



Al-Imam Muhammad Ibn Saud Islamic University
College of Computer and Information Sciences

Course Syllabus [Information Assurance & Security]

<i>Course Code</i>	<i>Course Name.</i>	<i>Credit Hours</i>	<i>Lec.</i>	<i>Lab</i>	<i>Prerequisites</i>
IT310	Information Assurance & Security	3	2	2	IT281, IT340

Course Description:

This course includes operational issues, policies and procedures, attacks and defense mechanisms, risk analyses, recovery, and information security. It exposes students to the unique advantages that biometrics brings to computer security. This course also addresses challenging issues such as security strength, recognition rates, and privacy, as well as alternatives of passwords and smart cards. In addition, the course provides knowledge in the building block of this field: image and signal processing, pattern recognition, security and privacy, and secure systems design.

Course Topics:

Week	Tentative Schedule
Week 01	Introduction to Biometrics
Week 02	Computer Authentication
Week 03	Identification document security
Week 04	Computer security. + assignment
Week 05	Security strength
Week 06	Recognition rates [First Exam]
Week 07	Privacy and Security balance
Week 08	Alternatives of passwords + Mid-term exam
Week 09	Smart cards
Week 10	Image and signal processing [Second Exam]
Week 11	Pattern recognition
Week 12	Pattern recognition
Week 13	Secure systems design
Week 14	Secure systems design
Week 15	
Week 16	[Final Exam]

Textbook and Resources:

Main Textbook:

Information Assurance Handbook: Effective Computer Security and Risk Management Strategies by Corey Schou, Steven Hernandez, McGraw-Hill Osborne Media; 1st edition, 2014.

Information Assurance for the Enterprise, Schou and Shoemaker, McGraw-Hill Irwin, 2007.

Other Resources

Automatic Fingerprint Recognition Systems, Ratha and Bolle (ed.s) 2003.

Biometric Systems, Wayman, Jain, Maltoni and Maio (ed.s) 2004.

Project and Assignments

Will be provided during the last weeks.

Grade Distribution

Quizzes	10 %
Midterm Exam	20 %
Assignments	10 %
Lab contribution and Exams	20 %
Final Exam	40 %