***TIM 58: Systems Analysis and Design***

# Winter Quarter 2017

*Tuesday/Thursday 1:30 – 3:05 pm*, *Classroom Unit 1*

**Professor Brent Haddad**; bhaddad@ucsc.edu; Office Hours: Wednesdays 12 noon – 2:00 pm and by appointment, 567 Engineering 2; (831) 331-0654.

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## COURSE OVERVIEW AND LEARNING OBJECTIVES

Nearly all organizations, public and private, depend on information systems to organize and manage their activities and interactions. Employees and customers expect an efficient, intuitive interaction with information systems. TIM 58 introduces the basic elements of information systems and gives you practice on procedures for analyzing and designing an organization’s information system.

## TEXTBOOK

## Alan Dennis, Barbara Haley Wixom, and Roberta M. Roth 2012. *Systems analysis and design*, 5th ed. John Wiley & Sons, Inc.

## ASSIGNMENTS

**Weekly Homework**. *Paper copies due in class at the beginning of class on Tuesdays.* 30% of grade.

**Team Project**. *Weekly project reports weeks 6-8. Final project due Week 9 (Tuesday March 7). Everything due at the beginning of class.* 20% of grade.

**Midterm Exam**. *Thursday February 9*. 20% of grade.

**Final Exam**. *Thursday, March 23, noon to 3 pm*. 30% of grade.

The weekly homework assignments focus on materials presented in the textbook and lecture. Their purpose is to give you experience with analysis and design methods you will be learning. The Team Project is a multi-phase application of methods to a project selected by your team. Teams of ~8 members will be assigned and work together to achieve weekly milestones and produce a final product. The midterm exam covers materials through Chapter 4 and the final exam covers the entire quarter.

## WEEKLY SCHEDULE OF READING AND ASSIGNMENTS

## *Weekly homework and team project assignments are due at the beginning of class on Tuesdays.*

**Week 1: Systems Development Life Cycle and Feasibility Analysis.** *Reading: Ch. 1*

**Week 2: Project Planning: resources, skills, and time needed.** *Reading: Ch. 2*

**Week 3: Identifying System Requirements** *Reading: Ch. 3*

**Week 4: Use Cases: Elements and Format** *Reading: Ch. 4*

**Week 5: Data Flow Diagrams: an example of Process Modeling** *Reading: Ch. 5*

 ***Midterm Exam: Thursday February 9 (covering Chs. 1-5)***

**Week 6: Entity Relationship Diagrams: their role in Data Modeling** *Reading: Ch. 6*

 ***Team Project Update #1 due Tuesday, February 14.***

**Week 7: Introduction to System Design: System Acquisition** *Reading: Ch. 7*

 ***Team* *Project Update #2 due Thursday, February 23.***

**Week 8: System Architecture** *Reading: Ch. 8*

 ***Team* *Project Update #3 due Thursday, March 2.***

**Week 9: User Interface: Key elements and design process** *Reading: Ch. 9*

 ***Final Team Project due Thursday, March 9.***

**Week 10: Program and Data Storage Design and Specification**

 *Reading: Ch. 10 and if possible Ch. 11.*

***Final Exam: Thursday, March 23, noon to 3 pm.***