CSCI 591, ST: Cyber Security

1 Course Description

(R-12) Offered intermittently. Prereq., consent of instr. Experimental offerings
of visiting professors, experimental offerings of new courses, or one-time offering
of current topics. Level: Graduate. Students will learn how modern computers
try to secure themselves, how these systems can be vulnerable, and how to break
into systems. Students will learn basic analysis of executables, permissions,
x86-64 assembly, exploits (e.g., stack smashing, dangling pointer), defenses to
standard exploits, keylogging, logic bombs, malware (and quines), cryptography,
breaking hashes (and other penetration testing), online anonymity, and a brief
history of how these topics arise and affect our modern world.