COSC 3333

Fall - 2021

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

Tuesdays and Thursdays 8:00am – 9:20am COB 211

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 or physical appointment.

No appointment needed for Tuesdays and Thursdays 9:30am – 11:00am in COB 315.05

Textbook Information

Coursepack: https://hbsp.harvard.edu/import/825658

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 @ 2.5 points each)	15
Hands-On Exercises (6 @ 5 points each)	30
Class Participation	5
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

This grading scale is fixed and immutable. While heart-breaking, the Instructor is not responsible for the following consequences for bad grades as reported by former students: assault by family member, delayed graduation, deportation, homelessness, failure to attend grad school, loss of significant other, crushing their hopes and dreams. Grades are not curved, individual extra credit is not offered and any requests to unethically "adjust" grades will be reported to the University as an incident of academic dishonesty. Students are encouraged to check their grades often and are responsible for all deadlines.

Course Policies

- 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. Students will have five minutes to complete the quiz.
- 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. Hands-On Exercises Students will have the opportunity to interact with different technologies through simulation, contests, and participation. Some exercises such as the SAP Water Distribution Game and Cyberattack Simulation will require students to attend a fixed time event and cannot be performed at their leisure. If students possess a valid and documented absence, a substitute assignment of a quality ten-page paper on a technology topic of the student's choosing, complete with references is due within 24 hours of the student's expected return to class or by the end of the semester, whichever is sooner.
- 4. Final Exam The final exam will take place during finals week according to the University schedule. The final exam is comprehensive, covering the entire semester.
- 5. 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 five.
- 6. 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



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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. Online webinars will be accepted.

- 7. 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.*
- 8. 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.
- 9. 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.
- 10. Meow. If you send the Instructor a DM through Slack of a lolcat before Sept 3 at 5pm, you will receive a bonus point. Keep this to yourself and do not share it with classmates.
- 11. 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 vourself. 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 quizzes or test.
- · Viewing another's solution to a problem set's problem and basing your own solution on it.

Tentative Course Schedule and Assignments:

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

Date	Concept	Assignment Due	Quizzes
Aug 24	Introduction		
Aug 26	What is MIS?		
Aug 31	Hardware I		
Sep 2	Hardware II		
Sep 7	Software	Hands-On Hardware	Hardware
Sep 9	Database		Software
Sep 14	ERP		Database
Sep 16	Hands-On: SAP Water Distribution Game 1of2		
Sep 21	Hands-On: SAP Water Distribution Game 2of2		
Sep 23	ЮТ	Case – Surviving SAP	ERP
Sep 28	Cryptocurrency		IOT
Sep 30	Networking	Hands-On Crypto	Cryptocurrency
Oct 5	Cloud Computing	Hands-On Networking	Networking
Oct 7	A Tour of Amazon AWS		
Oct 12	Programming		Cloud
Oct 14	Security I		
Oct 19	Security II	Case – Covid Vaccine	
Oct 21	Hands-On: Cyberattack Simulation		Security
Oct 26	Hands-On: Exploring the Darkweb		
Oct 28	eCommerce	Case – iPremier DoS	
Nov 2	Who's Who in Technology	Hands-On Darkweb	eComm
Nov 4	Business Continuity	Case – L'Oreal Paris	Who's Who
Nov 9	IT Strategy		Continuity
Nov 11	IT Planning	Case – Marie Kondo	Strategy
Nov 16	IT Laws		Planning
Nov 18	IT Ethics	Case – Facebook	Laws
Nov 23	Thanksgiving Break		
Nov 25	Thanksgiving Break		
Nov 30	Spreadsheet of Life		
Dec 2	ABCD Intelligence		