

COSC 3333

**Spring - 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**

Tue/Thurs 9:30am - 10:50am COB 255

\*Note: This is a hybrid course section. Class meeting times are listed on the last page of the syllabus.

#### **Instructor Information**

Dr. Robert P. Schumaker Professor, Computer Science Dept. COB 315.05 rschumaker@uttyler.edu

#### **Office Hours**

Tues/Thurs 2:00pm – 3:30pm on class meeting weeks in COB 315.05 Tues/Thurs 2:00pm – 3:30pm online meeting weeks through Canvas

If these times don't work for you, please make an appointment.

Appointments outside of office hours can be made at robschumaker.youcanbook.me

#### **Textbook Information**

Coursepack: https://hbsp.harvard.edu/import/691000

## **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.



COSC 3333

**Spring - 2020** 

## **Course Grading**

Course evaluation will be based on the following:

30
20
5
5
10
10
5
<u>15</u>
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. Students that are late or have an unexcused absence will not be
  permitted to take the guiz.
- 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.
- 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 team performance.
- 6. Class Participation Class Participation points are broken up into two parts; tech stories (Tech) and operating the teaching workstation (Workstation). Participation. Tech will be scored by the quantity of quality discussion a student contributes regarding relevant technology-related articles. Participation. Workstation will be scored as to whether the student voluntarily operates the teaching workstation. The exact formula of Class Participation points will not be revealed until the end of the semester and the maximum points that can be earned is ten. Students that 1. set up an appointment with their professor through youcanbook.me, 2. show up on-time for their appointment before



COSC 3333

**Spring - 2020** 

Thursday January 16 at 5pm and 3. have an informal chat about themselves, will receive one bonus point. Please do not share this with other students.

- 7. Hands-on Exercises Students with more skillsets are desired more by employers. This learning module is a series of hands-on skills that students can earn points through assembling a computer, locking down a wifi access point, learning Wordpress or working with a 3D printer. These exercises are generally less than an hour and students earn five points for each session they complete (maximum ten points). These exercises are offered during specific times during the semester so check the course calendar for availability.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.



COSC 3333

**Spring - 2020** 

#### 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 quizzes 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.



COSC 3333

**Spring - 2020** 

- 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.

#### **Classroom Lab Rules**

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

## 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 <a href="http://www.uttyler.edu/about/campus-carry/index.php">http://www.uttyler.edu/about/campus-carry/index.php</a>

## **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 <a href="https://www.uttyler.edu/tobacco-free">www.uttyler.edu/tobacco-free</a>

#### 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 <a href="http://www.uttyler.edu/registrar">http://www.uttyler.edu/registrar</a>. 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

COSC 3333

**Spring - 2020** 

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 <a href="https://hood.accessiblelearning.com/UTTyler">https://hood.accessiblelearning.com/UTTyler</a> and fill out the <a href="https://hood.accessiblelearning.com/UTTyler">New Student</a> application. The Student Accessibility and Resources (SAR) 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 <a href="http://www.uttyler.edu/disabilityservices">http://www.uttyler.edu/disabilityservices</a>, 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



COSC 3333

Spring - 2020

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.



COSC 3333

**Spring - 2020** 

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.

## **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
Jan 14	Introduction		
Jan 16	What is MIS?		
Jan 21	Hardware I		
Jan 23	Hardware II		
Jan 28	Software		Hardware
Jan 30	Database		Software
Feb 4	ERP		Database
Feb 6	SAP Water Distribution Game		
Feb 11	Hands-On Day		
Feb 13	Hands-On Day		
Feb 18	Cryptocurrency	Case – Bloom & Grow	ERP
Feb 20	Networking		Cryptocurrency
Feb 25	Cloud Computing		Networking
Feb 27	Programming		Cloud
Mar 3	Security – Offense and Defense		
Mar 5	Cyberattack Simulation		
Mar 10	No Classes – Spring Break		
Mar 12	No Classes – Spring Break		
Mar 17	Business Continuity	Case – iPremier DoS	Security
Mar 19	eCommerce		Continuity
Mar 24	Who's Who in Technology		eComm
Mar 26	IOT		Who's Who
Mar 31	IT Strategy		IOT
Apr 2	IT Planning	Case – DraftKings	Strategy
Apr 7	IT Laws		Planning
Apr 9	IT Ethics		Laws
Apr 14	Hands-On Day		
Apr 16	Excel for Business		
Apr 21	Spreadsheet of Life	Case – Facebook	
Apr 23	Artificial Intelligence		