THE UNIVERSITY OF TEXAS AT TYLER DEPARTMENT OF COMPUTER SCIENCE COSC 3315-060 Social and Professional Issues in Computing Fall 2020

Instructor Information:

J. Howard Baker MAcc (USC), Ph.D. Information Systems (U.T. Arlington) Senior Lecturer, Computer Science Computer Science Office: Suite COB 315.06

Office Hours:

On campus by appointment only on Monday or Wednesday. Contact me via email to set a date and time.

Communication:

Canvas email or professor's UTT email: hbaker@uttyler.edu

Class Instruction:

This is an online asynchronous course using the Canvas LMS. All lectures, discussion, instruction, and testing are online. All class lectures are recorded, and discussions are asynchronous with no requirement for students to log in on a specific day or time. However, testing may be required at a specific day and time.

Text:

The Future of Feeling: Building Empathy in a Tech-Obsessed World, by Kaitlin Ugolik Phillips, Publisher: Little A (February 1, 2020), ISBN-13: 9781542041843 (hardcover), ISBN-10: 1542041848 (hardcover), ISBN-13: 9781542041850 (paperback), ISBN-10: 1542041856 (paperback), Kindle eBook edition (with text-to-speech enabled) is also available on Amazon (free if you have Kindle Unlimited). You do not have to obtain this text from the bookstore.

Course Description:

Introduction to the social and professional issues that arise in the context of computing.

Mission Statement: The mission of this course is to address many of the myriad social and ethical concerns which arise from the use of advanced technologies including artificial intelligence, machine learning, quantum computing, blockchain technology, 5G, robotics, digital weapons, and facial recognition. Both security and privacy issues will be addressed. We will also examine various views of what is a "profession" and what is considered "professional conduct" in computer science and information systems.

Technology Ethics:

This course introduces key ideas and terms in moral theory and professionalism to explore technology ethics. The course emphasizes that computing is not a purely technical discipline but one with moral and social implications that affect everyday life. Lectures will cover several ethical frameworks such as the *ACM Code of Ethics and Professional Conduct* and will examine compliance challenges a computer professional might encounter.

Prerequisite:

COSC 1337 or COSC 1437 - Object Oriented Paradigm. The student is expected to have taken a foundational course in college-level composition and have a working knowledge of Microsoft Word and PowerPoint. Papers will follow the MLA rules used in academic writing. Links will be provided on using the MLA style and a sample paper.

A Statement on Course Etiquette:

When sending email or posting online, your posts and comments should always be **professional**, and you should always be **courteous** toward other students and the professor.

Personal issues and general comments about the class should be emailed privately to the professor. To email the professor directly, use Canvas email or the professor's UT Tyler email address at the top of this syllabus. During discussions, respect the opinions of others.

Late Assignments:

All work and assignments must be completed by the last regular day of class in the semester. No late work will be accepted without a valid excuse. The professor reserves the right to determine if an excuse is valid. Typically, valid excuses will involve an official university function, sickness, a documented family emergency, a documented religious observance, or a funeral. If possible, email the professor **ahead of time** if you will be late. I will work with you to handle special needs or circumstances. Always feel free to contact me if you are having a special need.

Grading:

All questions regarding grades must be settled by the last regular day of class in the semester. Plagiarism and the copying of other student's work, intentionally or unintentionally, can result in a failing grade.

All semester grades are final. Do not beg for more points or extra credit. There is no extra credit. Feel free to ask me for help if you are struggling with fulfilling an assignment.

If your final grade is within .5% of the next letter grade, I will increase the semester percent grade by .5% to raise the final letter grade! (Example: 89.5% will become 90%.)

Grades will be determined as follows:

Midterm Exam Paper covering Lectures 1 - 5	300
Textbook Quizzes (4 @ 40 pts each)	160
Textbook Essay Exam	40
Lecture Quizzes – may use PPT files and notes while taking a quiz (10 @ 20 pts each)	200
Final Exam Paper covering all lectures since the Midterm (but not the textbook)	300

Semester	Grade
Percent	
90-100	A
80-89.99	В
70-79.99	C
60-69.99	D
<60	F

Exams and Quizzes:

The Midterm Exam paper and the Final Exam paper cover the topics presented in the lectures. However, what you write about can also bring in related topics. For example, when discussing self-driving cars, you may also discuss how 5G will impact the technology. Both exam papers are designed to measure the student's knowledge of the material as well as their ability to communicate this knowledge **in an efficient and effective manner**. Both exam papers are to be in Microsoft Word and will follow MLA style. Failing to follow MLA style, or not performing grammar and spelling checks, will result in up to 50 lost points. Quizzes are taken via Canvas. Quizzes may consist of multiple-choice questions, true/false questions, discussion questions, or matching. Makeup versions of quizzes may be different from the original quiz taken by the class.

Assignments:

All assignments are to be completed and submitted via Canvas. Do not send assignments which are late via email attachment to me. All work must be recorded in Canvas. Upon request, I will give you instructions on how to submit a late assignment via Canvas.

Make-up Exams:

Makeup work will be granted at the discretion of the instructor. Makeups will be given only for unusual circumstances such as emergencies or documented illness. If possible, requests for a make-up assignment should be made PRIOR to the due date and time of the assignment.

Assignment Policy:

All assignments are due on the specified date and time shown in Canvas. All assignments must be individually and independently completed and must represent the effort of the student turning in the assignment. Exam paper assignments which are basically identical will be considered plagiarized, or a derivative of another's work, **and will result in an "F" grade for the course**. The Midterm Exam paper will be assigned at the start of the semester. The Final Exam paper will be assigned after the Midterm Exam paper due date and may be turned in earlier than the official final exam date. However, it must be turned in no later than the official final exam date.

Lecture Q & A Discussion:

Students should feel free to ask questions regarding the material being covered by posting their questions in the week's Q & A Discussion. This is like students raising their hands in class and asking questions. Questions should relate to the material being covered that week. There is a different discussion for each week. Other questions regarding the class, grades, or assignments should be emailed to the professor rather than being posted in the discussion board. Questions do not have to address only material presented in the lecture. For instance, if the lecture is about artificial intelligence (AI), a question might address anything relevant to the subject, such as asking for a good introductory article on AI. I will try to answer all the questions posted, and the class can see both the questions and my answers. There is no grade associated with the Q & A Discussion postings, but the material posted can add to your knowledge and be reflected in the two exam papers.

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 **one week** of joining the class.

Withdrawals:

Students must officially withdraw from this class; otherwise they will receive an "F" for the course.

The following are University policies:

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

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 <u>www.uttyler.edu/tobacco-free</u>.

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 <u>https://hood.accessiblelearning.com/UTTyler</u> 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 Revised 05/19

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 makeup 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 reenter 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)

	Evalu	ation Method				
1. Ex	1. Examination Papers and Quizzes 2. Homework					
3.		4.				
5.		6.				
7. Class Discussion 8.		8.				
_		of this course students should be able to:				
1.	Describe the basic components of ethical reasoning [1, 2, 7]					
2.	. Consider what ethical decisions you would make throughout the various scenarios [1, 2, 7]					
3.	Describe the basic principles of significant moral theories [1, 2, 7]					
4.	Explain how theorists define the constituents of a profession [1, 2, 7]					
5.	Explain what defines a professional [1, 2, 7]					
6.	Explain how advances in technology call for new privacy protection laws [1, 2, 7]					
7.						
8.						
9.						
	individual's self-concept from a single 'true' self to multiple explicit personas [1, 2, 7]					
10.						
	expression [1, 2, 7]					
11.						
	2, 7]					
12.	Explain what it means for a technology to	be pervasive, and for it to be autonomous [1, 2, 3,7]				

Tentative class schedule:

Week #	Days	Class Activities
Week 1	August 24-30	Watch Lecture # 01 — Introduction to Ethical Thinking and the Ethical Brain, Lecture Q & A via Discussion # 01, Take Lecture Quiz # 01
Week 2	August 31- September 6	Watch Lecture # 02 — Virtue Ethics, Situationism, EQ and Empathy, Lecture Q & A via Discussion # 02, Take Lecture Quiz # 02
Week 3	September 7-13	Labor Day September 7 - all offices closed; no classes held Watch Lecture # 03 — Introduction to the ACM Code of Ethics and Professional Conduct, Lecture Q & A via Discussion # 03, Take Lecture Quiz # 03
Week 4	September 14-20	Watch Lecture # 04 – Intellectual and Intangible Property Lecture Parts 1 & 2, Lecture Q & A via Discussion # 04, Take Lecture Quiz # 04
Week 5	September 21-27	Watch Lecture # 05 - Establishing a Culture of Trust, Lecture Q & A via Discussion # 05, Take Lecture Quiz # 05
Week 6	September 28- October 4	Midterm Exam paper due September 28 over Lectures 1-5 Watch Lecture # 06 – STUXNET and Digital Weapons, Lecture Q & A via Discussion # 06, Take Lecture Quiz # 06
Week 7	October 5-11	Watch Lecture # 07 — E-Government, E-Democracy, E-Voting, and the Digital Divide, Lecture Q & A via Discussion # 07, Take Lecture Quiz # 07
Week 8	October 12-18	Watch Lecture # 08 – Robots and Autonomous Systems, Lecture Q & A via Discussion # 08, Take Lecture Quiz # 08
Week 9	October 19-25	Watch Lecture # 09 – Society and Artificial Intelligence, Lecture Q & A via Discussion # 09, Take Lecture Quiz # 09
Week 10	October 26- November 1	Watch Lecture # 10 – Cryptocurrency, Block Chain, and Hash Graph, Lecture Q & A via Discussion 10, Take Lecture Quiz # 10
Week 11	November 2-8	November 2 – last day to withdraw, Read Textbook (<i>The Future of Feeling: Building Empathy in a Tech-Obsessed World</i>) Chapters 1 & 2, Quiz on Text Chapters 1 & 2
Week 12	November 9-15	Read Textbook Chapters 3 & 4, Quiz on Text Chapters 3 & 4
Week 13	November 16-22	Read Textbook Chapters 5 & 6, Quiz on Text Chapters 5 & 6

Week 14	November 23-29	Thanksgiving holidays for faculty and students
Week 15	November 30- December 7	Read Textbook Chapters 7 & 8 plus the Epilogue, Quiz over Text Chapters 7 & 8 plus the Epilogue Take the Textbook Exam covering Chapters 1-8 plus the Epilogue Study Day is December 7
Week 16	December 8	Final Exam Paper Due (Paper Does Not Cover the textbook)