

The University of Texas at Tyler
Department of Computer Science
COSC 3375: Analysis and Logical Design
Fall 2019

Course Description:

Prerequisites: COSC 1337. This course introduces the systems development process. Topics covered include structured and object-oriented analysis and design, use of modeling tools, the methodological life cycle 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.

Class Time:

Tuesday/Thursday

3:30pm – 4:50pm

Soules College of Business 207

Instructor Information:

J. Howard Baker MAcc (USC), Ph.D. (U.T. Arlington)
Senior Lecturer, Computer Science
Computer Science Office: Suite COB 315.06
e-mail: hbaker@uttyler.edu

Office Hours:

One hour before class, immediately after class, or by appointment.

Textbook Information:

Business Analysis for Practitioners: A Practice Guide, Project Management Institute, 2015, ISBN: 978-1-62825-069-5. Available in paperback or Kindle eBook.

Course Objectives:

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
- 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
- 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 <http://www.uttyler.edu/ccs>

Course Documents and PowerPoint Slides:

This class will use Canvas for all course-related materials. PowerPoint files will be provided prior to the lectures. Exams and quizzes will be administered via Canvas in class. Exams and quizzes will require an access code provided by the professor. Exams will also require a signed attendance sheet.

Course Grading:

Attendance Quizzes (25 x 1)	25%
Midterm Exam	35%
Final Exam	40%

Points	Grade
90-100	A
80-89.99	B
70-79.99	C
60-69.99	D
<60	F

NOTE: There will be no extra credit.

Course Policies:

Exams: Two exams (one midterm and one final exam) will be administered covering all material disseminated through the assigned readings and videos, as well as what is covered in lectures in class. The exams are designed to measure the student's knowledge of the material as well as their ability to use this knowledge in an efficient manner. Examinations may consist of multiple-choice questions, true/false questions, discussion questions, or application problems. The midterm and final exams are closed book and closed notes and are taken via Canvas. Once a question is answered, you will not be able to return to it.

Assignments: Off campus assignments are to be completed before class. You may be called on in class to discuss the assignment.

Attendance and Class Participation: Students are expected to be **active participants** in each class meeting. Note taking encouraged. Attendance will be taken each class by observation by the professor and the student answering the "attendance quiz" via Canvas at the end of class. Excellent attendance will be rewarded at the end of the semester by rounding up the semester percent grade by .5% if it will change the final grade.

Make-up Exams: Makeup exams and quizzes will be granted at the discretion of the instructor. Makeups will be given only for approved absences or unusual circumstances. The makeup exam may be different from the exam given during the regular class time and may be penalized 20% for being late. Except for extreme emergencies, requests for a make-up exam must be made PRIOR to the regular exam time and may require written documentation regarding the student's absence, such as a doctor's excuse. Quizzes that are made up due to an approved absence will not be penalized.

Course Registration: Students must register for this class as soon as possible to be assured of enrollment. Joining the class late will require makeup of all work within a week of joining the class. All students are expected to acquire the textbook (or e-book) and bring it to each class.

Withdrawals: Students must officially withdraw from this class; otherwise they will receive an "F" for the course. No withdrawal forms will be signed after the final drop date.

UT Tyler Honor Code

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

Students Rights and Responsibilities

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:

<http://www.uttyler.edu/wellness/rightsresponsibilities.php>

Campus Carry

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at

<http://www.uttyler.edu/about/campus-carry/index.php>

UT Tyler a Tobacco-Free University

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date) • Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Disability/Accessibility Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <http://www.uttyler.edu/disabilityservices>, the SAR office located in the University Center, # 3150 or call 903.566.7079.

Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the

planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Emergency Exits and Evacuation

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Student Standards of Academic Conduct

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i) "Cheating" includes, but is not limited to:
 - copying from another student's test paper;
 - using, during a test, materials not authorized by the person giving the test;
 - failure to comply with instructions given by the person administering the test;
 - possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
 - using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
 - collaborating with or seeking aid from another student during a test or other assignment without authority;
 - discussing the contents of an examination with another student who will take the examination;
 - divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;

- substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
 - paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
 - falsifying research data, laboratory reports, and/or other academic work offered for credit;
 - taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
 - misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.
- iii. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
- iv. All written work that is submitted will be subject to review by plagiarism software.

UT Tyler Resources for Students

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu • The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254)

Tentative Course Schedule and Assignments:

Scheduled dates may vary depending on weather and the pace of the class.

Week # & Day	Month	Day	Off Campus Activity <u>Prior</u> to Class	On Campus Activity
Week 1 Tuesday	AUG	27	Register for class, Obtain textbook	Professor Introduction, Seat Selection, Syllabus, Course Objectives, Student Survey via Canvas
Thursday	AUG	29	Assignment # 1	Lecture # 1, <i>What is this course about?</i> Attendance Quiz # 1
Week 2 Tuesday	SEPT	3	Assignment # 2	Lecture # 2, <i>Develop an Understanding of Proactive, Principled Behavior,</i> Attendance Quiz # 2
Thursday	SEPT	5	Assignment #3	Lecture # 3, Chapter 1 – Introduction to Business Analysis and Requirement Types, Attendance Quiz # 3
Week 3 Tuesday	SEPT	10	Assignment # 4	Lecture # 4, Chapter 2 – Needs Assessment – Part 1, Attendance Quiz # 4
Thursday	SEPT	12	Assignment # 5	Lecture # 5, Chapter 2 - Needs Assessment – Part 2, Attendance Quiz # 5
Week 4 Tuesday	SEPT	17	Assignment # 6	Lecture # 6, <i>Listening Skills,</i> Attendance Quiz # 6
Thursday	SEPT	19	Assignment # 7	Lecture # 7, <i>Nonverbal Communication,</i> Attendance Quiz # 7
Week 5 Tuesday	SEPT	24	Assignment # 8	Lecture # 8, Chapter 3 – Business Analysis Planning – Part 1, Attendance Quiz # 8
Thursday	SEPT	26	Assignment # 9	Lecture # 9, Chapter 3 - Business Analysis Planning – Part 2, Attendance Quiz # 9
Week 6 Tuesday	OCT	1	Assignment # 10	Lecture # 10, Chapter 3 - Business Analysis Planning – Part 3, Attendance Quiz # 10
Thursday	OCT	3	Assignment # 11	Lecture # 11, <i>Visual Communication and Semiotics,</i> Attendance Quiz # 11

Week 7 Tuesday	OCT	8	Assignment # 12	Lecture # 12, <i>Introduction to the Agile Framework,</i> Attendance Quiz # 12
Thursday	OCT	10	Study for the Midterm Exam	Comprehensive Midterm Exam
Week 8 Tuesday	OCT	15	Assignment # 13	Lecture # 13, Chapter 4 – Requirements Elicitation and Analysis – Part 1, Attendance Quiz # 13
Thursday	OCT	17	Assignment # 14	Lecture # 14, Chapter 4 - Requirements Elicitation and Analysis – Part 2, Attendance Quiz # 14
Week 9 Tuesday	OCT	22	Assignment # 15	Lecture # 15, Chapter 4 - Requirements Elicitation and Analysis – Part 3, Attendance Quiz # 15
Thursday	OCT	24	Assignment # 16	Lecture # 16, Chapter 4 - Requirements Elicitation and Analysis – Part 4, Attendance Quiz # 16
Week 10 Tuesday	OCT	29	Assignment # 17	Lecture # 17, Chapter 5 - Traceability and Monitoring – Part 1, Attendance Quiz # 17
Thursday	OCT	31	Assignment # 18	Lecture # 18, Chapter 5 - Traceability and Monitoring – Part 2, Attendance Quiz # 18
Week 11 Tuesday	NOV	5 (Last day to withdraw Nov. 4)	Assignment # 19	Lecture # 19, Chapter 6 – Solution Evaluation – Part 1, Attendance Quiz # 19
Thursday	NOV	7	Assignment # 20	Lecture # 20, Chapter 6 – Solution Evaluation – Part 2, Attendance Quiz # 20
Week 12 Tuesday	NOV	12	Assignment # 21 Watch the video <i>SCRUM Servant Leader Characteristics</i>	Lecture # 21, <i>The SCRUM Master and Characteristics of Servant-Leaders and Their Organizations,</i> Attendance Quiz # 21
Thursday	NOV	14	Assignment # 22	Lecture # 22, <i>SCRUM Lecture - Part 1,</i> Attendance Quiz # 22

Week 13 Tuesday	NOV	19	Assignment # 23	Lecture # 23, <i>SCRUM Lecture - Part 2</i> , Attendance Quiz # 23
Thursday	NOV	21	Assignment # 24 –	Lecture # 24, <i>SCRUM Lecture - Part 3</i> , Attendance Quiz # 24
Week 14 Tuesday	NOV	26	No Assignment	No Class – Thanksgiving Break
Thursday	NOV	28	No Assignment	No Class – Thanksgiving Break
Week 15 Tuesday	DEC	3	Assignment # 25	Lecture # 25, <i>The Movement to Objects</i> , Attendance Quiz # 25
Thursday	DEC	5	TBD	Snow day – open if needed for making up a missed class, otherwise no class
Week 16 Tuesday	DEC	10	Study for the comprehensive final exam	Comprehensive Final Exam – Date and time to be confirmed when the final exam schedule is published.