UiO ⦂ Department of Informatics
INF3510 Information Security
Reading syllabus 2016
Lectures 1 – 12

Text book: Shon Harris, CISSP All-in-One Exam Guide, 6th Edition, 2013

L01: Course Info + Basic IS Concepts   **Date: 25.01.2016**

- 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: 01.02.2016**

- 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:08.03.2016**

- 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 Restauration (p.945–953)
  - Testing and Revising the Plan (p.953–959)

Total pages: 101

L04: Computer Security   **Date: 15.02.2016**

- 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:22.02.2016**

- 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: 29.02.2016**

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

Total pages: 12

L07: Digital Forensics   **Date: 07.03.2016**

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

Total pages: 30

L08: User Authentication   **Date: 14.03.2016**

- 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:04.04.2016**

- 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: 11.04.2016**

- 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: 18.04.2016**

- 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: 02.05.2016**

- 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)

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