Typically, this involves readiness quizzes, readings from your textbook, and watching videos.

Individual and Group Assignments

Individual and group assignments will provide more opportunities for practicing specific skills, and let you demonstrate to me what you have learned.

Helpful Hints

- Plan ahead! Success in this course requires time management.
- Coordinate the work schedule for this class with the schedules for your other classes, work, and other activities. You are likely to have many deadlines toward the end of the semester, so it's important for you to keep up.
- There is often more than one good or correct way to develop a model or design for a given situation. There are always many more bad and incorrect ways to do so!

By the end of the course, I hope you will have learned the fundamentals of systems analysis, developed an arsenal of tools and techniques as well as the knowledge of when to use them and produced a proposal that will solve an information problem for a real client. Information system problems are pervasive in our society: what you learn here may help you in many aspects of your future endeavors.

Policies

Participation

All students are expected to complete all lessons, participate in all forums, and to contribute to group discussions. In addition:

- Complete assignments on time.
- If you know in advance that you will miss a quiz or assignment please let me know ahead of time.
- If you miss a readiness quiz or assignment unexpectedly, please let me know asap.
- If you don't understand something from lessons, **ask questions!** You can ask me using messages in Sakai, or you can e-mail me directly.

Quizzes and Assignments

Readiness quizzes (beginning of class; not for grading purposes) and assignments are to be submitted electronically. That will be used to keep your attendance.

Exceptions due to special circumstances will be considered on a case-by-case basis. When deemed appropriate, limited extensions may be granted. However, be sure to inform me AS SOON AS POSSIBLE should you require special accommodation. Exceptions are much less likely to be provided if requests for accommodation are not made in a timely fashion.

'Office' Hours

Those with questions about course material, having trouble with readiness quizzes and assignments, or seeking any other kind of assistance related to class are encouraged to contact me.

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates and the instructors. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza.

Find our class page at <https://piazza.com/unc/spring2021/inls582/home>

Academic Integrity and Diversity

UNC-Chapel Hill has had a student-administered honor system and judicial system for over 100 years. Because academic honesty and the development and nurturing of trust and trustworthiness are important to all of us as individuals and are encouraged and promoted by the honor system, this is a most significant University tradition. You are responsible for being familiar with the UNC-Chapel Hill Honor System.

- If your team is having difficulty with some aspect of your project, please come to see me. One of the educational outcomes of this class should be an increase in your effectiveness in getting advice from more experienced colleagues.
- The Honor Code, which prohibits giving or receiving unauthorized aid in the completion of assignments, is in effect in this class. The Instrument of Student Judicial Governance gives examples of actions that constitute academic dishonesty. There are also some specific guidelines for this class:
 - You may give and receive assistance regarding the use of hardware and software.
 - You are welcome to work together on class preparation; discussing articles, walking through examples, working on exercises, etc. You may also ask your classmates for clarification of class notes.
 - All work you submit should be your own.
 - Individual homework assignments are to be done individually. You may consult the course readings and slides, your notes, and even other print or web sources. (Keep in mind, however, that what you find in other sources may not be consistent with what I want you to do.) You may not consult your classmates or other people; all questions should be addressed to me.
 - Team assignments are to be done as a team, with the team taking responsibility for all products. Work on the project should be distributed equitably among team

members. I expect team members to discuss, consult, and even debate with each other about the project throughout the term.

In support of the University's diversity goals and the mission of the School of Information and Library Science, SILS embraces diversity as an ethical and societal value. We broadly define diversity to include race, gender, national origin, ethnicity, religion, social class, age, sexual orientation, and physical and learning ability. As an academic community committed to preparing our graduates to be leaders in an increasingly multicultural and global society we strive to:

- Ensure inclusive leadership, policies, and practices;
- Integrate diversity into the curriculum and research;
- Foster a mutually respectful intellectual environment in which diverse opinions are valued;
- Recruit traditionally underrepresented groups of students, faculty, and staff; and
- Participate in outreach to underserved groups in the State.

The statement represents a commitment of resources to the development and maintenance of an academic environment that is open, representative, reflective, and committed to the concepts of equity and fairness.

Counseling & Psychological Services (CAPS)

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Accessibility Resources

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email ars@unc.edu.

Title IX Resources

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at <http://safe.unc.edu>.