

**Accounting 5330
Fraud & Forensic Auditing
Spring 2022
5:30-9:30pm on Wed. & 12:30-4:30pm on Sat
Graduate Business Center XXX
Feb 19—Apr 04 2022**



Instructor: Waymond Rodgers Office: Business 245
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Office hours: Tuesday 4:45 to 5:30pm and by appointment.

Required Materials

1. *Biometric & Auditing Issues Addressed in a Throughput Model*. ISBN: 9781617356537 (W. Rodgers) publisher: Information Age Publishing, Inc.
2. *Managing the Business Risk of Fraud: A Practical Guide*. Sponsored by the Institute of Internal Auditors (IIA); The American Institute of Certified Public Accountants (AICPA); Association of Certified Fraud Examiners (ACFE)
3. ICAEW. 2018. *Artificial intelligence and the future of accountancy*.
<https://www.icaew.com/-/media/corporate/files/technical/information-technology/technology/artificial-intelligence-report.ashx?la=en>

Academic Integrity

UTEP prides itself on its standards of academic excellence. In all matters of intellectual pursuit, UTEP faculty and students must strive to achieve based on the quality of the work produced by the individual. In the classroom and in all other academic activities, students are expected to uphold the highest standards of academic integrity. Any form of scholastic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all graduates of UTEP.

Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is 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, any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP) and available in the office of the Dean of Students, may result in sanctions ranging from disciplinary probation, to failing grades on the work in question, to failing grades in the course, to suspension or dismissal.

Students with Disabilities

If you believe that you may have a disability requiring accommodations, contact the Disabled Student Services Office (306 Union East), 747-5148, email: dss@utep.edu.

Attendance

I take attendance and reserve the right to drop any student that misses too many classes. If you know in advance that you will be missing a class, please let me know.

Course Drop Policy

The last day to drop a class with an automatic “W” is March 30th. After this date, students choosing to drop the course will generally receive a grade of “F.” Subsequent to March 30th, a grade of “W” can be assigned only under *exceptional* circumstances and only with the approval of the instructor and academic dean. The student must petition for the “W” in writing and provide the necessary supporting documentation.

Course Objectives

Consider these ideas from the [Association of Certified Fraud Examiners' Report to the Nations on Occupational Fraud and Abuse](#):

- **A typical organization loses 5% of its annual revenue to fraud.**
- **Small organizations are disproportionately victimized by fraud.**
- **The median fraud loss for reported cases was \$160,000; the median length before detection, 18 months.**
- **Occupational fraud is more likely to be detected by a tip than by any other means.**
- **Anti-fraud internal controls help reduce both the cost and duration of occupational fraud schemes.**

Accounting and administrative fraud is a written, intended deception, and such undermines the faith in financial reports and the image of the organization. Accordingly, this course is intended to understand financial deception in order to understand its deterrence and its detection in an internal control system. Further, this course will cover biometric technology in order to enhance internal control systems. Biometric technologies measure and analyze human physiological and behavioral characteristics in order to safeguard tangible and intangible assets as well as to enhance productivity and profitability of an organization.

A framework for understanding this deception begins with the fraud triangle of pressures (incentives), opportunity and rationalization (attitude) of the deceiver often addressed as that person's character. Detection requires an understanding of the fraud triangle. An understanding of attitude begins with the individuals' culture and an individual's ethical reasoning. This suggests that this moral development follows a path similar to that of human social awareness in the psychological growth from a child to that of a parent. The truth and fairness in business transactions, given proper psychological growth, are important values that are to be preserved, promoted, and advocated by the accounting profession. Therefore, to deter fraud, public and private authorities must first create higher forms of awareness than what is currently suggested by law, penalties for non-compliance. The detection of fraud requires evidence-gathering procedures similar to that of auditing.

This course therefore includes the topics of artificial intelligence, fraud auditing, forensic accounting, and the professional and communication responsibilities of the CPA. All of the CPAs professional skills will be under-utilized without the ability to communicate effectively, both in writing and orally. To further develop these communication skills, students will be expected to lead and/or participate in class discussions and to complete case assignments according to the handouts and guidance provided in class. For example, to prove fraud the student must first establish the motive of intent. This requires the student to establish a persuasive theory of events, many independent and confirming sources of evidence for this theory, and evidence to defeat at some level, counter theories.

To fulfill this overall goal, the following learning outcomes will be achieved by demonstration of the capability to 1) Identify financial fraud, for its prevention and detection 2) Create the appropriate fraud report 3) Discuss the motivations for fraud 4) Review the criminal and civil justice system 5) Evaluate fraud risk and evidence to reduce its likelihood

Required texts:

Grading

Students will be evaluated on the following basis:

1.	Midterm exam	300
2.	Final exam (project)	400
3.	Written case assignments	200
4.	Student presentations	<u>100</u>
	Total	1,000

Assignment of grades will be based on the following standard:

<u>Points</u>	<u>Grade</u>
900 and above	A
750 to 899	B
600 to 749	C
599 and below	F

Make-up Exams

Please note that make-up exams are rare and at the instructor's discretion. If you are going to miss an exam, please contact me before the exam (you can call my office phone 747-7732, or send an email, any time of the day or night because if I am not there you can leave a message). If you contact me before the exam and I decide you have an acceptable reason for missing the exam, we can reallocate the points to the other exams. If you don't contact me prior to the exam, I will probably give you a zero on that exam.

Written case assignments

Homework assignments must be prepared using a word processing program or spreadsheet as appropriate. These assignments will be announced, and additional details provided, in the class period at least one week preceding the due date.

Student Presentations

Students will present one case, in teams. Students will be allowed, on a first come, first served basis, to choose which of the assigned cases that they wish to present. Any students who have not selected a case, will be assigned to a group.

Laptops, cell phones, etc.

The use of laptop computers will not be allowed during lectures / discussion time or during exams and quizzes. Laptops will only be permitted while students are working on in-class problems / exercises. The use of cell phones, mp3 players, and other electronic devices will not be permitted during class.

Class Schedule

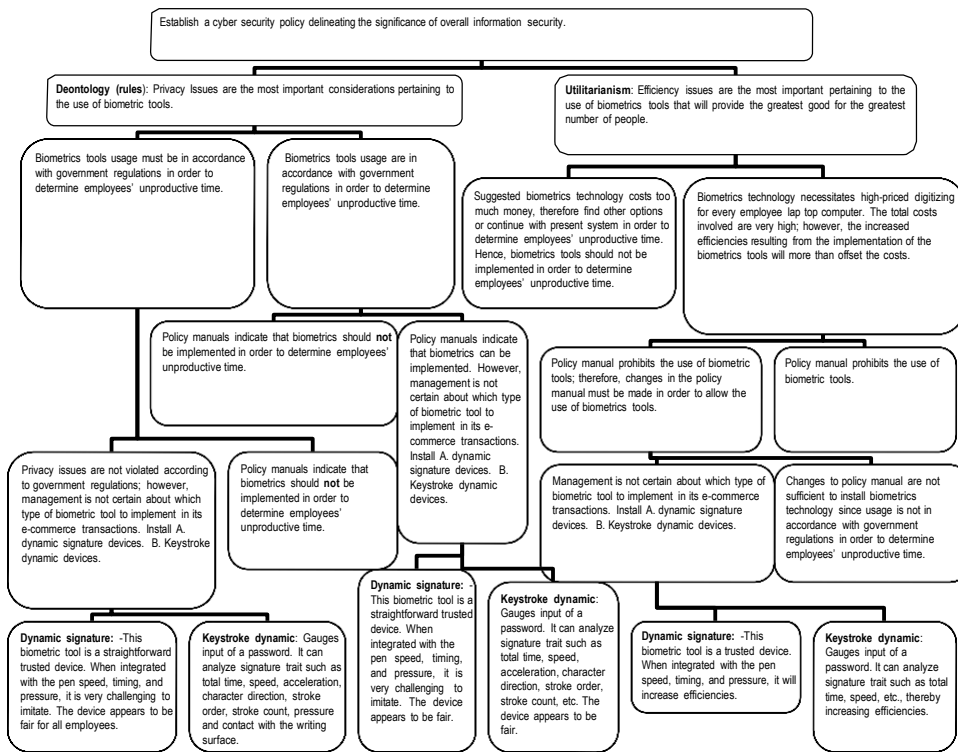
Date	Topic and cases
I. 2/19	Artificial Intelligence ICAEW. 2018. <i>Artificial intelligence and the future of accountancy</i> . https://www.forbes.com/sites/jeanbaptiste/2018/01/22/why-artificial-intelligence-is-the-future-of-accounting-study/#aeeacf5337bc
2/23	Fraud Risk Governance & Assessment Sections 1-2 Read: Managing the Business Risk of Fraud Handouts
2/26	Fraud Risk Prevention & Detection Sections 3-4 Read: Managing the Business Risk of Fraud Handouts
3/2	Fraud Investigation & Corrective Action Section 5 Read: Managing the Business Risk of Fraud Handouts
II. 3/5	Chapter 6: Biometrics Legal and Ethical Issues Cases
3/9	Chapter 7: Auditing Secured Biometric Transactions: Trust Issues
III. 3/12	Chapter 8: Fraud and Internal Control
3/12	Artificial Intelligence Report due
3/16 & 3/19	SPRING BREAK
IV. 3/26	Chapter 9: Auditing Issues in IC Biometrics Systems
3/30	PRESENTATIONS
V. 4/2	PRESENTATIONS
4/6	Final Projects due FINAL EXAMINATION

Version 1 – February 19, 2022 (subject to revision)

CYPER SECURITY-Artificial Intelligence: Auditing Project Exam

For your biometric internal control case project examination, a decision-making approach can be adopted following the *Throughput Model* approach related to an artificial intelligence cyber security internal control system (e.g., patents, trade secrets, customer relation management, etc.) That is, a decision tree can be used to represent ethical decision choices involving visually and explicitly several of the six dominant ethical positions discussed in Rodgers' book. You will begin with a specific problem (see Figure 8.1).

Figure 8.1.



1. Project Description is the first assignment, which is due on **February 23rd** in class. You are to write a one-page description of a biometric internal control system for cyber security. Please make sure that your one-page summary is professional in appearance.

2. Artificial Intelligence Issue Analysis is the second assignment, which is due on **March 2nd** in class. You are to identify intangible asset issues that may affect the organization you selected in the **project description assignment**. The issue can be related to an organization's patents, trade secrets, customer relation management, etc.

You need to write a 5-page long report (double spaced) in which you identify possible artificial intelligence issues, and how a biometric internal control system may arrest discrepancies. You must use a minimum of five sources and must include a bibliography and footnotes.

3. Artificial Intelligence-Cyber Security: Biometric Internal Control Report is the final report that is due on **March 12**. You are to write a paper reflecting an integrated biometric internal control system:

- (A) A description of the organization, its mission, history, function, activities and structure;
- (B) Recommendations that you might have for improving efficiency, sales, performance, culture, etc;

Your recommendations and analysis must be supported by references, data charts, and logical deduction and cited sources. Your report should be at least 12 pages long (double spaced) plus any relevant charts or graphs. Your report must be written in a professional manner and must have professional appearance. You must show evidence of research and have at least five sources cited and included in your reference section.

Contents

1. Title page
2. Table of Contents - listing the major sections of your report, including appendices with page numbers.
3. Executive Summary (1 page) - outline your internship experience and how it relates to your academic learning. This section holds the major findings and implications of the project.
4. Company Profile - include relevant literature, information used in your research or project. This section should not exceed 2 pages.
5. Biometric internal control system - A description of the implemented biometric internal control system in this organization, what type of fraudulent problems will be diminished.
6. General points to consider in writing the report:
 - The overall purpose, objective, aim, goal, etc. of the report.
 - The problem explained sufficiently to comprehend its significance to the company. – Importance of the project to the company, including benefits of understanding recommendations and clear implementation steps.

- Any **recommendations** that the biometric internal control system will have for improving efficiency, sales, performance, culture, etc.
- Include relevant documentation to support implementation, decision alternatives and their merits.

Format

- Typeface – use font of 11 or 12 point type.
- Margins - should be 1" on the top, bottom, left and right margins.
- Spacing - use double spaces between lines for easier reading.
- Page Number - should be clearly marked and on appendices as well as body of report.
- Visual Cues - (e.g. headings, bullets, underlines) should be used consistently throughout the paper for clarity of presentation.
- Charts and Tables - should be clearly labeled on all axes, including names and units, with titles and any secondary sources cited below. Charts and tables should be strong elements of your story that break up the written page, creating interest and variety.
- Citations - data sources should be cited when mentioned. For example, if you state that 60% of all internet users are male, you must cite where the data came from and the date of the report.
- Spell-check! - Avoid typographic and grammatical errors. All your assignment must be prepared in a professional manner and a quality that would be acceptable to an employer or publication.

Dr. Waymond Rodgers is the El Paso Community Professorship in Accounting at UTEP and Chair Professor at the University of Hull Business School, UK. Professor Rodgers is a Franklin Fellow (U.S. State Dept.) and a Ford Foundation Fellow (National Academy of Sciences). His degrees are from Michigan State University, B.A. in Accounting; University of Detroit-Mercy, M.B.A. in Finance; the University of Southern California, Ph.D. in accounting information systems; and an experimental psychology post-doctorate from the University of Michigan. His experiences include working as an auditor with Ernst & Young and PriceWaterhouseCoopers, as well as a commercial loan officer with Union Bank. His primary research areas are auditing, commercial lending decisions, decision modeling, ethics, trust issues, intellectual capital, and knowledge management. Professor Rodgers' has published in *Auditing: A Journal of Practice & Theory*, *the Communications of the ACM*, *Computers in Human Behavior*, *European Accounting Review*, *European Journal of Finance*, *Journal of Business Ethics*, *Journal of Applied Social Psychology*, *Journal of Economic Psychology*, *Journal of the Association of Information Systems*, *Journal of World Business*, *International Journal of Accounting*, *Management Learning*, *Management Science*, and *Organization Studies* among other journals. Finally, he is the recipient of major research grants from the CGA Canada Research Foundation Grant, Citicorp's Foundation Grant, Ford Foundation, Franklin Fellowship, National Institute of Health, National Science Foundation, Department of Defense, and the Navy Personnel Research and Development Center.

SOME USEFUL ACCOUNTING WEB SITES

AccountingWeb (www.accountingweb.com) Over 130 industry profiles.

American Accounting Association (aaahq.org) Voluntary organization for those interested in education and research.

American Institute of Certified Public Accountants (www.aicpa.org/news/index.htm) Recently released material concerning the accounting profession

Association of Certified Fraud Examiners (www.cfenet.com) Education on detecting, investigating, and deterring fraud and white-collar crime.

Committee of Sponsoring Organizations (www.coso.org) Voluntary private sector organization to improve the quality of financial reporting.

Financial Accounting Standards Board (www.fasb.org)

General Accounting Office (www.gao.gov) Investigative arm of Congress, primary products are reports, called "blue books" and testimony before Congress.

Governmental Accounting Standards Board (www.gasb.org) Standards for state and local governmental accounting and financial reporting.

Institute of Internal Auditors (www.theiia.org) Education, research, and technological guidance.

International Federation of Accountants (www.ifac.org) Strives to develop the profession and harmonize its standards worldwide.

The Public Company Accounting Oversight Board (www.pcaobus.org)

Securities and Exchange Commission (www.sec.gov)

International Financial Reporting Standards (IFRS) (www.ifrs.org)

FASB Codification

This resource can be accessed via <http://aaahq.org/ascLogin.cfm> and the use of the following login information. Username - AAA54732; Password - SJxuJbO

Statements on Auditing Standards

These can be accessed at the following UTEP library database: **Checkpoint: WG&L Financial Reporting and Management: AICPA/FASB/GASB/IASB (Thomson Reuters/RIA).**

Information about the CPA exam can be accessed at (www.cpa-exam.org)