

**UiO • Department of Informatics**  
**INF3510 Information Security**  
**Reading syllabus 2015**  
**Lectures 1 – 12**



Text book: Shon Harris, CISSP All-in-One Exam Guide, Sixth Edition, 2013

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

**Date: 19.01.2015**

- Harris: Ch.2. Information Security Governance and Risk Management
  - Fundamental Principles of Security (p.22–25)
  - Security Definitions (p.26–27)
  - Control Types (p.28–31)

Total pages: 10

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

**Date: 26.01.2015**

- Harris: Ch.2. Information Security Governance and Risk Management
  - Security Frameworks (p.34–58)
    - ISO 27000 Series
    - Enterprise Architecture Development
    - Security Controls Development
  - Security Management (p.69–70)
  - Security Steering Committee (p.126–131)
    - Personnel Security
    - Hiring Practices
    - Termination
    - Security-Awareness Training

Total pages: 33

**L03: Risk Management, and Business Continuity Planning****Date:02.02.2015**

- Harris: Ch.2. Information Security Governance and Risk Management
  - Risk Assessment and Analysis (p.70–100)
  - Information Classification (p.109–113)
- Harris: Ch.8. Business Continuity and Disaster Recovery Planning
  - Business Continuity and Disaster Recovery (p.885–897)
  - BCP Project Components (p.897–913)
  - Preventive Measures (p.913–914)
  - Recovery Strategies (p.914–930)
    - Business Process Recovery
    - Facility Recovery
    - Supply and Technology Recovery
  - Recovery and Restoration (p.945–953)
  - Testing and Revising the Plan (p.953–959)

Total pages: 101

**L04: Computer Security****Date: 09.02.2015**

- Harris: Ch.4. Security Architecture and Design
  - Computer Security (p.297–299)
  - System Architecture (p.300–303)
  - Computer Architecture
    - The Central Processing Unit (p.304–309)
    - Buffer Overflows (p.332–337)
    - CPU Architecture (p.342–346)
    - Virtual Machines (p.355–357)
    - System Security Architecture (p.357–365)
- Harris: Ch.7. Cryptography
  - TPM - Trusted Platform Module (p.843–844)

Total pages: 38

**L05: Cryptography****Date:16.02.2015**

- Harris: Ch.7. Cryptography
  - Cryptography Definitions and Concepts (p.765–777)
  - Types of Ciphers (p.777–780)
  - Methods of Encryption (p.781–799)
  - Types of Symmetric Systems (p.800–809)
  - Types of Asymmetric Systems (p.812–829)
  - Message Integrity (p.820–832)

Total pages: 73

**L06: Key Management and PKI****Date: 23.02.2015**

- Harris: Ch.7. Cryptography
  - Public-Key Infrastructure (p.833–840)
  - Key Management (p.840–843)

Total pages: 12

**L07: Digital Forensics****Date: 02.03.2015**

- Harris: Ch.9. Legal, Regulations, Investigations and Compliance
  - Investigations (p.1032–1061)

Total pages: 30

**L08: User Authentication****Date: 09.03.2015**

- Harris: Ch.3. Access Control
  - Identification, Authentication, Authorization and Accountability
    - Identification and authentication (p.160–173)
    - Password management (p.174–202)
  - Threats to Access Control (p.268–276)

Total pages: 52

**L09: Identity Management and Access Control****Date:16.03.2015**

- Harris: Ch.7.Access Control
  - Identification, Authentication, Authorization and Accountability
    - Authorization (p.203–218)
  - Access Control Models (p.219–227)
  - Access Control Techniques and Technologies (p.227–232)

Total pages: 31

**L10: Communications Security****Date: 23.03.2015**

- Harris: Ch.6. Telecommunications and Network Security
  - Open Systems Interconnection Reference Model (p.517–534)
  - TCP/IP Model (p.534–548)
- Harris: Ch.7. Cryptography
  - Internet Security (p.853–864)

Total pages: 45

**L11: Network Perimeter Security****Date: 13.04.2015**

- Harris: Ch.6. Telecommunications and Network Security
  - Networking Devices
    - Firewalls (p.628–653)
    - Proxy Servers (p.653–655)
    - Honeypot (p.655–656)
    - Unified Threat Management (p.656–657)
  - Wireless Technologies
    - WLAN Components (p.716–723)
    - Wireless Standards (p.723–728)
    - War Driving for WLANs (p.728–729)
- Harris: Ch.3. Access Control
  - Access Control Monitoring (p.255–268)

Total pages: 63

**L12: Development and Application Security****Date: 20.04.2015**

- Harris: Ch.10. Software Development Security
  - Software's Importance (p.1081–1082)
  - Where do we place security ? (p.1082–1087)
  - System Development Lifecycle (p.1087–1095)
  - Software Development Lifecycle (p.1095–1108)
  - Secure Software Development Best Practice (p.1108–1111)
  - Web Security (p.1157–1168)
  - Malicious Software (p.1197–1214)
- Harris: Ch.11. Security Operations
  - The Role of the Operations Department (p.1233–1234)
  - Administrative Management (p.1235–1240)
  - Network and Resource Availability (p.1263–1277)
  - Vulnerability Testing (p.1295–1306)

Total pages: 100

**L13: Operations Security****Date: 27.04.2015**

- Harris: Ch.11. Security Operations
  - Details to be added