

CNIT 125: Information Security Professional (CISSP Preparation)

Spring 2018 Sam Bowne

Schedule · Slides · Links

38396 Tue 6-9 MUB 388

Scores

Catalog Description

Covers information security in depth, including access control, application security, business continuity, cryptography, risk management, legal issues, physical security, and telecommunications and network security. This class helps to prepare students for the Certified Information Systems Security Professional (CISSP) credential, which is essential for

high-level information security professionals.

Advisory: Students should have taken CNIT 123, or hold the Certified Ethical Hacker credential, or have equivalent knowledge of basic security.

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

- A. Explain security and risk management.
- B. Define and implement access controls.
- C. Assess application security.
- D. Plan for business continuity and disaster recovery.
- E. Apply cryptography correctly to protect information.
- F. Explain legal regulations and ensure compliance.
- G. Perform investigations, preserve evidence, and cooperate with law enforcement authorities.
- H. Explain codes of conduct and ethical issues.
- I. Maintain security of operations.
- J. Assess physical and environmental security.
- K. Design security architecture.
- L. Explain telecommunications and network security.

Textbook

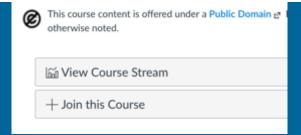
"CISSP Study Guide, Third Edition"; by Eric Conrad, Seth Misenar, Joshua Feldman; ISBN-10: 0128024372 <u>Buy from Amazon (\$45)</u>

Quizzes

The quizzes are multiple-choice, online, and open-book. However, you may not ask other people to help you during the quizzes. You will need to study the textbook chapter before the lecture covering it, and take the quiz before that class. Each quiz is available for one week, up 30 minutes before class. Each quiz has 5 questions, you have ten minutes to take it, and you can make two attempts. If you take the quiz twice, the higher score counts.

To take quizzes, go here: https://canvas.instructure.com/courses/1277338

To create an account, click the "Join this Course" link, which is either on the right side or the bottom of the page, as shown below.



Live Streaming

Live stream at: http://www.ccsf.edu/en/educational-programs/school-and-departments/school-of-liberal-arts/broadcast-electronic-media-arts/EATV/webcasts.html

Classes will also be recorded and published on YouTube for later viewing.

Kahoot and Zoom

Tue 1-16

The Kahoot competitions don't work well with the CCSF livestream, because it has a delay. For them, use Zoom:

https://zoom.us/j/4108472927 Meeting ID: 410-847-2927

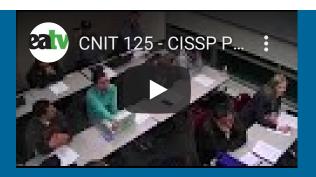
Schedule

<u>Date</u> <u>Quiz</u> <u>Topic</u>

Ch 1. Introduction to CISSP

Class Structure: Accountability and Expectations

Introductions



Ch 2 (Part 1) Quiz * *** Tue 1-23

Ch 2. Security and Risk Management (Part 1) Managers present pitches; students join teams
First group meeting; Task 1 assigned **



Tue 1-30 **No Quiz Due**

6:00 - 7:30 PM: Infosession for the CCSF Task 1 due (extra credit) Information Security Analyst Apprenticeship in MUB 140





Fri 2-2

Last day to add

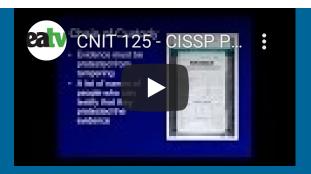
Tue 2-6 Ch 2 (Part 2) Quiz * Task 2 due

Ch 2.Security and Risk Management (Part 2) Group meetings; Task 3 assigned **



Tue 2-13 Ch 3 Quiz * Task 3 due

Ch 3. Asset Security
Group meetings; Task 4 assigned **
Managers' Performance Review 1



Tue 2-20 Ch 4 (Part 1) Quiz*
Task 4 due

Ch 4. Security Engineering (Part 1) Group meetings; Task 5 assigned ** Early Presentations 1



Tue 2-27 Ch 4 (Part 2) Quiz* No Task due

Ch 4. Security Engineering (Part 2)

Normal Presentations 1



Tue 3-6 Flex Day: No Class Ch 5. Communication and Network Security (Part 1) Ch 5 (Part 1) Quiz* Tue 3-13 **Group meetings; Task 6 assigned **** Task 5 due Late Presentations 1 CNIT 125 - CISSP P... **No Quiz** Tue 3-20 Guest Speaker: Tim Ryan, Technical Operations Manager, CCSF No Task due CNIT 125 - CISSP P... Tue 3-27 Spring Recess: No Class Tue 4-3 Ch 5 (Part 2) Quiz* Ch 5. Communication and Network Security (Part 2) Group meetings; Task 7 assigned ** Task 6 due

Managers' Performance Review 2



Tue 4-10 Ch 6 Quiz* Task 7 due Last section of Ch 5 & Ch 6. Identity and Access Management Group meetings; Task 8 assigned **



Tue 4-17 Ch 7 Quiz* Task 8 due Ch 7. Security Assessment and Testing & Start of Ch 8 Group meetings; Task 9 assigned **



Tue 4-24 Ch 8 Quiz* Task 9 due

Ch 8. Security Operations *Early Presentations* 2



Tue 5-1 Ch 9 Quiz*
No Task due

Ch 9. Software Development Security *Normal Presentations 2*



Tue 5-8 No Quiz
No Task due

Guest Speaker: Jakub (Kuba) Sendor, Security at Yelp

This talk will be livestreamed and recorded!



Tue 5-15

Class Cancelled for **DEF CON China**



Thu 5-17 through Wed 5-23

Final exam available online: 1 hour, only one attempt

- * Quizzes are online, and are due 30 min. before class. Penalty: -2 pts. for being late
- ** Tasks should require 1-2 hours of work
- *** No late penalty until Feb 6



Links

Introduction to CISSP and CNIT 125

CISSP 1: CISSP Education & Certification

CISSP 2: (ISC)2 | Certified Information Security Education

CISSP 3: CISSP was the third highest salaried certification in 2009

CISSP 4: DOD 8570 requires CISSP, Sec+, and other certs for all gov\t Information Assurance employees

CISSP 5: CISSP exam prices
CISSP 6: (ISC)2 Code of Ethics

CISSP 7: Associate of (ISC)² Certification

CISSP 8: SSCP Education & Certification

CISSP 9: Exam Prices (pdf)

CISSP 10: Test Prep: 10 Tips For Preparing and Passing the CISSP Exam

CISSP 11: How to get continuing education credit for CISSP certification holders

CISSP 12: GIAC Research in the Common Body of Knowledge -- Good white papers for the ten CISSP domains

CISSP 13: DoD Directive 8570.1 M - DoD Approved Baseline Certifications

CISSP 14: Associate of (ISC)^2 FAQ

CISSP 15: 7 Types of Hard CISSP Exam Questions and How To Approach Them

CISSP 16: How I Prepared for the CISSP Exam--Sam Bowne

CISSP 17: A CISSP Study Plan Memoir

CISSP 18: CISSP Practice Test

CISSP 19: San Francisco Bay Area ISSA--CISSP Study Sessions

CISSP 20: CPE Requirements

CISSP 21: (ISC)^2 SF Chapter

CISSP 22: Average CISSP Salary 2017

CISSP 23: Exam Prices 2017

CISSP 24: Dilbert: How the CISSP Exam was Written

CISSP 25: Your Guide to the Certified Information Systems Security Professional (CISSP) Exam

CISSP 26: Transcender Practice Exam

Links for Chapter Lectures

Ch 2a: Octomom's hospital records accessed, 15 workers fired (from 2009)

Ch 2b: Three Primary Analytics Lessons Learned from 9/11 (2012)

Ch 2c: The Shadow Factory: The NSA from 9/11 to the Eavesdropping on America: James Bamford: 9780307279392: Amazon.com: Books

Ch 2d: Chelsea Manning explains why she leaked secret military documents, fought for transgender rights behind bars

Ch 2e: WikiLeaks Q & A: who is Bradley Manning and what did he do?

Ch 2f: Chelsea Manning - Wikipedia

Ch 4a: Memory segmentation - Wikipedia

Ch 4b: Trusted Computer System Evaluation Criteria - Wikipedia

Ch 4c: Internet of Shit (@internetofshit) | Twitter

Ch 4d: OWASP Top Ten Project

Ch 4e: Secret Service codename - Wikipedia

Ch 4f: Pretty Rindjael Animation

Ch 4g: IPsec - Wikipedia

Ch 5a: 64-bit Global Identifier (EUI-64)

Ch 5b: How FTP port requests challenge firewall security

Ch 5c: Online Dig | Men & Mice

Ch 6a: Call It Super Bowl Face Scan I (From 2001)

Ch 6b: Obama Eyeing Internet ID for Americans (from 2011)

Ch 9a: Metasploit Module Source Code in Ruby

Other Links

A Beginner's Guide to Data Compliance

HIPAA certification HCISPP vs CSCS

Certified Security Compliance Specialist

How to Reverse Engineering with Radare2 -- INTERESTING FOR PROJECTS

COBIT 5 Laminate

Describe the main differences in due dilligence and due care

DREAD (risk assessment model) - Wikipedia

US-EU Safe Harbor Data-Transfer Talks Enter Final Week (1-25-16)

Separation of Duties in Information Technology

New Unsorted Links

Ch 2q: U.S.-EU & U.S.-Swiss Safe Harbor Frameworks

Ch 2h: Privacy Shield

Ch 2i: Privacy Shield -- Is Safe Harbour's Replacement Up To The Job In 2017? (May, 2017)

ISC2 Launches New CISSP Exam Format to Help Bring More Cybersecurity Professionals into the Field

Ideas for Student Projects 2017

Official (ISC)^2 CISSP Study App

SpiderMonkey -- Deobfuscates JavaScript Malware ty @lennyzeltser #IRespondCon

CISSP 27: CASP vs. CISSP: The Real Fight Is For Candidates' Attention

Top 20 CIS Critical Security Controls (CSC) You Need to Implement

OWASP Top 10 Security Risks - Part V

The Phoenix Project