

ACU COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF INFORMATION TECHNOLOGY & COMPUTING
COURSE SYLLABUS
IT 472 ADVANCED SECURITY
SPRING 2016



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Classroom: MBB (COBA) 314, MWF 9am

ACU Mission: The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world.

College of Business Administration Mission: The Mission of the College of Business Administration is to glorify God by creating a distinctively Christian environment in which excellent teaching, combined with scholarship, promotes the intellectual, personal and spiritual growth of business students, and educates them for Christian service and leadership throughout the world.

School of IT and Computing Mission: Our mission is to educate students in technology-related fields for Christian service and leadership throughout the world. We provide the highest quality education while encouraging students to live out their faith in the ever-changing, high-tech arena.

Course Description: IT 472 Advanced Security (3-0-3), spring, on demand. Covers the domains of the Information Systems Security Professional common body of knowledge. Domains range from forensics and legal topics to physical and operations security to programming, cryptography and network security. Projects will reinforce and integrate the domains.

Contribution of Course to the Development of Communication Skills: This course will provide opportunities to develop communication skills required in report writing students security projects. Project briefings will provide experience at technical presentation.

Contribution of Course to Christian Service and Leadership: Many of the concepts and details of this course are difficult and require time and dedication to master. Yet without competency in them the computer professional will not be able to present an image of a qualified professional. Colossians 3:23,24 (NIV) *Whatever you do, work at it with all your heart, as working for the Lord, not for men, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving.* Generally, it is difficult to make the Good News about Jesus Christ seem desirable to unbelievers, unless those carrying that news are respected as authorities in other areas first. It doesn't always have to be in a professional area, but it does help when trying to show colleagues Christ.

Audience: This course is intended for IT majors wanting advanced expertise in the various domains of security and for CS majors who want hands-on experience with cryptography and software development security. Student-selected projects will satisfy diverse interests in security.

Prerequisites: IT 310 Intro to Computer and Information Security or CS 230 Object-Oriented Programming.

Course Format: In addition to covering the listed text, students will complete application projects and exams will both assess student knowledge and serve as learning tools.

Goals for Student Competency:

	Competency	Measurement Instrument	Measurement Standard
1	Versatile in terms and concepts of cyber security	Written tests and project reports.	90% - A, 80% - B, etc. The participation reports will be used in system configuration and will be self-evaluating and self-correcting.
2	Demonstrated ability to apply security domains to security scenarios, case studies and/or computer simulations	Project assignments	90% - A, 80% - B, etc., based on competency level or achievement level computer simulation or exercise (varies by specific project)
3	Critical thinking and problem solving competency	Project assignments	Grades for this competency will be reflected in other areas of the course. Rubric will be used for student improvement.

Grading System: Final grades will be determined using the 1000 point system detailed in the table below.

Grades will be distributed as 900-1000 pts. = A, 800-899 pts. = B, 700-799 pts. = C, 600-699 pts. = D, 000-599 pts. = F.

Domain Quizzes (10@35)	350	Pretest	25
Projects (3@150)	450	Participation	50
Final Exam	125		
			Total 1000

Course Details and Policies:Course Materials, Communication, and Canvas

The primary means of communication will be classroom discourse and discussion followed closely by email and the online course management system found at: <http://acu.edu/canvas>

As far as possible all handouts, assignments, assignment submissions, grades and feedback will be accomplished via this site. Student email will be channeled through this site unless a message is student-initiated and sent directly to the professor's email account. When a working computer program or simulation must be physically presented by the student, the student should be prepared to demonstrate the working assignment either on a school computer (or equipment) or the student's laptop in the professor's office or other common area.

Participation

Participation amounts to 5 percent of the semester grade and is calculated by attendance, and timeliness of homework and project component submissions.

Homework, Projects, and Quizzes

Credit for homework and quizzes is given only when they are submitted on time, whether the student has an excused absence or not. Students will complete three two-week projects. The first project is the same for all students. Students will select their two remaining projects from a list that includes a wide range of topics.

Attendance and Tardiness

Students are expected to be present, on time, and prepared for class. For school approved absences, exams or projects may be taken/submitted **only before** leaving on the the school approved function. Advance notification of the absence must be given to the professor one week before the absence. The above-stated Homework and Quizzes policy applies to school approved absences only.

For those who like details: Tardy is defined as entering or not being prepared for class (finding a seat, pulling out books from backpacks, etc.) after the professor has started the formal class, or making the

professor have to wait to start class because a student is not ready. A student more than 15 minutes tardy is considered absent. Three tardies amount to an absence, and after three weeks worth of absences a student will be dropped with a grade of WF. It will not take this many absences, however, to miss so much valuable learning that passing will be difficult.

Disruptive and Disrespectful Behavior

Behavior that is disruptive or disrespectful behavior will not be tolerated. This includes sleeping, habitual leaving and re-entering the classroom once the session has started, inappropriate use of electronic devices, inappropriate talking that is off-topic, or other similar activities. Those disrupting the class will be asked to leave and counted absent.

Academic Dishonesty and Ethics

1. The teacher and students will adhere to the college and university policies in regards to cheating, copying, and misuse of computer resources. Students caught collaborating on individual work or using additional resources on take-home exams, may receive an F for the course. It is not the professor's burden to prove malicious cheating or copying. Student work may be checked using plagiarism detection software. Collaboration will be assumed when, in the perception of the professor, assignments look too similar or when visual or forensic evidence suggests unacceptable collaboration. Within-team collaboration is expected on team projects with the provision that all team members are equally contributing. Refer to these sites for copies of the formal policies:

www.acu.edu/campusoffices/campuslife/acad_integrity.html

www.acu.edu/academics/coba/cobahonorcode.html

2. All are encouraged to follow the Golden Rule, "treat others as you would want to be treated."

3. It is to the student's benefit to put forth his/her best effort. The tasks that seem hard or impossible initially become the very milestones that give confidence and competence later. Full effort is always rewarded with better accomplishments in the end.

Special Accommodations

Abilene Christian University is committed to providing a learning atmosphere which reasonably accommodates qualified persons with disabilities. If you feel you have a disability which may impair your capacity to successfully complete this course, please contact the Director of Disability Services (674-2667) in Alpha Academic Services within the first two weeks of the course. Student Disability Services assists students with disabilities in obtaining appropriate academic accommodations.

Request For Feedback

This course is under continuous revision. The professor welcomes suggestions for improvement. The sooner in the semester suggestions are made, the sooner improvements can be implemented. Please don't wait until the last day of class or the end-of-course critiques to make comments.

Text and Supplements:

Required Text

Harris, Shon (2013). CISSP All-in-One Exam Guide/6e, ISBN-13: 978-0071781749

Additional References: Internet resources will be provided as semester progresses.

Administrative Comments:

To drop a course, you must complete the required paperwork with your advisor. See the ACU calendar for important dates: http://www.acu.edu/campusoffices/registrar/academic_calendar.html

Summary of Daily Assignments: Class agenda, exam dates, assignment and project due dates will be determined based on class composition and student interests. A tentative schedule is shown on the following page. Any significant changes to this schedule (such as exam dates and substantial content) will be communicated at least one week before the new event date.

IT 472 Tentative Course Schedule

#	Activity
Week 1	Pretest, Course Orientation, CISSP Domain 1 Information Security and Risk Management Domain
Week 2	CISSP Domain 2 (Friday out-of-class-quiz) Security Architecture and Design Domain
Week 3	CISSP Domain 3 (Friday out-of-class-quiz) Telecommunications and Network Security Domain
Week 4	CISSP Domain 4 (Friday out-of-class-quiz) Operations Security Domain
Week 5	CISSP Domain 5 (Friday out-of-class-quiz) Cryptography Domain
Week 6	CISSP Domain 6 (Friday out-of-class-quiz) Physical Security Domain
Week 7	CISSP Domain 7 (Friday out-of-class-quiz) Software Development Security Domain
Week 8	CISSP Domain 8 (Friday out-of-class-quiz) Access Control Domain
Week 9	CISSP Domain 9 (Friday out-of-class-quiz) Business Continuity and Disaster Recovery Planning
Week 10	CISSP Domain 10 (Friday out-of-class-quiz) Legal, Regulations, Compliance, and Investigation
Week 11	Project 1 (Student-selects project from list)
Week 12	Project 1 (Due Friday by beginning of class)
Week 13	Project 2 (Student-selects project from list)
Week 14	Project 2 (Due Friday by beginning of class)
Week 15	Project 3 (Student-selects project from list)
Week 16	Project 3 Due on day of final