

**UiO • Department of Informatics**  
**INF3510 Information Security**  
**Reading syllabus 2018**  
**Lectures 1 – 12**



Text book: Harris & Maymí, CISSP All-in-One Exam Guide, 7th Edition, 2016

**L01: Course Info + Basic IS Concepts**

**Date: 22.01.2018**

- CISSP 7th Ed.: Ch.1. Security and Risk Management
  - o Fundamental Principles of Security (p.1–6)
  - o Security Definitions (p.6–8)
  - o Control Types (p.8–13)

Total pages: 13

**L02: IS Management, and Human Factors in IS**

**Date: 29.01.2018**

- CISSP 7th Ed.: Ch.1. Security and Risk Management
  - o Security Frameworks (p.13–32)
    - ISO 27000 Series
    - Enterprise Architecture Development
  - o Privacy (p.70-72)
    - The increasing Need for Privacy Laws (p.72-73)
    - Employee Privacy Issues (p.81-83)
  - o Policies, Standards, Baselines, Guidelines and Procedurest (p.86–94)
  - o Personnel Security (p.154–159)
    - Hiring Practices
    - Termination
    - Security-Awareness Training
- CISSP 7th Ed.: Ch.7. Security Operations
  - o Liability and Its Ramifications (p.1053–1060)

Total pages: 46

**L03: Cryptography****Date:05.02.2018**

- CISSP 7th Ed.: Ch.3. Security Engineering
  - o Cryptography in Context (p.335-340)
  - o Cryptography Definitions and Concepts (p.340–350)
  - o Types of Ciphers (p.350–353)
  - o Methods of Encryption (p.353–369)
  - o Types of Symmetric Systems (p.369–380)
  - o Types of Asymmetric Systems (p.380–388)
  - o Message Integrity (p.388–388)

Total pages: 73

**L04: Key Management and PKI****Date: 12.02.2018**

- CISSP 7th Ed.: Ch.3. Security Engineering
  - o Public-Key Infrastructure (p.399–404)
  - o Key Management (p.404–407)

Total pages: 19

**L05: Risk Management, and Business Continuity Planning****Date:19.02.2018**

- CISSP 7th Ed.: Ch.1. Security and Risk Management
  - o Risk Assessment (p.94–98)
  - o Threat Modelling (p.98-102)
  - o Risk Assessment and Analysis (p.102–126)
  - o Business Continuity and Disaster Recovery (p.130–153)
- CISSP 7th Ed.: Ch.7. Security Operations
  - o Disaster Recovery (p.1002-1030)
  - o Insurance (p.1030-1031)
  - o Recovery and Restoration (p.1031-138)

Total pages: 90

**L06: Computer Security****Date: 26.02.2018**

- CISSP 7th Ed.: Ch.3. Security Engineering
  - o System Architecture (p.248–252)
  - o Computer Architecture (p.252-270)
  - o Operating Systems
    - CPU Architecture Integration (p.287–290)
    - CPU Operation Modes (p.290-291)
    - Virtual Machines (p.298–300)
    - System Security Architecture (p.301–307)
  - o TPM - Trusted Platform Module (p.407–409)

Total pages: 38

**L07: Incident Response and Digital Forensics****Date: 05.03.2018**

- CISSP 7th Ed.: Ch.7. Security Operations
  - o The Incident Management Process (p.993-1002)
  - o Investigations (p.1038–1053)

Total pages: 30

**L08: User Authentication****Date: 12.03.2018**

- CISSP 7th Ed.: Ch.5. Identity and Access Management
  - o Identification, Authentication, Authorization and Accountability
    - Identification and authentication (p.727–728)
    - Authentication (p.739–762)
  - o Threats to Access Control (p.834–840)

Total pages: 30

**L09: Identity Management and Access Control****Date:19.03.2018**

- CISSP 7th Ed.: Ch.5. Identity and Access Management
  - o Identification, Authentication, Authorization and Accountability
    - Authorization (p.762–776)
    - Federation (p.776-785)
    - Identity as a Service (p.785-786)
  - o Access Control Models (p.787–795)
  - o Access Control Techniques and Technologies (p.796–799)
- CISSP 7th Ed.: Ch.3. Security Engineering
  - o Security Models
    - Bell-LaPadula Model (p.307–308)

Total pages: 37

**L10: Communications Security****Date: 09.04.2018**

- CISSP 7th Ed.: Ch.4. Communication and Network Security
  - o Open Systems Interconnection Reference Model (p.479–497)
  - o TCP/IP Model (p.497–512)
  - o Remote Connectivity
    - VPN (p.649–657)

Total pages: 45

**L11: Network Perimeter Security****Date: 16.04.2018**

- CISSP 7th Ed.: Ch.4. Communication and Network Security
  - o Networking Devices
    - Firewalls (p.581–605)
    - Proxy Servers (p.605–606)
    - Honeypot (p.607)
    - Unified Threat Management (p.607–608)
  - o Wireless Networks
    - WLAN Components (p.664–665)
    - Evolution of WLAN Security (p.665–672)
    - Best Practice for Securing WLANs (p.677)
- CISSP 7th Ed.: Identity and Access Management
  - o Access Control Monitoring (p.822–832)

Total pages: 48

## **L12: Development and Application Security**

**Date: 23.04.2018**

- CISSP 7th Ed.: Ch.8. Software Development Security
  - o Building Good Code (p.1077–1078)
  - o Where do we place security? (p.1078–1083)
  - o Software Development Lifecycle (p.1084–1097)
  - o Secure Software Development Best Practice (p.1097–1098)
  - o Web Security (p.1146–1154)
  - o Malicious Software (p.1178–1193)
- CISSP 7th Ed.: Ch.4. Communication and Network Security
  - o Network Attacks (p.696-700)
- CISSP 7th Ed.: Ch.6. Security Assessment and Testing
  - o Auditing Technical Controls
    - Vulnerability Testing (p.866–869)
    - Penetration Testing (p.869-873)

Total pages: 60