Syllabus

Week 1:  Dates: Jan 7, Jan 9, Jan 11  
Topics: Access control matrix, safety question  
Reading: text, §2, 3.1–3.4; papers [TL13,Z+05]

Week 2:  Dates: Jan 14, Jan 16, Jan 18  
Topics: Expressive power of models; security policies  
Reading: text, §3.5–3.6, 4; paper [Bi96]

Week 3:  Dates: Jan 21, Jan 23, Jan 25  
Topics: Confidentiality policies; assurance  
Reading: text, §5, A, 19; papers [D+06,Sa93]  
Due: Jan 23: homework 1; Jan 23: select project

Week 4:  Dates: Jan 28, Jan 30, Feb 1  
Topics: More assurance; integrity policies  
Reading: text, §20, 6–6.2, 6.4, 6.5; paper [E+03]

Week 5:  Dates: Feb 4, Feb 6, Feb 8  
Topics: Availability, hybrid policies  
Reading: text, §7, 8; papers [J+11,LO10]  
Due: Feb 8: homework 2

Week 6:  Dates: Feb 11, Feb 13, Feb 15  
Topics: Other policy models, information flow policies  
Reading: text, §8, 17; papers [A+10,WB04]  
Due: Feb 15: project progress report

Week 7:  Dates: Feb 18, Feb 20, Feb 22  
Topics: Information flow mechanisms, covert channels  
Reading: text, §17, 18; papers [B+07,S+06,SA06]  
Due: Feb 22: homework 3

Week 8:  Dates: Feb 25, Feb 27, Mar 1  
Topics: Noninterference, nondeducibility, restrictiveness  
Reading: text, §9; papers [D+11,KR02]

Week 9:  Dates: Mar 4, Mar 6, Mar 8  
Topics: Theory of malware, attack models, digital forensics  
Reading: §23, 27–27.2, 27.4; papers [Mi79]

Week 10: Dates: Mar 11, Mar 13, Mar 15  
Topics: Insider threat; elections and voting  
Reading: papers [B+09,HP11,O+17]  
Due: Mar 15: homework 4

Mar 22:  Due: Completed project due at 3:00pm

References


