Information Systems Design
Spring, 2020

Course: COSC 3315
Section: 501
Time: 5:40 PM – 6:55 PM,   M W
Room: ST 1104
Instructor: **Name:** Vladan Vuckovic
 Office: ST 2114
 Phone: 552-2257
 E-mail: vuckovic_v@utpb.edu
 Office hours: M T W TR 2:00 PM – 4:00 PM

Textbook: "Systems and Analysis and Design", **12ᵗʰ Edition**
(Required) by Scott Tilley, Shelly Cashman Series

ISBN-13: 978-0-357-11781-1

Prerequisite course: COSC 2430 (Introduction to Computer Science II)

Measurable Learning Outcomes:
By the end of the semester, students will be able to:

- Understand systems analysis and design stressing the process of planning, analysis, design, implementation and operation.
- Translate business requirements into information systems that support a company's short and long-term objectives.
- Understand and implement traditional structured analysis, object-oriented concepts, and agile methods.

Course Description:
This course focuses on computer systems and relationship between hardware and software components. Emphasis is on business system design and analysis.

Grades: Midterm Exams & HW & Quizzes   (40 %)
 Projects   (40 %)
 Final Exam   (20 %)

- Overall performance will determine your final letter grade.

FINAL LETTER GRADE

A = 90% – 100%
B = 80% – 89%
C = 70% – 79%
D = 60% – 69%
F = 0% – 59%

**Last day to drop a course or withdraw from the university: March 27, 2019

Course Outline

1   Introduction to Systems Analysis and Design

2   **Phase 1** – Systems Planning

-    Analyzing the Business Case

3   **Phase 2** – Systems Analysis

-    Requirements Modeling
-    Data and Process Modeling
-    Object Modeling

4   **Phase 3** – Systems Design

-    Output and User Interface Design
-    Data Design
-    System Architecture

5   **Phase 4** – Systems Implementation

-    Systems Implementation

6   **Phase 5** – Systems Operation, Support, and Security

-    Systems Operation, Support, and Security

7   Systems Analysis and Design **Toolkits**

8   Special Topics

Schedule (Tentative)

Week #1 (1/13, 1/15)
- Syllabus, Schedule
- Chapter 1(Introduction)

Week #2 (1/20, 1/22)
- **1/21 – No class MLK Day**
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Group Project #1

Week #3 (1/27, 1/29)
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Group Project #1

Week #4 (2/3, 2/5)
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Group Project #1

Week #5 (2/10, 2/12)
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Chapter 8 (Output and User Interface Design)
- Group Project #1

Week #6 (2/17, 2/19)
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Chapter 8 (Output and User Interface Design)
- Group Project #1

Week #7 (2/24, 2/26)
- Chapter 9 (Data Design)
- MS ACCESS DATABASE
- Chapter 8 (Output and User Interface Design)
- Group Project #1

Week #8 (3/2, 3/4)
- Chapter 9 (Data Design)
- Group Project #2
- Chapter 4 (Requirements Modeling)
- **Group Project #1 (Presentations)**

Week #9 (3/9, 3/11)
- **Spring Break**

Week #10 (3/16, 3/18)Midterm
- Chapter 4 (Requirements Modeling)
- Group Project #2

Week #11 (3/23, 3/25)
- Chapter 5 (Data and Process Modeling)
- Group Project #2

Week #12 (3/30, 4/1)
- Chapter 6 (Object Modeling)
- Group Project #2

Week #13 (4/6, 4/8)
- Chapter 10 (System Architecture)
- Group Project #2

Week #14 (4/13, 4/15)
- Chapter 10 (System Architecture)
- Group Project #2

Week #15 (4/20, 4/22)
- Chapter 10 (System Architecture)
- Group Project #2

Week #16 (4/27, 4/29)
- Chapter 10 (System Architecture)
- **Group Project #2 (Presentations)**

Week #17
- **Final Exam**

Course Policies

Attendance Policy

Attendance is **critical**. Students are expected to attend **all** classes. It is your responsibility to obtain any information given out in class. If you miss a class, you are responsible for all course materials presented and for all announcements and/or changes to the syllabus. Some materials presented in the lecture are not covered by the text.

Calculating Attendance Bonus:
1) perfect attendance: gain 2 % + Border line
2) miss 1 class: gain 1 % + Border line

Important: Late arrival or early departure of class meetings is considered as unattended classes unless there are valid excuses in advance.

*Legal Excuses: Your illness with your doctor's proof. The notified absences with **my permission in advance** (athletic programs, field trips, etc.). The unexpected events with my permission. Other excuses will not be accepted.

Cheating Policy

Cheating on exams, quizzes, and all other assignments will not be tolerated. Also, **collaboration and/or plagiarism** are absolutely not tolerated. You must do your own work. *All like papers will receive the same score – the grade of zero.* The subject of scholastic dishonesty is addressed more fully in the Student Guide, Appendix B.

Prerequisite Policy

- Students who are enrolled in the course and have not completed required prerequisites will not be allowed to proceed with a course.

- If students do not have the required prerequisites and do not drop the course voluntarily, they will be dropped administratively.

Courtesy Policy

Students should be courteous to their instructor and classmates. Turn off the computer monitor before the class starts. No chatting during the class. All phones must be turned off during the class except an emergency case.

Acceptable Student Behavior/ Degrading Policy:

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (*Code of Student Life*). Unacceptable or disruptive behavior will not be tolerated. Students engaging in unacceptable behavior may be instructed to leave the classroom. Inappropriate behavior may result in disciplinary action or referral to the University's Behavioral Intervention Team.

You will lose 5% of your overall performance if you do the following (each time):

1. Use the computer without instructor's permission.

2. Work on other materials (e.g. other class materials, job related works, internet surfing, etc.) during my class period.

3. Chatting, Eating, and Drinking (Water O.K.).

4. Any class disturbing behaviors.

Exam and Quiz Policy

We will have several midterm exams and a final exam. *No make-up exams, unless accompanied by a valid excuse.* Also, we will have several quizzes. *No make-up quizzes, unless accompanied by a valid excuse.* Missed exams or quizzes will receive a grade of zero.

- **No make up exams and quizzes will be taken after the solution is distributed.**

- **Final Exam: The final exam will be a comprehensive exam.**

Graded Assignments (Exams) Return Policy

All graded assignments will be given back to the students *except the exams.* All graded assignments will be passed back to the students during the regular class periods. *It is the student's responsibility to receive all graded work at the time that they are passed back.* If a student misses a class on the day a graded assignment is returned, it is the student's responsibility to acquire the graded assignment as soon as possible. *It is also student's responsibility to resolve all grading problems within one week of the return date of the graded assignment or exam. No grade will be changed after one week of the return date of the graded assignment or exam.*

Student Commitment Policy

- Each student is expected to read the text and related materials *before attending the class.*
- Each student should be prepared to spend an average of at least 8 hours a week outside of class to pass this class.
- Each student should have a his/her development environment:

  Example: Computers, Application Programs, Operating Systems, Internet Service Providers (ISP), etc.

Computer Science Research Lab: Lab is available at ST 2121.

Assignment Policy

Assignments will be written, programming, or research projects.

- All Assignments are to be submitted by the **end of class on the due date.** *Late assignments will not be accepted unless you get the permission from the instructor.*

- First page of your assignment should include your name, course number, section number, and assignment number. No credits will be given for assignment without this information. *It is required that all assignments returned to students throughout the semester be retained until the end of the semester.*

- *For programming assignments, instructor will not help any coding.*

- *For programming assignments,* students are required to have 2 USB (Universal Serial Bus) memories. One for working the project, and one for backing up the project.

- **Format Requirement:** The assignment must be typed using either a text editor or a word processor except diagrams, plots, and calculation formulas (these can be handwritten).

- **Identical or very similar assignment will receive a grade of zero.**

ADA (Americans with Disabilities Act) Policy

Students with Disabilities: The University of Texas of the Permian Basin in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act provides "reasonable accommodations" to students with disabilities. Any student with a disability who is requesting an accommodation for this course must provide the instructor with official documentation in the form of a letter from the ADA Officer for Students. Only those students who have officially documented a need for an accommodation will have their request honored. ****Adapted from UTSA ADA syllabus statement.****

ADA Officer for Students: Mr. Paul Leverington
Address: Mesa Building 4243
Voice Telephone: 432-552-3702
Email: Leverington_P@utpb.edu

Printing Policy

If the materials are posted on the Web site, it is your responsibility to print all materials from the Web Site before attending the class.

Disclaimer: Instructor reserves the right to modify the policies set forth in this document.