Texas A&M University-Central Texas

College of Business Administration

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CIS 5370 – 115, CRN 10406 - Foundations of Information Security / HLS 5370 – 125, CRN 10648 - Information Security / CIS 5370 – 135, CRN 10537 - Foundations of Information Security

Spring 2023
Texas A&M University-Central Texas

COURSE DATES, MODALITY, AND LOCATION

Course dates: Jan 17, 2023 - Mar 10, 2023

Course Access

CIS 5370.115 and HLS 5370.125 sections are 100% online course and use the A&M-Central Texas Canvas Learning Management System [https://tamuct.instructure.com/]. The course syllabus, schedule, supplemental readings, class announcements, Power point slides, learning modules, and other course-related documents will be posted on canvas. Each student is responsible for the posted material and should check canvas at least weekly for updates. The course outline in this syllabus shows the basic schedule for the semester. New weekly assignment instructions will be posted EACH Tuesday morning throughout the semester, and assignments and discussions will have an associated Monday midnight deadline.

CIS 5375.135 section is taught in a "blended" or "web enhanced" format with online content and assignments provided in between class meeting times using the A&M-Central Texas Canvas Learning Management System [https://tamuct.instructure.com]. The course syllabus, schedule, supplemental readings, class announcements, power point slides, learning modules and other course related documents will be posted in canvas. Each student is responsible for the posted material, and should check canvas at least weekly for updates. Campus class meetings for this semester are 2:00 PM - 4:45 PM in Founder's Hall 413 on 01/18, 01/25, 02/01, 02/08, 02/15, 02/22, 03/01 & 03/08

INSTRUCTOR AND CONTACT INFORMATION

Instructor: Dr. Anitha Chennamaneni

Office: Texas A&M University Central Texas FH 323

Phone: (254) 519-5463

TAMUCT Email: anitha.chennamaneni@tamuct.edu
Preferred Email: Course Canvas Site, Inbox tool.

Alternate (if Canvas is down): anitha.chennamaneni@tamuct.edu

Office Hours: Wednesday 11 am – 1 pm

Thursday 11 am - 1 pm

Other days and times by appointment only

Student-instructor interaction: Please send all course related email correspondence through Canvas Inbox Tool. Please use TAMUCT email only when Canvas is not available. I check email several times a day during the week and at least once during the weekends. I will respond within 24 hours and within 48 hours on Saturday through Sunday. Please do not hesitate to stop by my office during the scheduled office hours or contact me via phone / Canvas Conversations Tool or *TAMUCT email*, if there are any personal problems or challenges that are hindering your regular progress in the course.

Emergency Warning System for Texas A&M University-Central Texas

SAFEZONE. SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts.

Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app.

You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the <u>SafeZone</u> website [www.safezoneapp.com].

To register SafeZone on your phone, please follow these 3 easy steps:

- 1. Download the SafeZone App from your phone store using the link below:
 - iPhone/iPad: [https://apps.apple.com/app/safezone/id533054756]
 - Android Phone / Tablet
 [https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp]
- 2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
- 3. Complete your profile and accept the terms of service

For updates on COVID information, please monitor the University <u>website</u> [https://www.tamuct.edu/covid19/]

COURSE INFORMATION

Course Overview and Description

This course explores technical and managerial aspects of information security and assurance. Topics include Security and Risk Management, Business Assets Security, Communication and Network Security, Database Security, Operating systems security, Identity and Access Control Management, Physical, technical and operational security measures, Security policy and management.

Course Objectives

To ensure students have an understanding of the many areas of Information/Cyber Security.

Student Learning Outcomes:

- Explain information systems security and its effect on people and businesses.
- Describe the impact of malware on an organization's systems and how to prevent and detect attacks.
- Explain risk management techniques and apply appropriate controls.
- Describe networking principles and security mechanisms.
- Evaluate network, database and operating systems security.
- Apply user authentication and access controls
- Apply cryptography in maintaining information security.
- Explain the role of security operations, security policies, security audits, testing, and monitoring in an IT infrastructure.
- Develop a comprehensive security model
- Implement an Information Security Policy

Required Textbook

Required: Kim, David, and Michael G. Solomon. Fundamentals of Information Systems Security, Fourth Edition, Burlington, MA: Jones & Bartlett, 2023 (ISBN 978-1284220735)

To gain access to the labs, you will need to purchase the access code either with the print book bundle, eBook bundle or standalone. Here are the purchase options below:

Print +Lab - https://www.jblearning.com/catalog/productdetails/9781284251333

eBook + Lab - https://www.jblearning.com/catalog/productdetails/9781284244571 (Use coupon code TXAMCYBR25 to receive 25% off)

Lab (no book included) - https://www.jblearning.com/catalog/productdetails/9781284244564

Optional Textbook: CISSP (ISC)2 Certified Information Systems Security Professional, 9th Ed.

James Michael Stewart, Mike Chapple

ISBN: 978-1119786238

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

• **Supplementary Material:** The course textbook will be supplemented with other materials including research paper readings, case studies, presentations, industry articles, videos, etc.

• On-Line References TBA

Current publications - The campus library contains numerous books and periodicals relating to Computer Science. The student should take advantage of this resource by visiting the library.

COURSE REQUIREMENTS

Reading Assignments: All assigned chapters will be used as basis for class /canvas discussions. Students are expected to study the assigned readings before each class session.

Class Participation: Students are expected to post thoughtful and comprehensive responses to the discussion questions in canvas as well as respond on a timely basis to a minimum of two classmates' postings. Failure to do so will result in a point loss. Post your initial response to the discussion topic before 11.59 pm Wednesday and respond to other students' postings later in the week. Please do not be late in your postings as other students will be waiting on your post to respond to later in the week. Discussion topics, due dates, and the grading rubric specific to discussion evaluations are available in canvas and should be used as a guide when participating in discussions. It is each student's responsibility to accumulate notes from assigned readings, supporting videos, and other sources and reference them in the postings to support one's arguments, add insight to classmates' postings, and/or challenge classmates' postings. Sources when referenced must be cited in the postings. Follow-up posts need to be meaningful and should promote in-depth discussions on a topic at a higher level of thinking. A mere cursory response such as "I agree" "I disagree" or a "good post" without any substantive content to back up would result in a point loss. In all postings, students are expected to observe proper rules of netiquette in both oral and written communications and conduct professionally. submissions are not allowed for discussion forums. The maximum total for canvas discussion posts is 50 points.

Examinations - There will be two major exams. Each will be worth 250 points. Makeup exams will be given ONLY when arrangements have been made PRIOR to the class meeting.

Lab Assignments - There will be 7 lab assignments. Labs are designed to provide hands on training for mastering key course concepts. Instructions for lab assignments are available in

canvas. All assignment submissions require a zipped copy of your assignment that allows me to unzip, open, and view the contents or other documents associated with the assignment. Please include your name and assignment identification in the zip file name (YourName_ChX.zip). You should also note that archives such as .rar, .gz, .tar, .7z, (among others) are not zip archives. Assignment submissions failing to provide the specified naming, identification, and format will not be accepted for grading. All assignments are due on the specified due date and time. Assignments turned in after due dates are considered late. 5 points will be deducted for each day the assignment is late. Special circumstances need to be discussed with the instructor ahead of time when possible

Research Paper: Each student is required to write a major paper on a topic from this course that is of interest to you. Topics must be approved by the professor by the end of third week. This paper must be 10 to 12 pages in length (type written and double-spaced, 12 point font with 1 inch margins) excluding bibliography, table of contents, graphics, tabular or illustrative material. References should include current sources and must conform to APA style. The paper is expected to meet graduate-level standards and be suitable for publication in a professional journal. You should research at least 12 external references such as academic journal /conference papers, trade journals, short videos and relevant websites for your paper. At least 8 of these references must be from peer reviewed journals or conferences only. Use of Wikipedia or the class text as a reference will cause a serious loss of points. References must include the published journal / conference name and information, NOT a URL where paper was found. Research paper is worth 100 points. A grading rubric for research paper is available in canvas and should be used as a guide when completing the paper. Late submissions are not allowed for research paper.

Grading Criteria Rubric and Conversion

Assignment	Points	Percent	My Grade
Exam 1	250 points	25%	
Exam 2	250 points	25%	
Canvas Discussions	50 points	5%	
Lab Assignments	350 points	35%	
Research Paper	100 points	10%	
Total	1000 points	100%	

89.5-100%	895-1000 points	Α
79.5-89.4%	795-894 points	В
69.5-79.4%	695-794 points	С
59.5-69.4%	595-694 points	D
0-59.4%	0-594 points	F

Posting of Grades:

All student grades will be posted in the Canvas Grade book and students should monitor their grading status through this tool. Grades for weekly assignments, discussions, quizzes and exams will be posted within 7 days following the due date.

CALENDAR

Complete Course Outline

The instructor reserves the right to make changes to this syllabus. Any changes that effect grades or grading will be made in writing.

Week	Week of:	Topic	Assignments Due
1	01/17/2023	Course welcome, introduction, and	Syllabus Acknowledgement Due
		expectations	Post to Introductory Meet & Greet Discussion forum
		Assigned readings	
		and selected topics from chapters 1 and 2	Discussion Post1 due
2	01/23/2023	Assigned readings and selected topics from chapters 3 and 4	Lab Assignments 1 & 2 due on 01/30/2023
3	01/30/2023	Assigned readings and selected topics from chapters 5 and 6	Lab Assignment 3 due on 02/06/2023
4	02/06/2023	Assigned readings and selected topics from chapters 7 and 8	Lab Assignment 4 due on 02/13/2023 Exam 1 Due

5	02/13/2023	Assigned readings and selected topics from chapters 9 and 10	Lab Assignment 5 & 6 due on 02/20/2023
6	02/20/2023	Assigned readings and selected topics from chapters 11 and 12.	Lab Assignment 7 due on 02/27/2023 Discussion Post 2 due
7	02/27/2023	Assigned readings and selected topics from chapters 13 and 14	Research Paper due on 03/06/2023
8	03/06/2023		Final Exam

Important University Dates:

https://www.tamuct.edu/registrar/academic-calendar.html

TECHNOLOGY REQUIREMENTS AND SUPPORT

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.

Logon to A&M-Central Texas Canvas [https://tamuct.instructure.com/] or access Canvas through the TAMUCT Online link in myCT [https://tamuct.onecampus.com/]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu
Phone: (254) 519-5466

Web Chat: [http://hdc.tamu.edu]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our <u>Access & Inclusion</u> Canvas page (log-in required) [https://tamuct.instructure.com/courses/717]

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more <u>information regarding the student conduct process</u>, [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may <u>submit a referral</u>, [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Drop Policy

If you discover that you need to drop this class, you must complete the <u>Drop Request</u> Dynamic Form through Warrior Web.

[https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdpId=https://eis-prod.ec.tamuct.edu:443/samlsso&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https %3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant, experiencing pregnancy-related conditions, and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit Student Affairs [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these requirements and guidelines online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing WarriorCenter@tamuct.edu.

To schedule tutoring sessions and view tutor availability, please visit <u>Tutor Matching</u>
<u>Services</u> [https://tutormatchingservice.com/TAMUCT] or visit the Tutoring Center in 111
Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Library & Archives

The University Library & Archives provides many services in support of research across campus and at a distance. We offer over 350 electronic databases containing approximately 631,525 eBooks and 75,149 journals, in addition to the 97,443 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. Schedule an appointment here [https://tamuct.libcal.com/appointments]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our <u>Library website</u> [https://tamuct.libguides.com/index]

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University—Central Texas (A&M—Central Texas) is a free service open to all A&M—Central Texas students. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via WCOnline [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

OTHER POLICY STATEMENTS

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the <u>Title IX webpage</u> [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the <u>referral</u> online

[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the <u>Behavioral Intervention Team</u> website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

Instructor Policies

The instructor reserves the right to make changes to this syllabus during the course of the semester for the benefit of the students. Any changes that effect grades or grading will be made in writing.

Instructor reserves the right to supplement the material presented in the text with additional material including handouts, oral presentations, industry articles, videos, research paper readings, case studies, power point presentations etc. for the benefit of the students

All work is submitted through Canvas and due on the specified due date/time. Work turned in after due date is considered <u>late</u>. 5 points will be deducted for each day the assignment is late. Special circumstances need to be discussed with me ahead of time when possible. Missed assignments, projects, and examinations will receive a grade of zero. Any work not submitted in the proper format is rejected and receives no credit.

Incidents of violations of academic integrity, such as plagiarism or turning in the work of others as your own work, will result in a cap on the maximum number of points that can be earned in this class. The cap will be 600 points resulting in a best case grade of "D" for the class. Students whose assignment contains plagiarized information i.e., failing to cite and reference the information source in properly applying APA formatting to citations and references, copying and /or using content from unauthorized sources etc. will receive a 0 for the assignment and possibly a referral to Student Affairs.

At all times in the class, please observe proper rules of netiquette in your oral and written communication and conduct yourself in a professional manner

The Operation of the Online Course and Being an Online Student. Online learning requires students to be very self-disciplined and demands regular and consistent participation in the class. Please read the document posted on Canvas on what makes a successful online student. Be sure you understand and are prepared to comply with all required class assignments and deadlines. If you are not able to comply, for any reason, you must contact me immediately.

Copyright Notice.

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas'

Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.