CS 345: Cyberethics
Spring 2023
Tuesday, Thursday 9-10:20

Instructor

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WELCOME!!

I'm so happy you have chosen to join us for our study of cyberethics! I always enjoy delving into the course material and hope you will enjoy it as well!

Office hours

MWF 8:30-9:20
MW 11:30-12:20
T TH 8:30-8:50 and 11:30-12
TH 10:30-11:20

Textbook & Course Resource Information

Required Reading Material

Gift of Fire, Edition: 5 th , ISBN: 9780134615271, Author: Baase, Publisher: Pearson, Formats: PAPERBACK, BryteWave Format, Copyright Year: 2018.

Blackboard

All course information is managed on Blackboard.

Course resources may be found at:
Truman Bookstore: https://www.bkstr.com/trumanstatestore/home
Truman Library: http://library.truman.edu/

Minimum Technology Requirements

- Reliable access to email and the Internet
- Internet browser, latest version
- Current version of an operating system, Microsoft Word (with all assignments submitted as .doc or .docx or pdf files), and presentation software that allows collaboration with group members. If you do not have your own copy of Microsoft Word or other Microsoft products, you may access it at view.truman.edu.
- Since this course involves sending and receiving large files and meeting online, you may find that a high speed Internet connection is advantageous.
- Computer with microphone and webcam
- Ability to attend Zoom meetings
- Here are additional tips for a successful online experience from Truman's Learning Technologies Team:

https://ltt.truman.edu/teaching-online-truman/blackboard-information-for-students/basic-troubleshooting-tips/

Minimum Technical Skills

Students need to be able to send and receive email, use a word processor, participate in Zoom meetings, and navigate Blackboard to locate and submit assignments and to make posts on Blackboard discussion boards. You will also need to use a collaboration tool to complete and submit a large group paper.

Technical Expectations for Completing Assignments and Exams

You will need a computer with a reliable, fast Internet connection throughout the entire summer semester to complete assignments and assessments in this course. In the event you experience a technical difficulty during an assessment, you will need to provide screenshots verifying the difficulty so we can trace what occurred.

Course Description

This course provides a broad overview of cyber ethics and professional ethics as they pertain to society in general and to the computer science professional. In this course we study the social, ethical, and professional issues of computing and the Internet.

Prerequisites

Junior standing in credit hours earned. You will also need excellent time management skills as this course moves twice as fast as it does during a regular fall/spring semester.

Course topics: We will cover the following topics as time permits.

1. Unwrapping the Gift

1.1 The Pace of Change

1.2 Change and Unexpected Developments

1.2.1 Self-Driving Vehicles

1.2.2 Connections: Mobile Phones, Social Networking, and the Internet of Things

1.2.3 E-commerce and Free Stuff

1.2.4 Artificial Intelligence, Robotics, Sensors, and Motion

1.2.5 Tools for Disabled People

1.3 Themes

1.4 Ethics

1.4.1 What is Ethics, Anyway?

1.4.2 A Variety of Ethical Views

1.4.3 Some Important Distinctions

2. Privacy

2.1 Privacy Risks and Principles

5.2.3 Is “Harmless” Hacking Harmless?

5.3 Some Specific Applications of Hacking

5.3.1 Identity Theft

5.3.2 Case Study: The Target Breach

5.3.3 Hacktivism, or Political Hacking

5.3.4 Hacking by Governments

5.4 Why Is the Digital World So Vulnerable?

5.4.1 Vulnerability of Operating Systems and the Internet

5.4.2 Human Nature, Markets, and Vulnerability of the Internet of Things

5.5 Security

5.5.1 Tools to Help Protect the Digital World

5.5.2 People Who Can Help Protect the Digital World

5.5.3 Hacking to Improve Security

5.5.4 Backdoors for Law Enforcement

5.6 The Law

5.6.1 The Computer Fraud and Abuse Act

5.6.2 Criminalize Virus Writing and Hacker Tools?

5.6.3 Penalties for Young Hackers

5.7 Whose Laws Rule the Web?

5.7.1 A Crime in One Country but Not Another

5.7.2 Libel and Freedom of Speech

5.7.3 Culture, Law, and Ethics

5.7.4 Potential Solutions

6. Work

6.1 Fears and Questions

6.2 Impacts on Employment

6.2.1 Job Destruction and Creation

6.2.2 Changing Skills and Skill Levels

6.2.3 Are We Earning Less and Working More?

6.3 Changing Work Patterns: From Telecommuting to Gigs

6.3.1 Telecommuting

6.3.2 The Sharing Economy, On-Demand Services, and GIG Work

6.4 A Global Workforce

6.5 Employee Communication and Monitoring by Employers

6.5.1 Social Media Content

6.5.2 Separating–or Merging–Work and Personal Systems

6.5.3 Monitoring Employer Systems and Tracking Employees

7. Evaluating and Controlling Technology

7.1 Evaluating Information

7.1.1 The Need for Responsible Judgment

7.1.2 Computer Models

7.2 Neo-Luddite Views of Computers, Technology, and Quality of Life

7.2.1 Criticisms of Computing Technologies

7.2.2 Views of Economics, Nature, and Human Needs

7.3 Digital Divides

7.3.1 Trends in Access in the United States

7.3.2 Reaching the Next Billion Users

7.4 Control of Our Devices and Data

7.4.1 Remote Deletion of Software and Data

7.4.2 Automatic Software Upgrades

7.5 Making Decisions About Technology

7.5.1 Questions

7.5.2 The Difficulty of Prediction

7.5.3 Intelligent Machines and Super-intelligent Humans–Or the End of the Human Race?

7.5.4 A Few Observations

8. Errors, Failures, and Risks

8.1 Failures and Errors in Computer Systems

8.1.1 An Overview

8.1.2 Problems For Individuals

8.1.3 System Failures

8.1.4 Example: Stalled Airports at Denver, Hong Kong, and Malaysia

8.1.5 Example: HealthCare.gov

8.1.6 What Goes Wrong?

8.1.2 Problems For Individuals

8.2 Case Study:The Therac-25

8.2.1 Therac-25 Radiation Overdoses

8.2.2 Software and Design Problems

8.2.3 Why So Many Incidents?

8.2.4 Observations and Perspective

8.3 Increasing Reliability and Safety

8.3.1 Professional Techniques

8.3.2 Trust the Human or the Computer System?

8.3.3 Law, Regulation, and Markets

8.4 Dependence, Risk, and Progress

8.4.1 Are We Too Dependent on Computers?

A.1. Software Engineering Code of Ethics and Professional Practice

A.2. ACM Code of Ethics and Professional Conduct

Learning Objectives and Course Schedule

Course Objectives

By the end of the course it is expected that the student will

- Be familiar with a variety of current social issues relating to computers/information such as privacy and use of information.
- Understand one's responsibilities as a computing professional and their ethical underpinnings.
- Effectively communicate with others in writing and speech on many of computing's social/ethical issues.
- Be able to summarize positions of both sides in various current debates over computing-related social/ethical issues.
- Be familiar with professional codes of conduct (both IEEE and ACM).
- Be familiar with many of computing's controversies (e.g. privacy vs information access and civil liberties vs. law enforcement)

Exams, Assignments, and Grading

This course is designated Writing Enhanced. That means you will be using writing in a variety of ways, to think through ideas, to communicate ideas, and to reflect on course-related experiences. You'll also be working on writing process, continuing to develop habits that will make your writing less stressful, more efficient, and more effective. The Writing Enhanced program serves all three of the "pillars" of Truman State University's educational philosophy: communication skill, critical thinking, and quality of life (ethical and civic engagement, lifelong learning, and empathy). Writing is an essential skill, and effective written communication is at the top of employer's desired skills. Critical thinking is enhanced by writing, and effective writing requires a critical understanding of audience, situation, and contexts. Writing can also be an essential tool for engaging in the life of one's community and enhancing one's own quality of life, through reflection, journaling, and correspondence. The ultimate goal of the Writing Enhanced program is to have students think of themselves as writers and not as people who sometimes use writing as a tool.

In this course, you will perform several types of writing including such types as writing to communicate to professor (writing to show what has been learned), writing to communicate to others (writing toward a specified audience that is not the instructor), writing to learn/think: writing to prepare, writing to learn/think: writing toward self-awareness, and writing to learn/think: writing to understand.

Exams:

This course will have two exams. Exams will be online in a computer lab during week 8 (midterm) and week 15 or 16 (final exam) depending on course progression.

Assignments and Quizzes:

NOTE: We will cover chapters 1-4 for the midterm exam and chapters 5-9 for the final exam. Each week you will do your assigned readings, take the in-class quiz over the reading assignment, participate in class discussions, work on writing assignments, complete any (relatively small)

homework/assignments for the week, prepare your generally weekly in-class group presentation, and study for the upcoming midterm/final exam.

Quizzes

These will occur at the beginning of each week over the upcoming week's assigned reading. The purpose of the quizzes is to ensure everyone has done the week's reading which will in turn, inform the ensuing class discussion.

Writing Assignments

This is a writing enhanced class; there will be several writing assignments throughout the semester. They will typically involve you writing and submitting a paper that asks you to think about and apply some topic of current study. Due dates and submission instructions will be provided for each assignment. It is important you not fall behind as the course moves rapidly; therefore, individual assignments will lose one letter grade for each day (or part of a day) it is late (turned in past its stated due date and time.)

In-Class Discussion/Participation

Class discussions are designed to facilitate synchronous interactions about the current week's topic of study. Your tasks for the in-class discussion will include reading the assigned material for the upcoming week, thinking about the important ideas presented in the reading, sharing your major take-aways with the class, responding to comments made by your class mates, and introducing new material related to the topic. One of the purposes of class discussion is to expand your knowledge through the collective research and comments on the subject.

Exams

We will have a midterm exam and a final exam. You will have two hours to complete each exam. You will be responsible for securing your own timepiece (clock/watch) and ensuring you do not exceed your time allotment. *Blackboard* will also be timing you on the exam. It will let me know how long you took on the exam. Please make certain you do not go over the time limit. Do not use Blackboard's timing device for your elapsed time as it is set to time several items. It will compute your elapsed time once you submit your exam. More will follow on penalties for exceeding the time limit. The midterm will be at the end of week 8 and the final exam will be at the end of week 15 or during week 16 during our final exam time slot. More will follow on the exam format. Late (make-up) exams will not typically be given; any exception will be at my discretion and requires prior arrangement and documentation (unless emergency has occurred where prior arrangement is impossible).

Presentations

You will be asked to make almost weekly group presentations throughout the semester on a topic of your group's choosing. You'll prepare slides to use during your presentation.

Grading Policy:

Your final semester grade will be determined by the following scale:

90-100	A
80-89	B
70-79	C

60-69	D
0-59	F

Weight of Assignments, Participation, Other Assessments

Quizzes	15%
Participation/Presentations/Assignments	25%
Writing Assignments (approximately 25 pages, total)	25%
Midterm Exam	17%
Final Exam	18%

Note: A request for any grade re-examination must be made within **one week** of the graded item being posted on Blackboard. Grades will be posted in Blackboard's gradebook.

Course Expectations and Resources

Attendance (based on the General Catalog and Faculty Senate SB516: University Policy on Class Attendance):
Students with sanctioned absences will not be penalized for being absent, but will be expected to make up any missed work within a reasonable length of time. The professor reserves the right to deem additional absences as unsanctioned once a student has missed 6.67% of class time for sanctioned absences. A list of sanctioned absences can be found in the General Catalog. Sanctioned absences include serving as a representative of the University at intercollegiate athletic events, professional conferences, academic competitions, field trips for courses, interviews for graduate school or careers, health-related absences (with documentation), and absences covered by Truman's non-discrimination policy. For an absence to be sanctioned, students must notify the professor of scheduled absences during the free add/drop period and as soon as possible for any other absences. Students should also provide the faculty member with written notification of the absence. Arrangements for making up prior work should be made prior to the absence. If the absence is unexpected, the student should arrange to make up the missed work as soon as possible. An appeal of a faculty member's attendance policy can be made through the University Grade Appeals process (see the General Catalog for details). Penalties for missing more than 6.67% of the course in sanctioned absences and penalties for unsanctioned absences will be dealt with on a case-by-case basis; should this occur, please contact me as soon as possible to discuss the possibility of make-up work.

Substantive Interaction:
Truman policy and federal regulations require that students demonstrate that they are academically engaged in the courses they take. You must meet this requirement within the first calendar week of the semester, beginning at 12:00 am on Tuesday, 1/17/23, and ending 11:59 pm Friday, 1/20/23. Failure to do so, or to provide an explanation of an extenuating circumstance by that date and time will result in your removal from the course. Under certain circumstances, removal could impact your scholarship eligibility or financial aid. For the purposes of this class, establishing academic engagement requires, at a minimum, you to sign the "substantive interaction" sign-in sheet in class either 1/17/23 or 1/19/23.

Academic Dishonesty:
The General Catalog states:

> Students are expected to do their own academic work. Any student involved in cheating on a paper, an examination or in any other form of academic dishonesty is subject to disciplinary action, including suspension or expulsion from the class, the student's academic program, or the University.

More information can be found in the General Catalog and the Student Conduct Code Section 8.050.1.

All work submitted (such as quizzes, individual assignments, and exams) must be entirely your own; obviously an assignment requiring group work (such as a group assignment) does not prohibit collaboration with group members.

I take academic honesty **very** seriously. I will not hesitate to take actions in cases of academic dishonesty including assigning your work the grade of F, removing you from the class with an F for the semester, requesting that you be removed from the computer science discipline, and referring the case to the Dean of Science and Mathematics for further sanctions and to be included in your permanent academic record.

All work that you turn in for a grade must be your own. You must not represent any ideas as your own that you got from any source other than your textbook or your instructor. This means if you look at *any* website for *any* help, you must give the exact URL of that website. Failure to do so constitutes plagiarism.

For some assignments in this class, you may be allowed to collaborate with another student in the class. Collaboration is only allowed on specific, identified, assignments. With this exception, you may not include another student's work in your own work under any circumstances. You may not look at another student's work before the assignment in question has been returned, graded. You may not show your work to another student until the assignment in question has been returned, graded. You are encouraged to participate in study groups and to work together on problems which are not assigned, but you may not discuss any portion of any response to a class assignment.

Giving unauthorized help to another student is proscribed. Enabling another student to engage in academic dishonesty is punishable with the same sanctions as those for engaging in academic dishonesty yourself.

Credit Hour Justification:

The minimum investment of time by the average Truman student necessary to achieve the learning goals in this course are not less than one hour (50 minutes) of classroom instruction and a minimum of two hours of out of class student work each week per credit hour awarded or at least the equivalent of three hours (2:50) of laboratory work, internships, practica, and other academic work each week per credit hour awarded. This average time per week for an average student may have weekly variations.

University-Wide Resources and Procedures

Disability Services:
To obtain disability-related academic accommodations students with documented disabilities must contact the course instructor and the Office of Student Access and Disability Services (OSA) as soon as possible. Truman complies with ADA requirements. For additional information, refer to the Office of Student Access and Disability Services website at https://disabilityservices.truman.edu/. You may also contact OSA by phone at (660) 785-4478 or studentaccess@truman.edu.

Emergency Procedures:
In each classroom on campus, there is a poster of emergency procedures explaining best practices in the event of an active shooter/hostile intruder, fire, severe weather, bomb threat, power outage, and medical emergency. This poster is also available as a PDF at this link: http://police.truman.edu/files/2015/12/Emergency-Procedures.pdf .Students should be aware of the classroom environment and note the exits for the room and building. For more detailed information about emergency procedures, please consult the Emergency Guide for Academic Buildings, available at following link: http://police.truman.edu/emergency-procedures/academic-buildings/

This six-minute video provides some basic information on how to react in the event there is an active shooter in your location: http://police.truman.edu/emergency-procedures/active-shooter/active-shooter-preparedness-video/.

Truman students, faculty, and staff can sign up for the TruAlert emergency text messaging service via TruView. TruAlert sends a text message to all enrolled cell phones in the event of an emergency at the University. To register, sign in to TruView and click on the "Truman" tab. Click on the registration link in the lower right of the page under the "Update and View My Personal Information" channel on the "Update Emergency Text Messaging Information" link. During a campus emergency, information will also be posted on the TruAlert website http://trualert.truman.edu/.

Discrimination and Title IX:
Truman State University, in compliance with applicable laws and recognizing its deeper commitment to equity, diversity and inclusion, which enhances accessibility and promotes excellence in all aspects of the Truman Experience, does not discriminate on the basis of age, color, disability, national origin, race, religion, retaliation, sex (including pregnancy), sexual orientation, or protected veteran status in its programs and activities, including employment, admissions, and educational programs and activities. Faculty and staff are considered "mandated reporters" and therefore are required to report potential violations of the University's Anti-Discrimination Policies to the Institutional Compliance Officer.

Title IX prohibits sex harassment, sexual assault, intimate partner violence, stalking and retaliation. Truman State University encourages individuals who believe they may have been impacted by sexual or gender-based discrimination to consult with the Title IX Coordinator who is available to speak in depth about the resources and options. Faculty and staff are considered "mandated reporters" and therefore are required to report potential incidents of sexual misconduct that they become aware of to the Title IX Coordinator.

For more information on discrimination or Title IX, or to file a complaint contact:

Office of Institutional Compliance
Violette Hall, Room 1308
100 E. Normal Ave
Kirksville, MO 63501
Phone: (660) 785-4354
titleix@truman.edu

The institution's complaint procedure can be viewed at: http://titleix.truman.edu/files/2015/08/University-Complaint-Reporting-Resolution-Procedure.pdf and the complaint form is accessible at http://titleix.truman.edu/make-a-report/

FERPA:
Education records are protected by the Family Education Right to Privacy Act (FERPA). As a result, course grades, assignments, advising records, etc. cannot be released to third parties without your permission. There are, however, several exceptions about which you should be aware. For example, education records can be disclosed to employees or offices at Truman who have an "educational need to know". These employees and offices may include your academic advisor, the Institutional Compliance Officer, the Registrar's Office, or Student Affairs depending on the type of information.

Disruptive behavior:
"Behavior that persistently or flagrantly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be asked to leave class pending discussion and resolution of the problem" and may be reported to the Office of Citizenship and Community Standards. *(Quotation from Washington State University).*

No phones nor any other electronic device are permitted in the classroom once class begins. If a pressing need arises where you must be available for an incoming phone call, please contact me about this before class begins.

Please be sure to arrive in the classroom by the time class is scheduled to begin. Not doing so disrupts the learning experience.

Important Contacts:
Various offices that provide services to online students are identified at the One Stop Services page on online.truman.edu. Should you need to consult with administrators that oversee this department and course, here is the contact information for those individuals:

Computer Science Department Chair:
Dr. Alan Garvey
Violette Hall 2166
660-785-7600
agarvey@truman.edu

Dean, School of Science and Mathematics
Dr. Timothy Walston
Magruder Hall 2004
660-785-4248
samdean@truman.edu

Hopefully your experience with this class is positive. When and if you feel a complaint about this or another course is required, however, the procedure for lodging a complaint can be found on the University's Report a Complaint page. **Students are always asked to address their complaint to the professor of the course first when possible, then take their concerns to the Department Chair if the matter cannot be resolved with the faculty member.**

Learner Support:
The University provides a range of both academic and student support services to ensure your success. These offices can advise you on learning strategies, point you toward valuable services, and help you troubleshoot technical problems as they arise.
The Center for Academic Excellence provides advising services for students in their first year for most departments, as well as tutoring services. The Center is located in PML 109 and it may be reached at 660-785-7403.
Counseling Services are available on campus at McKinney Center. Appointments may be scheduled by calling (660) 785-4014. An after-hours crisis line is also available at 660-665-5621.
The IT Service Center has combined the IT Call Center, Help Desk and Telephone Services into a one-stop location to serve you. You will find the following services and more when you stop by PML 203 or call 660-785-4544. You may submit a customer support ticket at this web address.

Important Dates:

January 16	Last day to withdraw from all courses with a 100% refund of tuition and fees*
January 17	The first day of full semester and first-block courses
January 22	The last day to sign up to waitlist
January 23	Last day to add or drop a full-semester or first-block course without advisor, instructor, and department chair approval and without the $50 Add/Drop fee being assessed to the student account
	Last day to sign up to audit a full-semester or first-block course
	Last day to change a full-semester or first-block course to CR/NC (credit/no credit) without the $35 CR/NC fee being assessed to the student account
January 25	Last day to withdraw from all courses with a 90% refund of tuition and fees*

January 27	Last day to drop a first-block course without a W appearing on the student transcript and with the $50 Add/Drop fee being assessed to the student account
February 9	Last day to withdraw from all courses with a 50% refund of tuition and fees*
February 10	Last day to drop a full-semester course without a W appearing on the student transcript and with the $50 Add/Drop fee being assessed to the student account
March 7	Last day to withdraw from all courses with a 25% refund in tuition and fees*
March 8	Last day of first-block courses Last day to change a first-block course to CR/NC (credit/no credit) with the $35 CR/NC fee being assessed to the student account Last day to drop a first-block course with a W appearing on the student transcript and with the $50 Add/Drop fee being assessed to the student account
March 13-17	Midterm Break – NO classes held but University offices are open 8am-5pm
March 22	Last day to sign up to audit a second-block course Last day to add or drop a second-block course without the $50 Add/Drop fee being assessed to the student account Last day to change a second-block course to CR/NC (credit/no credit) without the $35 CR/NC fee being assessed to the student account Tentative first day of registration for Spring 2023. Officially assigned registrations dates will be available on the Registrar's website by mid-February.
May 5	Last day to change a full-semester or second-block course to CR/NC (credit/no credit) with the $35 CR/NC fee being assessed to the student account Last day to drop a full-semester or second-block course with a W appearing on the student transcript and with the $50 Add/Drop fee being assessed to the student account Last day to withdraw from all courses with a 0% refund and W assigned to the student transcript *
May 8	The first day of finals
May 10	Reading Day – No Finals
May 12	Last day of finals

Student Engagement

Response Time and Feedback:

I am available to you, should any question arise, either via email, or in-office visits. Please feel free to contact me with any question, whatsoever; no question is too small. I enjoy interacting with all my students!

I will respond to your emails within 24 hours during weekdays and within 48 hours on the weekend. Assignments will be graded within a week of its due date, where possible.

Learner Interaction:

Various kinds of learner interaction are encouraged. For example, it is importance to attend office hours as soon as any question arises, send questions via email, etc. It is expected that you keep up to date reading the weekly textbook reading assignments, submitting weekly assignments.

Student Survey of Instruction:

You will be asked to complete a survey regarding instruction in this course at the end of the term. The survey is anonymous and the professor will not see the results until after grades have been completed. This feedback is very important and helps the professor continuously improve the course. It also helps

the University make decisions about our overall curriculum. Please be sure to participate in this survey opportunity.

SafeAssign:
Truman State University subscribes to SafeAssign via Blackboard. Papers and essay exams written for this course may be submitted through SafeAssign to ensure Academic Integrity is maintained. Your submissions are shared with the University and Global database of SafeAssign whereby the content of your submissions will be compared to other future submissions.