

UiO • Department of Informatics
INF3510 Information Security
Reading syllabus 2014
Lectures 1 – 12



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

L01: Course Info + Basic IS Concepts

Date: 16.01.2014

- 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: 23.01.2014

- 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:30.01.2014**

- 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: 06.02.2014**

- 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:13.02.2014**

- 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: 27.02.2014**

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

Total pages: 12

L07: Digital Forensics**Date: 06.03.2014**

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

Total pages: 30

L08: User Authentication**Date: 13.03.2014**

- 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:20.03.2014**

- 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: 27.03.2014**

- 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: 03.04.2014**

- 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 Operations Security**Date: 10.04.2014**

- 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: Security Applications**Date: 24.04.2014**

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