

# INLS 382-002 Spring 2019 Syllabus

## Overview

*Analysis of organizational problems and how information systems can be designed to solve those problems. Application of database and interface design principles to the implementation of information systems.*

## The details

**Course:** INLS 382-002

**Semester:** Spring 2019

**Time:** 5:45-8:30 p.m., Tuesday

**Location:** Manning 014

**Instructor:** Ron T. Brown, Ph.D (ront@email.unc.edu)

**Textbook and readings:** “Software Requirements, Third Edition” by Karl Wieggers and Joy Beatty. An ebook is available through UNC Libraries, which up to 9 people can view at a time. A print copy is also available on reserve in the SILS Library. Finally, if you prefer, print copies are available online for under \$35. Additional readings are required as posted on the course website.

*Optional textbook:* “Agile Estimating and Planning” by Mike Cohn. A print copy is available on reserve in the SILS Library.

**Online course environment:** Sakai (I sometimes say Blackboard, I apologize for this)

**Office hours:** By appointment. I’m happy to schedule in-person, Google Hangouts, or Skype calls with reasonable notice. Generally within the hours of 5pm-9pm

## Objectives

At the conclusion of the course, you should have a good understanding of how to approach the task of mapping an information technology solution onto an organizational information requirement. You will not be a seasoned systems analyst; that's something that comes with time and experience. However, you'll be able to be an active participant for your organization on a systems design team, or able to make more informed decisions from a management perspective.

After completing this course you should be able to:

- Understand the role information has in solving business information problems;
- 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.

## Grading

Requirement	Portion of grade
Classroom activity	10%
Sakai quizzes (3)	30%
Individual assignment (3)	15%
Group project assignments (1)	16%
Project presentations and critique	7%
Final exam	22%

Grades will be posted in Sakai.

### Course grade Minimum %

A	95%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
F	less than 63%

## Assignments

### Individual assignments

Throughout the semester I will assign three individual assignments, which will be posted to Sakai. More instructions for these assignments will be provided after completing the unit to which the assignment is related.

## Sakai quizzes

Each quiz will focus on large topic areas for the course. A quiz will test basic knowledge of each topic.

## Group project assignments

Throughout the semester groups will conduct a larger scoped project related to a system or organization. This project will have updates throughout the semester. This will culminate in a class presentation.

## Classroom activity

- You should show up to class on time and stay until the end.
- Our classes will rely heavily on classroom discussion and group activities. You will receive credit for enhancing your colleagues' classroom experience in some way during the week.

## Exams

The exam will include a mix of questions (multiple choice, essay, etc.) based on the readings and classroom activities. The exam will be administered via Sakai.

## Policies

- Attendance is expected. Please let me know if you expect to miss class.
- Project assignments are due by the start of class on the due dates.
- **Late work will have 10 percentage points subtracted from the grade for each 24-hour period it is overdue. In other words, the maximum possible grade for an assignment submitted between 1 and 24 hours overdue is 90%, and then 80% for the next 24 hours, and so on.**

## Honor code

It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and support the enforcement of the [Honor Code](#), which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student or academic personnel acting in an official capacity.

## Campus Code

It shall be the further responsibility of every student to abide by the [philosophy of the code](#); namely, to conduct oneself so as not to impair significantly the welfare or the educational opportunities of others in the University community.

## **Faculty Responsibilities**

I have a role to play as well, and I will fulfill [these responsibilities](#).

## **What it means to us**

The system rests on several central tenets:

- The university community, including faculty and students, share a commitment to the pursuit of truth, and the dissemination of knowledge to succeeding generations of citizens devoted to the high ideals of personal honor and respect for the rights of others.
- These goals can only be achieved in a setting in which intellectual honesty and personal integrity are highly valued; other individuals are trusted, respected, and fairly treated; and the responsibility for articulating and maintaining high standards is widely shared.
- Both students and faculty must play active roles in fostering a culture in which honor is prized and acting to remedy violations of community norms relating to academic misconduct, injuries to members of the University community, and conduct that adversely affect University operations and resources.
- The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution

Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for the most significant Carolina tradition. Your reward is in the practice of these principles.

Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code. You are encouraged to work together with your fellow students and to share knowledge and learning. However, academic dishonesty in any form is unacceptable, because any breach in academic integrity, however small, strikes destructively at the University's life and work.

## **Classroom code of conduct**

We are a learning community and should treat each other with the respect we would expect of others. Constructive disagreement is encouraged, but please attempt to balance critiques with efforts to build and maintain a welcoming classroom community. I will try my best to do the same, but I welcome any suggestions for improvements or even general statements of discomfort.

Our classroom is dedicated to providing a harassment-free course experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion (or lack thereof), or technology choices. Harassment includes offensive verbal comments related to gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion, technology choices, sexual images in public spaces, deliberate intimidation, stalking,

following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. We do not tolerate harassment of course participants in any form. Sexual language and imagery is not appropriate for any course setting or products.

If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact your instructor or another SILS faculty member immediately.

Adapted from <http://confcodeofconduct.com/>.

## **Valuing, Recognizing, and Encouraging Diversity**

Promoting and valuing diversity in the classroom enriches learning and broadens everyone's perspectives. Inclusion and tolerance can lead to respect for others and their opinions and is critical to maximizing the learning that we expect in this program. This may challenge our own closely held ideas and personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment.

Diversity includes consideration of (1) the variety of life experiences others have had, and (2) factors related to "diversity of presence," including, among others, age, economic circumstances, ethnic identification, disability, gender, geographic origin, race, religion, sexual orientation, social position.

**\*\*This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.\*\***

**Taken from the UNC Department of Health Policy and Management's [HPM Diversity Syllabus Statement 2011](#).**

## **Accommodations**

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 difficulties with accessing learning opportunities.

All accommodations are coordinated through the Accessibility Resources and Service Office. In the first instance please visit their website <http://accessibility.unc.edu>, Tel: 919-962-8300 or Email: [accessibility@unc.edu](mailto:accessibility@unc.edu). A student is welcome to initiate the registration process at any time, however, the process can take time. ARS is particularly busy in the run-up to Finals and during Finals. Students submitting Self-ID forms at that time are unlikely to have accommodations set until the following semester.

Please contact ARS as early in the semester as possible.

# Schedule

Due to my need to travel for business the schedule and readings are subject to change. Stay tuned for announcement via Sakai and email. When changes are made, I will work to update Sakai and syllabus to reflect the new schedule.

## Week 1: Introduction, case study

**15 January 2018**

- Course orientation

Optional

- Mike Cohn, “Agile Estimating and Planning”, A Case Study: Bomb Shelter Studios [\[e-reserves\]](#)

## Week 2: Agile

**22 January 2018**

Readings

- (if you did not read prior to first class) Mike Cohn, “Agile Estimating and Planning”, A Case Study: Bomb Shelter Studios [\[e-reserves\]](#)
- W&B, Chapter 20
- [Agile Manifesto](#)
- [Principles behind the Agile Manifesto](#)
- Matthew Guay, [Project Management 101: The Complete Guide to Agile, Kanban, Scrum and Beyond](#)
- Lyssa Adkins, [Seven Agile Coach Failure Modes](#)

Optional

- Ken Schwaber and Jeff Sutherland, [The Scrum Guide](#)
- Martin Fowler, [The New Methodology](#)

## Week 3: Systems Development Life Cycle (SDLC) and the role of the business analyst

**29 January 2018**

Readings

- W&B, Chapter 1
- W&B, Chapter 4 W&B, Chapter 3

- [Introduction to Software Engineering/Process/Life Cycle](#)
- Russell Kay, [System Development Life Cycle](#)
- Davis, William. (1999). The problem statement. In W. Davis & D. Yen, The Information System Consultant's Handbook: Systems Analysis and Design. Boca Raton: CRC Press. Chapter 12, 87-90. [\[e-reserves\]](#)

Optional

- Graeme Philipson, [A Short History of Software](#)
- [SELECTING A DEVELOPMENT APPROACH](#)
- Nayan B. Ruparelia, [Software development lifecycle models](#)

## Week 4: User requirements

5 February 2018

Readings

- W&B, Chapter 2
- Jerry Cao, [User Analysis Before Diving Into Design \(Part 1\)](#)
- W&B, Chapter 6
- Georg Strom, [Sense-Making Methodology: Learn What Users Understand is Important](#)

Assignment

- Sakai quiz 1 covers topics 1-3
- Written assignment 1, [due 2/12](#)

## Week 5: Estimation and Planning

12 February 2018

- Form project groups.

Readings

- W&B, Chapter 5
- W&B, Chapter 32
- C Chapter 1
- C Chapter 2
- C Chapter 4
- C Chapter 5
- C Chapter 6

## Week 6: Personas and requirements

19 February 2018

## Readings

- W&B, Chapter 7
- W&B, Chapter 8
- Silvana Churruca, [DIY User Personas](#)
- W&B, Chapter 9
- Alan Klement, [Replacing The User Story With The Job Story](#)
- W&B, Chapter 10
- W&B, Chapter 11
- Artscape DIY, [A Guide to Feasibility Studies](#)

## Optional

- Shlomo Goltz, [A Closer Look At Personas: What They Are And How They Work \(Part 1\)](#)

## Week 7: Modeling Part 1

26 February 2018

### Readings

- W&B, Chapter 12
- Hoffer, et al., “Modern Systems Analysis and Design”, Chapter 7: Process Modeling [\[e-reserves\]](#)
- Ed Yourdon, [Data Flow Diagrams](#)

## Week 8: Modeling Part 2

5 March 2018

### Readings

- Scott Wambler, [Data Modeling 101](#)
- Page Laubheimer, [Wireflows: A UX Deliverable for Workflows and Apps](#)
- W&B, Chapter 13
- Sophia Voychehovski, [Object-Oriented UX](#)

### Assignment

- Sakai quiz 2 covers topics 4-7

## Spring Break – No Class

12 March 2018

## Week 9: Roadmaps

## 19 March 2018

- Group checkpoint #1

### Readings

- W&B, Chapter 14
- Melissa Perri, [Rethinking the Product Roadmap](#)
- Andressa Chiara, [Defining your MVP: the ever-raging war](#)
- W&B, Chapter 16
- W&B, Chapter 17
- Melissa Perri, [Effective Product Roadmaps](#)

### Assignment

- Written assignment 2, [due 3/26](#)

## Week 10: Tools and new system design

### 26 March 2018

#### Readings

- W&B, Chapter 15
- UXPin, [The Hands-On Guide to Wireframing](#)
- Friedman, Batya. (1996). [Value-sensitive design](#). interactions 3(6), 17-23.
- [Introduction to the Design with Intent toolkit](#)
- Take a quick look at the [Design with Intent cards](#)

#### Optional

- Shilton, Katie. (2010). Technology development with an agenda: Interventions to emphasize values in design. Proceedings of the ASIS&T 2010 Annual Meeting. [\[e-reserves\]](#)

## Week 11: Real life systems – guest speakers

### 2 April 2018

- W&B, Chapter 28
- W&B, Chapter 31
- W&B, Chapter 19

### Assignment

- Sakai quiz 3 covers topics 8-11
- Written assignment 3, due 4/9

## **Week 12: Implementation**

**9 April 2018**

### **Readings**

- W&B, Chapter 21
- W&B, Chapter 22
- W&B, Chapter 23

## **Week 13: Types of projects**

**16 April 2018**

- Group checkpoint #2

### **Readings**

- W&B, Chapter 24
- W&B, Chapter 25
- W&B, Chapter 26

### **Assignment**

- Final exam assigned

## **Week 15: Last day of class - Semester review and presentations**

**23 April 2018**

- Last day of class
- Presentations
- Semester review

**3 May 2018 at 7:00 PM: All grades for quizzes, and exams are due. **Submit assignments before 7:00pm****