

## COMP/IT 424 Computer System Security

### Spring 2020

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#### COMP/IT-424

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**Instructor:** Sami Al-Salman  
**Class meeting:** Tuesday 12:00 - 1:15 pm (Sierra Hall 1131)  
Thursday 12:00 - 1:15 pm (Sierra Hall 1131)  
**Office Hours:** Monday 10:00 - 11:30 am  
by appointment (Sierra Hall 3432)

**Email:** sami.al-salman@csuci.edu

#### **Course Description:**

Security techniques in operating systems, data bases, and computer networks. Analysis of formal security models. Introduction to cryptography, and public key security schemas.

Prerequisites: COMP-151 or IT-221 required, COMP-362 or IT-421 recommended.

#### **Course Objectives:**

Upon completion of the course, the student will be able to:

- Describe modern security protocols
- Design security protocols
- Assess vulnerabilities of a computer system and corresponding threats
- Explain impediments to security
- Assess the comparative strengths of cryptographic systems
- Synthesize and articulate ideas clearly and convincingly in oral and written form

#### **Required Textbook:**

*Cryptography and Network Security* by William Stallings, 7<sup>th</sup> edition 2017, Pearson Education Inc.

ISBN-13: 978-0-13-444428-4  
ISBN-10: 0-13-444428-0

### **Grading:**

Assignments (4 @ 7.5 points each)	30%
Quizzes (4 @ 5 points each)	20%
Term Paper & Presentation	15%
Midterm	15%
Final Exam	20%
<b>Total:</b>	<b>100%</b>

- Four Assignments worth 7.5% each: There will be one homework assignment roughly every three to four weeks; the assignments must be submitted as a PDF file through Canvas. The assignments details will be made available approximately two weeks before their due date. **You are encouraged to work in groups of two or three. You should submit one assignment per group.**
- Four quizzes worth 5% each (two during the first half of the semester and the other two during the second half) – dates TBA at least one week prior.
- One term paper worth 15% which is to be written in groups of two, three or four. The term paper is due on May 4<sup>th</sup> and its topic is to be presented (including a PowerPoint) during the last two weeks of class. Groups will be formed and topics will be chosen during week 4 & 5 of the semester.
- 1 midterm worth 15% — date TBA (usually week 8 of the semester).
- Final exam worth 20% — to be written on Tuesday May 19<sup>th</sup> 10:30 -12:30 pm.

### **Grading Scale:**

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

### **General:**

1. Students may, **and at times will**, work together in groups on homework assignments, class assignments or the project. However, each member must

- individually inform the instructor of all people contributing to their work. Students may not work together on the quizzes, midterm, or the final exam.
2. While there is no grade assigned to attendance, students are encouraged to attend the lectures. The assignments will be posted online. The midterm and the final exam will be written in class.
  3. **ACADEMIC DISHONESTY:** It is imperative that a student maintains a high standard of individual honor in his or her academic work. Academic dishonesty will not be tolerated and all sanctions will be administered as defined in the Channel Islands Catalog.
  4. Cal State Channel Islands is committed to equal educational opportunities for qualified students with disabilities in compliance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. The mission of Disability Accommodation Services is to assist students with disabilities to realize their academic and personal potential. Students with physical, learning, or other disabilities are encouraged to contact the Disability Accommodation Services office at (805) 437-8510 for personal assistance and accommodations.

### ***Please Note***

**This syllabus is tentative and may be subject to change throughout the course of the semester. Students will be notified in advance of any changes.**