

Tentative Syllabus

This syllabus is tentative and subject to change as needed. If there is a topic you want to hear about and it is in the syllabus, please let me know. I won't promise to cover it, but I may

	Date	Topic	Reading
1.	Fri, Sep 29	Introduction to Computer Security	§1
	Fri, Sep 29	<i>Discussion Section: Robust Programming</i>	handout
2.	Mon, Oct 2	Introduction; common vulnerabilities	§1
3.	Wed, Oct 4	Common vulnerabilities	
4.	Fri, Oct 6	Principles of secure design	§13
	Fri, Oct 6	<i>Discussion Section: Robust Programming, con't</i>	handout
5.	Mon, Oct 9	Flaw Hypothesis Methodology	§23.1, 23.2
6.	Wed, Oct 11	Flaw Hypothesis Methodology	§23.2
7.	Fri, Oct 13	Vulnerability models	§23.3, 23.4
	Fri, Oct 13	<i>Discussion Section: Writing good code I</i>	§29.1–29.3
8.	Mon, Oct 16	Vulnerability models	§23.3, 23.4
9.	Wed, Oct 18	Access control matrix model; HRU result	§2, 3.1, 3.2
10.	Fri, Oct 20	Policies and their expression	§4
	Fri, Oct 20	<i>Discussion Section: Writing good code II</i>	§29.4, 29.5
11.	Mon, Oct 23	Confidentiality: Bell-LaPadula	§5.1, 5.2–5.2.2; 5.3
12.	Wed, Oct 25	Integrity: Biba, Clark-Wilson	§6.1, 6.2, 6.4
13.	Fri, Oct 27	Basic cryptography	§9.1, 9.2
	Fri, Oct 27	<i>Discussion Section: Writing good code III</i>	§29.6
14.	Mon, Oct 30	Classical cryptography	§9.2
15.	Wed, Nov 1	Public key cryptography	§9.3
16.	Fri, Nov 3	Cryptographic protocols, signatures, certificates	§9.4, 10.1, 10.2, 10.4.2, 10.6
	Fri, Nov 3	<i>Discussion Section: Review for midterm</i>	
17.	Mon, Nov 6	<i>Midterm exam</i>	
18.	Wed, Nov 8	Electronic voting	
19.	Fri, Nov 10	Network security I	§11.1, 11.3, 11.4.1
	Fri, Nov 10	<i>Discussion Section: to be arranged</i>	
20.	Mon, Nov 13	Authentication	§12
21.	Wed, Nov 15	Identity	§14
22.	Fri, Nov 17	Access control mechanisms	§15
	Fri, Nov 17	<i>Discussion Section: to be arranged</i>	
23.	Mon, Nov 20	The confinement problem, Trojan horses	§17.1, 17.2, 22.1, 22.2
24.	Wed, Nov 22	Computer worms and viruses, other vermin	§22.3–22.5, 22.7
	Fri, Nov 24	<i>No class (Thanksgiving)</i>	
25.	Mon, Nov 27	Intrusion detection	
26.	Wed, Nov 29	Network security II	§26
27.	Fri, Dec 1	Basics of assurance	§18
	Fri, Dec 1	<i>Discussion Section: to be arranged</i>	
28.	Mon, Dec 4	Evaluating systems	§21

	Date	Topic	Reading
29.	Wed, Dec 6	<i>to be arranged</i>	
30.	Fri, Dec 8	<i>to be arranged</i>	
	Fri, Dec 8	<i>Discussion Section: Review for final</i>	
	Wed, Dec 13	<i>Final exam</i>	
