

Department of Computer Science

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COURSE SYLLABUS DFSC 5317 Digital Security

Spring 2018

Location:

Online

Class meeting timesInstructorOfficeE-mailPhone:Thursdays (Online)Dr. Cihan VarolAB1 216Fcvarol@shsu.edu936-294-3930

Office hours:

Wednesdays 9:00 – 11:00 and Thursdays 18:00 – 20:00 (online)

Course description:

This course introduces the student to basic security needs. The course will include, but not be limited to examination of individual vs. government privacy issues, federal encryption standards, the different layers of security currently available, cryptography, and strategies for evaluation and selection of security methods. Credit 3. *Prerequisite: None.*

Course Outline:

- (1/18-1/19): **syllabus** and prepare hardware (a desktop or notebook computer) and operating systems (Windows XP/7/8, and Linux)
- (1/19-1/25): **computer** (hardware, operating systems, and applications) **security**
- (1/25-2/1): complete <u>Assignment 1</u>
- (2/1-2/8): **network** (wired networks, e.g. LANs, and wireless networks, e.g. Bluetooth and RFID) **security**
- (2/8-2/15): continued
- (2/15-2/22): complete <u>Assignment 2</u>
- (2/22-3/1): **cloud security** (Architecture, risks, controls, and legal aspects)
- (3/1-3/8): complete Assignment 3
- (3/8-3/22): **mobile security** (mobile phones and tablets)
- (3/22-3/29): complete Assignment 4
- (3/29-4/5): **security of other digital devices and systems** (credit cards, passports, memory cards, etc.)
- (4/5-4/12): continue above topic
- (4/12-4/19): complete Assignment 5
- (4/19-4/26): **emerging topics** and complete paper summary <u>Assignment</u>
- (4/26-5/3): students work on Final Term Paper/Project

Textbooks:

No textbook is required for this course. Course materials will be posted online.

Grading:

Your grades will be determined according to the following.

Assignments			600 points				
Paper Summary Final Term Project / Paper Participation			50 points 300 points 50 points				
				>= 895	\Rightarrow	A	
>= 790 but < 895	\Rightarrow	В					
>= 685 but < 790	\Rightarrow	C					
< 685	\Rightarrow	F					

Homework Assignments:

- Assignment due dates will be posted along with the assignments files.
- Each assignment contains a number of questions relevant to the course content as well as possible research components that require students to conduct individual research and possible lab exercises.
- Homework assignments must be typed (preferable in MS Word document) and submitted through blackboard by due dates. Submissions should follow the instructions given in the posted assignment files.
- **ALL** cited works must be listed using standard IEEE citation format (http://www.ieee.org/documents/ieeecitationref.pdf) in the submitted assignment file.

Final Term Paper/Project:

Details of requirements will be posted. A student will complete a research paper, ready (e.g. in IEEE format) to be submitted to a conference/workshop/journal, based on either a study/survey of existing research and/or a practical project mainly completed by himself/herself. If paper is considered to have good quality, professor will help edit it and find suitable conference/workshop/journal for submission. Student will be the first author of the paper; other contributors should be listed as co-authors, and professor should be listed as the last author of the paper.

Late Policy:

Penalty for all late assignments/papers is 25% of the worth per calendar day late, unless an extension (for a valid reason) has been granted in advance.

Academic Dishonesty:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work, which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students should be aware, specifically, that the instructor reviews all programming assignments and exercises for evidence of collaborative work. While it is sometimes appropriate and encouraged for students to discuss concepts and ideas, it is never permissible to collaboratively work on coded examples, to share or swap completed or partially completed programming assignments. In addition, it is not permitted for students to use code examples provided by the instructor without appropriate documentation/ citation of the use of that code.

Classroom Conduct:

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive

remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Students with Disabilities Policy:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf

Religious Holidays:

An institution of higher education shall excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.