

## Course Description

Prerequisites: COSC 1337. This course introduces the systems development process. Topics covered include structured and object-oriented analysis and design, the use of modeling tools, the methodological lifecycle and project management. It includes the study of interpersonal skill development with clients, users, team members and others associated with the development, operation and maintenance of systems.anced course in analyzing sports data for decision making.

## Class Time

Tues/Thurs 9:30am – 10:50am COB 211

## Instructor Information

Dr. Robert P. Schumaker  
Professor, Computer Science Dept.  
rschumaker@uttyler.edu

## Office Hours

Email preferred.

If your inquiry is grade-related, please make a Zoom appointment.

## Textbook Information

Systems Analysis and Design (Dennis, Wixom and Roth) ISBN: 978-1-119-80378-2

## Software Information

[https://store.visible-systems.com/\(S\(tq2xr1cqjp0abh3tb3u5zfwl\)\)/AnalystEduc.aspx](https://store.visible-systems.com/(S(tq2xr1cqjp0abh3tb3u5zfwl))/AnalystEduc.aspx)

## Course Objective

This course is designed to provide an understanding of Systems Analysis and Design and its function. By the end of this course students are expected to:

- Specify the starting point of systems analysis including strategic systems planning, review of systems requests, risk assessment, feasibility analysis and the steps in performing preliminary systems investigation
- Perform requirements modeling and fact-finding techniques
- Apply basic approaches to the development of application software
- Identify current IT issues and major trends in systems development
- Describe team-based modeling methods, including JAD and RAD
- Carry out enterprise modeling using entity relationship and data flow diagrams
- Explain the transition from the analysis phase to the design phase
- Implement data modeling and database design
- Perform user interface, input and output design
- Describe systems implementation procedures including structure charts, system testing, user training, data conversion, changeover methods and post-implementation evaluation
- Explain systems operation, management and maintenance
- Discuss the role of ethics in the information systems profession

## Computer Account Access

Students will need a Patriot account and password for computer access. This information can be found at <https://www.uttyler.edu/ccs>

## Course Documents and Slides

This class will use Canvas for course documents, slides, quizzes and other class-related materials. Students are encouraged to check the website frequently during the course of the semester to keep up to date about course activity.

## Course Grading

Course evaluation will be based on the following:

Quizzes and In-Class Exercises	50
Visible Analyst	35
Lifelong Learning	5
Class Participation	10
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Total Points	100

## Grading Scale

- A 90.0 points or more
- B 80.0 to 89.999 points
- C 70.0 to 79.999 points
- D 60.0 to 69.999 points
- F 59.999 points or less

## Course Policies

1. Quizzes – Quizzes will be administered on topics previously presented and can include lectures, cases or assigned readings. They are designed to measure the student’s mastery of the material as well as their ability to use these skills in an efficient manner. Quiz questions may come in many different formats.
2. Visible Analyst Exercises – To master the material, students will be expected to create appropriate diagrams using the Visible Analyst tool.
3. Lifelong Learning – It is imperative for successful individuals to continue learning throughout their lifetime. Professional organizations are a wonderful opportunity to reinvent, retool and build connections with industry leaders. Students that attend a professional technology organization meeting (and bring proof of attendance) will receive credit. Upcoming meetings and events can be found on Canvas. Online webinars will be accepted.
4. Class Participation – Class Participation points will be scored by the quantity of quality discussion a student contributes regarding relevant technology-related articles. The maximum points that can be earned is ten.

5. Missed Classes, Tests/Quizzes and Assignments – Students who miss class are responsible for getting missed materials and lecture information on their own time from their peers. Any tests/quizzes and/or assignments due during the student's documented absence will be due by 5pm of the day of their return with no penalty.

6. Time Outside of Class: This course is a computer application course that requires students to complete computer application exercises and projects. It is the responsibility of the student to make a backup of all assignments or application projects. If your work is not saved and accessible by the instructor, then it cannot be evaluated and a grade of F will be given for that particular project or assignment. BACKUPS of projects and tests are imperative in order to avoid lost or damaged data.

7. Classroom Lab Rules

- Please do not surf the Web during class unless instructed to access the Internet.
- Do not access inappropriate Web sites during class. This will lead to dismissal from the class.
- Please do not work on other computer assignments during class.
- Please do not talk to your neighbor during class.
- Please do not bring food or an uncovered drink into the computer classroom lab.
- Please do not order food to be delivered to the classroom.
- Do not use your phone during class.

8. Memes. Create a custom meme about taking this particular class (could be Systems Analysis and Design, Dr. Schumaker or UT Tyler related). Email your meme to the instructor before August 30 at 5pm for a bonus point. Keep this to yourself and do not share it with classmates. Thanks for reading the syllabus.

## Tentative Course Schedule and Assignments

Date	Concept	Readings
Aug 26-Sep 1	Introduction	
	Overview and How it all fits together	
Sep 2-8	The Systems Analyst and Information Systems	Chapter 1
Sep 9-15	Project Selection and Management	Chapter 2
Sep 16-22	Requirements Determination	Chapter 3
Sep 23-29	Understanding Processes with Use Cases	Chapter 4
Sep 30-Oct 6	Data Modeling	Chapter 5
Oct 7-13	Moving into Design	Chapter 6
Oct 14-20	Architecture Design	Chapter 7
Oct 21-27	User Interface Design	Chapter 8
Oct 28-Nov 3	Program Design	Chapter 9
Nov 4-10	Data Storage Design	Chapter 10
Nov 11-17	Project Work Week	
Nov 18-24	Moving into Implementation	Chapter 11
Nov 25-Dec 1	Thanksgiving Break (No Classes)	
	Thanksgiving Break (No Classes)	
Dec 2-6	Transition to the New System	Chapter 12