COSC 3333

Fall - 2020

Course Description

Prerequisite COSC 1307 and MATH 1342. This course is a survey of the tools and techniques for the gathering of business information and structuring and manipulation of data to support managerial decision making. Main topic areas include decision support system technology, artificial intelligence tools, expert systems and business applications such as SAP.

Class Time

August 25 – November 19

Tues/Thurs 8:00am – 9:20am COB 211 & Online – See Slack announcements

December 1 – December 3 and Final Exam Online through Canvas

Instructor Information

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

Office Hours

DM through Slack (preferred), Zoom, email

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

Because of University regulations regarding Covid-19, there will be **no** physical office hours this semester. Appointments can be made at robschumaker.youcanbook.me

Textbook Information

Coursepack: https://hbsp.harvard.edu/import/749285

Course Objective

The course is designed with the following goals:

- Understanding the role of information systems in organizations
- Understanding the various information systems used
- Understanding the technical infrastructure for information systems
- Understanding data management
- Effectively using appropriate query and search technology to locate and retrieve pertinent business information
- Understanding the role of technologies to solve business problems

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 Slides

This class will use Canvas for course documents, slides 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 class changes.



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Course Grading

Course evaluation will be based on the following:

Quizzes (15 @ 2 points each)	30
Case Discussion (6 @ 5 points each)	30
SAP Water Distribution Game	5
Cyberattack Simulation	5
Class Participation	10
Lifelong Learning	5
Final Exam	<u>15</u>
Total Points	100

Grading Scale

Α	90.0 points or more
В	80.0 to 89.999 points
С	70.0 to 79.999 points
D	60.0 to 69.999 points
F	59.999 points or less

Course Policies

- Quizzes Quizzes will be administered at the beginning of each class and will cover the topic
 previously presented and can include lectures, cases or the 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. Students will have five
 minutes to complete the quiz.
- 2. Case Discussion Throughout the semester we will analyze business technology cases through Canvas. Students will post their discussion questions and answer others. More details will be provided in Canvas.
- 3. Final Exam The final exam will take place during finals week. A copy of the final exam date/time schedule can be found by doing a search for "UT Tyler Final Exam Schedule." The final exam is comprehensive, covering the entire semester.
- 4. SAP Water Distribution Game To further learn how ERP systems can be used in a business, student groups will compete against one another to see who can make the most money. Points will be awarded based on how well the students' group performed. Further details will be provided in class.
- 5. Cyberattack Simulation Student teams will be immersed in a business simulation to examine their ability to gather data and make sound decisions under the pressure of a cyberattack. Points will be awarded based on performance.
- 6. 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.
- 7. 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 email proof of attendance) will receive credit. Upcoming meetings and events can be found on Canvas. Because of Covid-19, online webinars will be accepted.



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- 8. Make-up exams will be granted at the discretion of the instructor. Make-ups will be given only under extremely unusual circumstances, will be different from exams given during the regular class time and may be penalized up to 50% of the grade. *Permission for a makeup exam must be obtained PRIOR to the regular exam and must include written documentation of the student's absence*.
- 9. Late Assignments Assignments are due by 5:00pm of the date assigned. Assignments that are turned in late will be penalized by 20% for each 24 hour period (5:01pm to 5:00pm the following day) past the deadline and will receive a zero if turned in more than 5 calendar days late. Electronic assignments are encouraged to be sent electronically.
- 10. 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 excused absence will be due by 5pm of the day of their return with no penalty. Late assignment grading will be applied thereafter.
- 11. 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.
- 12. The Harvard CS50 Regret Clause If you commit some act that is not reasonable but bring it to the attention of the course's heads within 72 hours, the course may impose local sanctions that may include an unsatisfactory or failing grade for work submitted, but the course will not refer the matter for further disciplinary action except in cases of repeated acts. Below are rules of thumb that (inexhaustively) characterize acts that the course considers reasonable and not reasonable. If in doubt as to whether some act is reasonable, do not commit it until you solicit and receive approval in writing from the course's heads. Acts considered not reasonable by the course are handled harshly. If the course refers some matter for disciplinary action and the outcome is punitive, the course reserves the right to impose local sanctions on top of that outcome that may include an unsatisfactory or failing grade for work submitted or for the course itself. The course ordinarily recommends exclusion (i.e., required withdrawal) from the course itself.



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Reasonable

- Communicating with classmates about problem sets' problems in English (or some other spoken language), and properly citing those discussions.
- Discussing the course's material with others in order to understand it better.
- Helping a classmate identify a bug in their code at office hours, elsewhere, or even online, as by viewing, compiling, or running their code after you have submitted that portion of the pset yourself. Add a citation to your own code of the help you provided and resubmit.
- Incorporating a few lines of code that you find online or elsewhere into your own code, provided that those lines are not themselves solutions to assigned problems and that you cite the lines' origins.
- Reviewing past semesters' tests and guizzes and solutions thereto.
- Sending or showing code that you've written to someone, possibly a classmate, so that they might help you identify and fix a bug.
- Submitting the same or similar work to this course that you have submitted previously to this
 course.
- Turning to the course's heads for help or receiving help from the course's heads during the quizzes or test.
- Turning to the web or elsewhere for instruction beyond the course's own, for references, and for solutions to technical difficulties, but not for outright solutions to problem set's problems or your own final project.
- Whiteboarding solutions to problem sets with others using diagrams or pseudocode but not actual code
- Working with (and even paying) a tutor to help you with the course, provided the tutor does not do your work for you.

Not Reasonable

- Accessing a solution to some problem prior to (re-)submitting your own.
- · Accessing or attempting to access, without permission, an account not your own.
- Asking a classmate to see their solution to a problem set's problem before (re-)submitting your
- Discovering but failing to disclose to the course's heads bugs in the course's software that affect scores.
- Decompiling, deobfuscating, or disassembling the staff's solutions to problem sets.
- Failing to cite (as with comments) the origins of code or techniques that you discover outside of
 the course's own lessons and integrate into your own work, even while respecting this policy's
 other constraints.
- Giving or showing to a classmate a solution to a problem set's problem when it is they, and not you, who is struggling to solve it.
- Looking at another individual's work during the guizzes or test.
- Manipulating or attempting to manipulate scores artificially, as by exploiting bugs or formulas in the course's software.
- Paying or offering to pay an individual for work that you may submit as (part of) your own.
- Providing or making available solutions to problem sets to individuals who might take this course in the future.
- Searching for or soliciting outright solutions to problem sets online or elsewhere.
- Splitting a problem set's workload with another individual and combining your work.
- Submitting (after possibly modifying) the work of another individual beyond the few lines allowed herein.
- Submitting the same or similar work to this course that you have submitted or will submit to another.
- Submitting work to this course that you intend to use outside of the course (e.g., for a job) without prior approval from the course's heads.



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- Turning to humans (besides the course's heads) for help or receiving help from humans (besides the course's heads) during the guizzes or test.
- · Viewing another's solution to a problem set's problem and basing your own solution on it.

University Policies and Additional Information that Must Appear in Fall 2020

Important Covid-19 Information for Classrooms and Laboratories

Students are required to wear face masks covering their nose and mouth, and follow social distancing guidelines, at all times in public settings (including classrooms and laboratories), as specified by Procedures for Fall 2020 Return to Normal Operations. The UT Tyler community of Patriots views adoption of these practices consistent with its Honor Code and a sign of good citizenship and respectful care of fellow classmates, faculty, and staff.

Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home and may join the class remotely. Students who have difficulty adhering to the Covid-19 safety policies for health reasons are also encouraged to join the class remotely. Students needing additional accommodations may contact the Office of Student Accessibility and Resources at University Center 3150, or call (903) 566-7079 or email saroffice@uttyler.edu.

Recording of Class Sessions

Class sessions may be recorded by the instructor for use by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

University Policies and Additional Information that Must Appear in Each Course Syllabus (5/19) 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

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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 offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including non-visible disabilities such as 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 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.



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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;



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- 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.
- lii. "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.

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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 the pace of the class.

Date	Concept	Assignment Due	Quizzes
Aug 25	Introduction		
Aug 27	What is MIS?		
Sept 1	Hardware I		
Sept 3	Hardware II		
Sept 8	Software		Hardware
Sept 10	Database		Software
Sept 15	ERP		Database
Sept 17	ЮТ	Case – Surviving SAP	ERP
Sept 22	Cryptocurrency		IOT
Sept 24	Networking	Case - ShotSpotter	Cryptocurrency
Sept 29	Cloud Computing		Networking
Oct 1	Programming		Cloud
Oct 6	Security I		
Oct 8	Security II		
Oct 13	Lab Week or TBA		
Oct 15	Lab Week or TBA		
Oct 20	Business Continuity	Case – iPremier DoS	Security
Oct 22	eCommerce		Continuity
Oct 27	Cyberattack Simulation		
Oct 29	SAP Water Distribution Game	Case – L'Oreal Paris	
Nov 3	SAP Water Distribution Game		
Nov 5	Who's Who in Technology		eComm
Nov 10	IT Strategy		Who's Who
Nov 12	IT Planning	Case – Marie Kondo	Strategy
Nov 17	IT Laws		
Nov 19	IT Ethics	Case – Facebook	Planning
Nov 24	No Classes – Thanksgiving Break		
Nov 26	No Classes – Thanksgiving Break		
Dec 1	Spreadsheet of Life		
Dec 3	Artificial Intelligence		Laws

No Shade – Lecture in COB 211 and livestreamed (unless otherwise noted in Canvas and Slack) Green – Lecture livestreamed only

Final Exam - 8am Friday Dec 4 through 5pm Sunday Dec 14 through Canvas

^{*} Check the Slack channel daily for any important updates