CSCE 2615 Enterprise Systems Architecture, Analysis and Design

Instructor: David Keathly
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Semester: Summer 2012
Time: T/Th 2:00 – 3:4
Place: NTDP B190

Course Catalog Description

Overview of software architectures for information systems starting with requirements and proceeding through the analysis and design aspects of the software development lifecycle. Introduction to a variety of implementation methodologies as well as alternate architectural paradigms. Laboratory and project activities expose students to the design and specification of IT Systems to meet a variety of business and technical problem environments.

Course Outcomes

1. Demonstrate an understanding of the multiple layers of abstraction in modern computer systems and the interface between software and hardware.
2. Evaluate the hardware requirements for an IT System and select the proper architecture and components necessary to satisfy the requirements.
3. Evaluate the software requirements for an IT System, and define software architecture to satisfy the requirements.
4. Demonstrate an understanding of the use of UML and analysis and design patterns in the development of a system design.
5. Demonstrate an understanding of design and development methodologies and architectural paradigms through laboratory assignments and a class project.
6. Demonstrate communication skills that will enable clear reasoning and logical descriptions of problems and solutions in the design, implementation and management of large-scale IT Systems.

Textbook:

Systems Analysis and Design, Ninth Edition
Shelly Cashman Rosenblatt (ISBN: 1-133-27405-6)

Prerequisites

CSCE 1040

Course Requirements:

Attendance: Optional, although student is responsible for all materials covered in lecture and class discussion
Exams: 2
Assignments: There will be a few initial individual assignments and a semester project

For More information

David Keathly's Webpage: www.cse.unt.edu/~dkeathly
Class Web Page: moodle.cse.unt.edu

Topics

This course provides an introduction to Systems Analysis and Design. Topics include analyzing the business case, requirements modeling, data and process modeling, and development strategies, with an increased focus on object modeling and project management. Students also learn about output and user interface design, data design, systems architecture and implementation, and systems operation, support and security.

Course Calendar (subject to change)

Week	Topics	Readings, Materials and Assignments
Week 1	Course Overview Ch 1 Intro to Systems Analysis and Design	see lecture notes on class web page
Week 2	Ch 2Analyzing Business Processes and Cases Ch 4 Requirements Modeling and Use Cases	see lecture notes on class web page
Week 3	Ch 5 Data and Processing Modeling Ch 6 Object Modeling	see lecture notes on class web page
Week 4	Ch 7Development Strategies Supplemental 1 : UML to Support Analysis	see lecture notes on class web page
Week 5	Ch 8 UI Design Midterm Exam (Ch 1-7 + Supp1)	see lecture notes on class web page
Week 6	Ch 9 Data Design	see lecture notes on class web page
Week 7	Ch 10: System Architecture Supplemental 2: UML to support Design	see lecture notes on class web page
Week 8	Ch 11 System Implementation Ch 12 Reliability, Security and Support	see lecture notes on class web page

Week 9	Evaluation of Semester Projects	see lecture notes on class web page
Week 10	Final Exam (Ch 8-12 plus Supp 2)	

Grading Policy

The various components of your grade are weighted as follows:

Exams (2)	30%
Semester Project	30%
Individual Assignments, Quizzes and Case Studies (drop 1 assignment and 1 quiz)	40%

Course Policies:

- ABSOLUTELY, NO LATE assignments will be graded that are more than two weeks late, unless specific arrangements are made with the instructor in advance. Assignments turned in during the first week after they are due will be penalized 25%. The second week after due date will incur a 50% penalty.
- All assignments will be turned in by midnight on the date due. Assignments must be submitted via the Moodle Course web site
- ALL requests for extensions on assignments must be made prior to the due date, in person, and must be for a valid "emergency" reason. In extreme circumstances, contact after the due date may be accepted if there is a COMPELLING reason.
- Attendance is at your option. However, you are responsible for all discussion, lecture and other information disseminated during the lecture period, regardless of whether you attend or not.
- Lectures and Project assignments are included in this syllabus. However, you should regularly check the class website, as well as take note of in-class announcements for changes in the schedule or assignments.

Collaboration and Cheating:

Collaboration among students in class is most certainly encouraged, as it is my belief that it provides a better learning environment, and is required for any group assignments. **All resources used should be clearly cited in written work of any kind, both individual and team.**
Note that each student should turn in his or her own work. Collaboration should only extend to discussing concepts and ideas, not in completing the actual details of the assignment. Work that is substantially similar without warrant will be subject to penalties at the discretion of the instructor.

For further details and clarifications regarding collaboration and cheating, view the university Student Rights and Responsibilities web page.

Student Evaluation of Teaching Effectiveness (SETE)
The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class

ADA:

UNT complies with all federal and state laws and regulations regarding discrimination including the Americans with Disability Act of 1990 (ADA). If you have a disability and need a reasonable accommodation for equal access to education or services please contact the Office of Disability Accommodation.