IS2150/TEL2810 Information Security and Privacy, Room 501
Wednesday, Fall 2013, Tentative Course Schedule

Week #	*Topic*	*Objective*: The students are expected to have the following capability after the lecture	*Testing*
Week 1 Aug 28	Introduction (Chapter 1) Basics of Cryptography	• *Define/Describe/explain* some key security terms • *Describe/explain* the importance of trust, assurance and operational issues within the security area • *Recognize/explain* and use the basic cryptographic techniques	• **Reading Assignment**
Week 2 Sept 4	Network Security; Authentication and Identity	• *Explain* and *employ* the basic network security (e.g., authentication) techniques	• **Quiz 1 (Covering Week 1)** • **Homework 1 (2 Weeks)**

Week 3 Sept 11	Access control in Unix and Windows
	
	 Mathematical Review
		• *Recognize* the basic access control mechanism in OS
		 • *Use* access control commands to *manipulate* permissions in the OS
		 • *Quick overview of maths*
		  • *Write* a sentence in logic form and *interpret* the logic expressions
		  • *Solve* problems using mathematical induction
		  • *Interpret*, *analyze and construct* lattice structures
			• **Lab 1 Out (2 Weeks)**
			 • **Programming Project Java programming Assignment (Due: Week 12)**

Week 4 Sept 18	HRU Access Control Matrix	• *Represent/Describe* formally the safety problem using ACM • *Reason* and *Demonstrate* the undecidability result related to security	• **Quiz 2** • **Homework 2 (2 Weeks)**
Week 5 Sept 25 Week 6 Oct 2	Confidentiality, Integrity, Hybrid Policy Models	• *Explain* the confidentiality, integrity and hybrid policy models and *relate* them to application needs • *Employ* them to new applications and synthesize solution • *Understand/Explain* general privacy issues	• **Lab 2 Out (2 Weeks)**

Homeworks/Labs are due by the end of the due date, i.e., by 11:59PM

Week 7 Oct 9	**Continue previous Lecture / Review for Midterm**		
Oct 16	**Mid-Term**		
Week 8 Oct 23	Security Evaluation, Risk Management, Legal and Ethical Issues	• *Explain* the main idea behind common criteria • *Recognize* the importance of risk management process and *employ* it to *assess* and *solve* organizational security • *Recognize, define/explain* legal and ethical concerns related to security	• **HW and/or Lab 3** (2 Weeks)
Week 9 Oct 30	Malicious Code, Software security	• *Recognize, compare/contrast, explain* different types of malicious code • *Recognize, compare/contrast, explain* different types of coding related software issues	• **Quiz 3** (for Week 11)
Week 10 Nov 6	Vulnerability Analysis; IDS; Auditing; Firewalls	• *Recognize, classify* and *compare* vulnerability (taxonomy/classification) • *Recognize, explain* and *analyze* auditing/IDS/Auditing systems	• **HW and/or Lab 4** (2 Weeks) • **Quiz 4** (for Week 11)
Week 11 Nov 13	Privacy Overview of S&P of emerging systems (cloud, SN, BigData)	• *Recognize, explain* the basic security and privacy issues in new systems • *Understand, explain* privacy models and approaches	• **Quiz 5** (for Week 12, 13)
Week 12 Nov 20			
Nov 27	**Thanks Giving**		
Week 13 Dec 6	**Continue previous Lecture/Review for Final**		
Week 14 Dec 6	**Final**		