Information System Analysis & Design

Instructor: Dr. Ryan Urquhart
Office Hours: Tuesday 4:30 - 5:45
Email: ryanu@email.unc.edu
Course #: 382

Time: 5:45 - 8:30 on Tuesday
Room: Manning 209
Section #: 001

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

The professor reserves the right to make changes to the syllabus, including project due dates and test dates. These changes will be announced as early as possible. (source: http://faccoun.unc.edu/files/2011/03
Res-2012-11OnSyllabusGuidelines_v4FinalAsApproved.pdf)

INSTRUCTOR COMMUNICATION

For specific, concrete questions, e-mail is the most reliable means of contact for me. You should receive a response within a day or so, but sometimes it may take 2-3 days. If you do not receive a response after a few days, please follow up. Please keep this in mind when you are scheduling your own activities, especially those related to scheduled assignments. If you wait until the day before the assignment is due to ask me a clarification question, there is a good chance that you will not receive a response before the due date.

It is always helpful if your e-mail includes a targeted subject line that begins with “INLS 382-01.” Please use complete sentences and professional language in your e-mail also.

For more complicated questions or help, we can talk before/after class or make an appointment via email to talk with me at a different time. I cannot discuss grades over e-mail; if you have a question about grading, you must talk with me in person.
REQUIRED MATERIAL

Textbooks

A textbook isn’t required for this class. For your reference, selected topics will come 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 Canvas 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 group assignment, then the person submitting the assignment should use his or her name and include the assignment. For example, "brownj_Milestone1. Note: Include your team members name on the title page of the assignment, not the filename. (It's a good idea to let someone else on the team to review the assignment for grammar and to ensure that each group member name is included.)

**Weekly Presentations**

After groups have been formed, one student in each group will be required to present to class on a pre-determined topic selected from the lecture. Additionally, the student’s other two team members will be required to be a notetaker for the presentation. It's the group’s responsibility to coordinate on who will present. 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". Failure to do so will result in 50 points being deducted.

The presentation should be no more than 10 slides and the presenter should be prepared to answer/discuss questions from the class.

**SHORT QUIZZES**

We will have several quizzes this semester. If you complete your homework, attend class and participate in team assignments, then you will excel on each quiz.
GRADING

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

**Individual Assignments: 20%**

*This involves the special topics presentation, class assessment, quizzes as well as participating in discussions on various topics.*

**Milestones 1 & 2: 20%**

*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.*

*Milestone #1: Project Proposal
Milestone #2: Business Analysis and System Study - The Current System*

**Quizzes: 30%**

*We will have several quizzes (in class and take-home)*

**Final Exam: 30%**

*Milestone #3: Systems Implementation Presentation*
**Grading Scale**

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

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

**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**

Ten percent (10%) per hour will be deducted from each late submission. The deduction is automatically calculated by Canvas based on the time of your submission.

**SUPPORT RESOURCES**

**Equality Statement**

The university 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 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 or email: ars@unc.edu

**Counseling and Psychological Services**

Counseling and Psychological Services (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 the CAPS website or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

**Dealing with Discrimination, Harassment, Violence or Exploitation**

Any student who is affected 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 (CAPS; see above), or the Gender Violence Services (GVS) Coordinators (gvsc@unc.edu) to discuss your specific needs. Note that only communication with CAPS or GVS is confidential. Additional resources are available at https://safe.unc.edu/.