

Control & Security of Financial Information Theory and Practice

(ACCT4380-01/ACCT 5378-01/ACCT 7390-01)

Spring 2023 – January 19th to May 11th

Class Location: **Virtual Synchronous Zoom Class**
Class Meeting Date/Time(s): **Thursdays, 6:00 pm to 9:00 pm**
Instructor: **Rob Brant CPA, MBA, CPM**
Office Hours: **Zoom Only – schedule via email**
Contact email address: rebrantj@bauer.uh.edu
Cell Phone: **281-475-7429**
Grading: **Letter**
Prerequisites: **ACCT 4375, ACCT 5375, Graduate Standing**

Course Rationale/Description

Accounting majors will encounter technology immediately upon entering the workforce. Likewise, the companies that they will serve, either as clients or employers, will face the management challenges of ensuring the integrity of its information systems, data and financial information, not to exclude its operational data, systems and information as well. This course intends to provide a broad overview of the importance of information security management, and how today's information security issues and technologies within modern day computer systems and networks impact financial systems, operations and information integrity.

This course incorporates the following MSACCY Program Learning Goals:

- a) oral communication skills through class discussions
- b) written communication skills through assignments and/or examinations
- c) research skills through assigned research projects
- d) ethical awareness through case evaluations
- e) global awareness through class discussions
- f) technological skills through research project
- g) analytical problem-solving skills through case evaluations and research project

Course Objectives

- i. To teach the concepts and interrelationships of security controls that address the risks to information systems and information integrity.
- ii. To gain an understanding of the various risks to maintaining a secure financial computing environment through properly implemented information security controls.

By the end of this course, students will be able to:

- a) Identify management controls and their relationship to information security
- b) Explain operational controls as they relate to information security
- c) Discuss various fundamental technical controls within information security
- d) Describe various information security threats
- e) Describe methods, tools and techniques available to combat information security threats
- f) Define why information security is a core component of effective enterprise risk management
- g) Understand implications of information security to financial, operational and other data as well as to the ongoing operations of business organizations

Course Format and Grading Procedures

This course will consist of lectures, class discussion multiple learning assignments, as well as one major group project/presentation. Attendance and participation during class is a portion of the final grade. For the attendance/participation portion of the course grade, attendance will be taken at every class meeting (based on Zoom attendance report). In addition, students will be expected to come to class prepared to discuss the material from the textbook and other assigned readings.

Course Materials - The required textbook and other materials for the course are:

***Principles of Information Security, 7th Edition* by Michael E. Whitman and Herbert J. Mattord, ISBN: 978-0-357-50643-1.** Textbook is available to rent or purchase on Amazon or from Cengage.

It is likely you will be referred to external research reports, articles (example Wall Street Journal – WSJ) and other materials.

Course Success Tips

- I. Before reading each Module/Chapter in textbook
 - a. Read “Upon Completion of this material, you should be able to:” on first page of Module
 - b. Next at end of Module/Chapter read the following:
 - i. Module Summary
 - ii. Review Questions
 - c. Review PowerPoint slides for the Module Chapter (will be posted in BB in advance)
- II. After reading Module/Chapter
 - a. Re-read Module Summary
 - b. Answer Review Questions
- III. Follow news, example WSJ, for new Cyber events, review and be prepared to discuss in class
- IV. Prepare questions in advance for guest speakers and email to instructor two days before speaker
- V. Send instructor questions in advance of class via email (before 5 pm on day of class)
- VI. Participate in class by sharing your thoughts and ideas
- VII. Ask questions and if you think you know the answer to another student’s question, please share
- VIII. Ask your classmates questions between classes and help your classmates out between class.
Please use Blackboard (BB) Discussion Board as others may learn from questions and answers.

Course Grading:

Letter grade will be a percentage of total points as follows:

Points %	Grade
90-100%	A
87-89%	B+
80-86%	B
77-79%	C+
70-76%	C
67-69%	D+
60-66%	D
Below 60%	F

The determination of the final grade will be from the following allocation % of grades:

- 10% - Class participation/Module exercises
- 30% - Mid-term exam
- 25% - Group project/presentation
- 35% - Cumulative Final exam

ALL quizzes and tests will utilize Blackboard online functionality. You will need to download the current version of Respondus Lockdown Browser app for exams and quizzes. Exams and quizzes will include multiple choice, true/false and fill in the blank questions.

When submitting assignments on Turnitin you cannot use Mac Safari.

Attendance and Punctuality

Regular attendance and punctuality are expected and highly recommended to attain maximum success in your studies and course grade. Plan your time and responsibilities accordingly.

Please note that laptop computers or tablets should be used only for class business during class time. You will lose a lot of benefit from the class lectures and discussion if you are engaged in surfing the internet and other activities such as checking your e-mail, Facebook, business related to other classes, etc. Other devices should be set to do not disturb during class to avoid distractions.

Late arrivals to class and early exits from class are disruptive to other students and instructor. Any consistent pattern of absence or lateness will be considered disruptive and subject to consequences. The Professor will be using Zoom attendance reports which show entry and exit time for students.

An absence does not relieve you of responsibility for knowledge of classroom assignments, or the consequence, of any changes in any course/learning requirements. This includes, but is not limited to, course changes, examinations, assignments, submission of any assignment, etc. It is your sole responsibility to find out what transpired from a classmate or case study group member(s). If you will be absent from class you must notify the Professor by email one hour before class begins.

Students are responsible for knowing and adhering to all university and college dates and deadlines. Such dates and deadlines include those for enrollment (registration), adding and dropping of courses, academic holidays, payment and refunds, and applying for graduation. Visit the following helpful websites for specific dates:

<http://www.uh.edu/academics/catalog/academic-calendar/> and <http://www.uh.edu/emergency>.

Complete Assignments

All assignments for this course will be submitted electronically either through Blackboard Learn or the instructors email unless otherwise instructed. Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.

All discussion assignments must be completed by the assignment due date and time. Late or missing discussion assignments will affect the student's grade.

Late Work Policy

Be sure to pay close attention to deadlines. There will be no makeup assignments, exams, or late work accepted without a serious and compelling reason and instructor approval. Assignments are expected to be turned into Blackboard by the assigned due date. Technology failures will not be accepted as reason for missed assignment due dates. Therefore, do not leave anything to the last minute. Back up files frequently and in various locations so work is not lost. It is the student's responsibility to identify alternative ways to complete or submit an assignment. For example, if the Blackboard Learn system is offline consider emailing the assignment before the due date. Students are required to follow all UH deadlines: <http://www.uh.edu/academics/catalog/academic-calendar/>

Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that they can help you find a solution.

Understand When You May Drop This Course

You are responsible for making arrangements to drop the course if you wish to do so. If you wish to drop the course, complete the online process at my.uh.edu before the deadline. Your instructor cannot drop you for any reason. Pay attention to the deadline and check your course enrollment status on My UH in <https://accessuh.uh.edu/> to make sure your drop has been processed

Computer Technical Issues

Students are encourage to start assignments early to help reduce last minute technical issues. All technical error reports must include screenshot proof attached to an email message.

PC/Windows tutorial: <http://www.wikihow.com/Take-a-Screenshot-in-Microsoft-Windows>

MAC/Apple tutorial: <http://www.wikihow.com/Take-a-Screenshot-in-Mac-OS-X>.

Support Services:

Student assistance for Blackboard can be found by visiting <http://www.uh.edu/blackboard/help/>, calling 713-743-1411, or emailing support@uh.edu. Software or hardware can be purchased at the UH Bookstore or UH CougarByte Discount website (<http://www.cougarbyte.com/>). Additional UH computer labs are available all over campus. Learn more by visiting <http://www.uh.edu/infotech/services/facilities-equipment/comp-labs/>

Technology Requirements

This course uses a learning management system called Blackboard to post assignment details, announcements, and provide collaborative opportunities. This course is best viewed through the use of a full desktop or laptop computer. The use of mobile devices may prevent course materials to not display or work properly. Below are the minimum technology requirements to be successful in this course:

- Supported operating system (e.g. Windows/PC or Apple/MAC computer)
- USB Flash Drive (at least 1 GIG)
- Stable internet connection (Ethernet connection preferred over wireless)
- CougarNet Login credentials <http://accessuh.uh.edu>
- Email account (UH alias or personal)
- Microsoft Office 2007 or later
- Adobe PDF Reader <http://get.adobe.com/reader/>
- Two supported internet browsers (e.g. Mozilla Firefox, Google Chrome)
- Pop-up blockers disabled for trusted sites (e.g UH, Blackboard)
- Cookies enabled for trusted sites (e.g UH, Blackboard)
- Java plug-in <http://www.java.com/en/download/installed.jsp>

Communication and UH email

All online communications for this course will be through UH email or UH Microsoft Teams. Please check your UH email and Teams accounts regularly. To access email, login to your Microsoft 365 account with your Cougarnet credentials. You need to use UH e-mail or Microsoft Teams for private correspondence relating to you with the Professor, rather than a personal email account. You can also use the UH email and/or Teams for questions related to the course material (review questions, case study issues, and general course related questions).

Failure to read your UH e-mail or UH Microsoft Teams does not relieve you of responsibility for knowledge of assignments, or the consequences of any changes in any course/learner requirements.

If you set-up your Cougarnet email to forward to a personal email address, make sure that you have set-up the forwarding correctly. You should ensure that your uh.edu, central.uh.edu and bauer.uh.edu email accounts all forward to your personal email. The Professor will only send **emails** to a UH email account and will not set-up a class email group that includes personal email addresses.

It is your sole responsibility to ensure your computer and UH e-mail account are functioning and current with regards to your operating system and internet security software. When you are confronting any computer related problems contact the UH Bauer IT Helpdesk to correct the problem. If you experience a computer or internet issue during class time, email the Professor so that he is award when class ends. Be prepared for computer issues by having Teams, Zoom and other apps installed on your phone, tablet or backup PC so that you can avoid missing class.

Academic Integrity

Each student in this course is expected to abide by the University of Houston Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work or the work of the current group for group-related projects.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from other students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an email, an email attachment file, a thumb drive, a shared on-line folder or a hard copy.

Should copying of others' work occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action.

During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam and may lead to failure of the course and University disciplinary action.

Counseling and Psychological Services

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the "Let's Talk" program, which is a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

COVID-19 Information

Students are encouraged to visit the University's [COVID-19](#) website for important information including diagnosis and symptom protocols, testing, vaccine information, and post-exposure guidance. Please check the website throughout the semester for updates. Consult the (select: [Undergraduate Excused Absence Policy](#) or [Graduate Excused Absence Policy](#)) for information regarding excused absences due to medical reasons.

Vaccinations

Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent [vaccine information](#), consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

Reasonable Academic Adjustments/Auxiliary Aids

The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact [the Justin Dart Jr. Student Accessibility Center](#) (formerly the Justin Dart, Jr. Center for Students with DisABILITIES).

Excused Absence Policy

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston [Undergraduate Excused Absence Policy](#) and [Graduate Excused Absence Policy](#) for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to [military service](#), [religious holy days](#), [pregnancy and related conditions](#), and [disability](#).

Online Student Etiquette:

This course will host synchronous online meetings. During these meetings consider the following:

- **Keep chats on topic.** Avoid inappropriate conversations that may distract others from the course topic or objective.
- **Avoid strong/loud language.** Be polite. Language can easily be misinterpreted in written communication. Before sending an email or chat message make sure it clearly conveys the intended feeling.
- **Use emoticons to express feelings.** Nonverbal cues can reinforce the feeling of a message. Use sparingly. :-)
- **Respect privacy of peers.** Do not post someone's personal information online without their expressed permission.
- **Use appropriate dress code on camera.** During a video conference dress as if attending a face-to-face class. Avoid offensive clothing.
- **Be mindful of background noise and scene/location.** Take advantage of quiet areas to avoid distractions to fellow classmates. Avoid offensive décor or noise.
- **Be helpful.** Assist fellow classmates in understanding course materials.

Syllabus Changes

Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Modifications to the syllabus may also need to occur due to guest speaker timing changes, progression of course topics during class, and external events that impact class timing. Notice of such changes will be announced as quickly as possible through UH email and the updated syllabus will be post on BB.

Recording of Class

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the [Justin Dart, Jr. Student Accessibility Center](#). If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with *anyone* without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Resources for Online Learning

The University of Houston is committed to student success, and provides information to optimize the online learning experience through our [Power-On](#) website. Please visit this website for a comprehensive set of resources, tools, and tips including: obtaining access to the internet, AccessUH, and Blackboard; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact UHOnline@uh.edu.

Webcams

Access to a webcam is required for students participating remotely in this course. Webcams must be turned on (*state when webcams are required to be on and the academic basis for requiring them to be on*). (Example: *Webcams must be turned on during exams to ensure the academic integrity of exam administration.*)

Honor Code Statement

Students may be asked to sign an honor code statement as part of their submission of any graded work including but not limited to projects, quizzes, and exams: " *I understand and agree to abide by the provisions in the (select: [University of Houston Undergraduate Academic Honesty Policy](#), [University of Houston Graduate Academic Honesty Policy](#)). I understand that academic honesty is taken very seriously and, in the cases of violations, penalties may include suspension or expulsion from the University of Houston.*"

Bauer MSACCY Classroom Professionalism Policy

The highest professional standards are expected of all members of the Bauer MSACCY Program. Faculty are expected to be professional and prepared to deliver value for every class session. Students are expected to be **professional** in all respects. Classroom activities are expected to be conducted in a professional manner similar to an important business meeting or business project activity. The Bauer MSACCY classroom experience is enhanced when the below are being followed. These concepts will serve as the **BAUER MSACCY Classroom Professionalism Policy**.

- **Students attend all classes.** The benefit of the teaching and intellectual exchange takes place only if the student attends all classes and fully participates in the classroom experience.
- **Students are fully prepared for each class.** Much of the learning takes place during classroom discussions. When students are not prepared they cannot contribute to the overall learning process for either themselves or their peers.
- **All Electronic Devices (laptops, notebook computers, tablets, iPads, etc.) are closed, put away and not being used. This also includes any use of smart watches for messaging, apps or other uses.** When students are surfing the web, responding to e-mail, messaging other students, and otherwise not devoting their full attention to the topic at hand they are doing

themselves and their peers a disservice. These activities are not professional or conducive to the classroom learning process. When there are PowerPoint slides for a course topic, they will be available on Blackboard or elsewhere before class. It is recommended that you print out the slides (4 or 6 to a page) before each class and write your notes in the margins or space provided as the material is covered in class. **There are often situations where learning is enhanced by the use of laptops and tablets in class. Faculty will let you know when it is appropriate to use them.**

- **Phones and wireless devices are turned off.** These devices are very distracting. Not only is phone usage not professional, it cuts off the flow of discussion and learning when someone engages in these activities. **When a true need to communicate with someone outside of class exists (e.g., for some medical need, etc.) please inform the professor prior to class and accommodations will be made.**

Professionalism will be considered as part of the overall course grade. Failure to follow this Policy is grounds for the student's course grade to be negatively impacted at the discretion of the Professor.

Helpful Information

Coogs Care: <https://www.uh.edu/dsaes/coogscare/>

Student Health Center: <https://www.uh.edu/healthcenter/>

COURSE SCHEDULE

Subject to content changes depending on speaker schedules/conflicts and instructor prerogative based upon cadence of the course over the first three Chapters/Modules. Students should read the complete Module/Chapter, unless Instructor communicates only specific sections of a Module/Chapter should be read. Students should also read other assigned reading and review the class PowerPoint slides (see Course Success Tips on pg. 2). All updates to this schedule will be posted on Blackboard and it is the student's responsibility to review changes and determine the impact on the student's schedule.

<i>Dates/Topics</i>	<i>Readings for Discussion</i>	<i>Assignments/Homework</i>
Jan 19 - Week 1 Introduction and Overview of Course Introduction to Information Security	See Syllabus and PowerPoint in BB Module 1	Selected Module readings, Syllabus and slides
Jan 26 - Week 2 Organizational Business Need for Information Security	Module 2	Selected Module readings and slides
Feb 2 - Week 3 Information Security Management	Module 3 NIST Cybersecurity Framework reading	Selected Module readings and slides See Blackboard for all readings
Feb 9 - Week 4 Risk Management	Module 4	Selected Module readings and slides
Feb 16 - Week 5 Incident Response and Contingency Planning	Module 5	Selected Module readings and slides Review Group Case study rubric and info sheet (see BB) Prepare Speaker questions
Feb 23 - Week 6 Subject Matter Guest Speaker (Incident Response) Review/Discuss Group Project Review Mid-Term Study Sheet	Review of material likely to be on mid-term exam!! Review Modules 1 to 5	Groups assigned for Project/paper/presentation (See Group Case Study instruction sheet on BB) Study for Mid-term exam - See Mid-Term Study Sheet and Instructions on BB

<p>Mar 2- Week 7 Mid-Term Exam – 90 Minutes</p> <p>Legal, Ethical and Professional Issues in Information Security</p>	<p>Online Exam administered (see information on BB!!)</p> <p>Module 6</p>	<p>Install current version of Respondus Lockdown Browser for exam in advance</p> <p>Selected Module readings and slides</p>
<p>Mar 9 - Week 8 Debrief Mid-term exam</p> <p>Security and Personnel</p>	<p>Module 7</p>	<p>Selected Module readings and slides</p> <p>WORK ON GROUP PROJECT</p>
<p>Spring Break: Mar 16</p>	<p>Enjoy your Break!!!</p>	
<p>Mar 23 - Week 9</p> <p>Security Technology: Access Controls, Firewalls, and VPN</p>	<p>Module 8</p>	<p>Selected Module readings and slides</p> <p>WORK ON GROUP PROJECT</p>
<p>Mar 30 - Week 10</p> <p>Security Technology: Intrusion Detection and Prevention Systems and Other Security Tools</p> <p>Answer Group Project questions</p>	<p>Module 9</p>	<p>Prepare speaker question in advance for next class</p> <p>WORK ON GROUP PROJECT</p>
<p>Apr 6 - Week 11</p> <p>Subject Matter Guest Speaker (Intrusion Detection and Prevention Systems)</p> <p>Implementing Information Security</p>	<p>Module 11</p>	<p>Selected Module readings and slides</p> <p>WORK ON GROUP PAPER</p>
<p>Apr 13 - Week 12</p> <p>Information System Maintenance</p> <p>Group Status Reports</p> <p>Review important points for Final</p>	<p>Module 12</p> <p>Review material likely to be on final exam!!</p>	<p>GROUP PROJECT PAPER due on Apr 13 by 6pm! Only Group Leader submit on Turnitin (do not use Apple Safari).</p>
<p>Apr 20 - Week 13</p> <p>Group Presentations Night!!</p>		<p>Group Leader submit Group Project PowerPoint Slides by Apr 20 6pm on Turnitin (do not use Apple Safari).</p>
<p>Apr 27 - Week 14</p> <p>Group Presentations Night!!</p>		<p>Study for Final Exam on Modules 6, 7, 8, 9, 11 & 12 plus Cumulative and guest lecturer points</p>
<p>May 4 - Final Exam (Cumulative) 6:00 to 9:00 pm</p>	<p>Online Exam in BB – requires Current Respondus Lockdown Browser</p>	<p>Have a GREAT SUMMER and THANK YOU!!!</p>