COMP 5370, Computer and Network Security

Credit hours: 3 lecture
Contact hours: 3 lecture


Prerequisites: COMP 3270
Corequisites: None

Selected Elective Course (CSCI, SWEN, WIRS)

Instructor or Course Coordinator: Dr. Tony Skjellum

Required Textbook

Course Outcomes
The student will be able to
- recognize potential risks and threats to computer operations and communications.
- understand Federal rules and regulations affecting computer security, including legal ramifications, FOIA, and policies.
- understand security issues unique to wireless communications.
- have a working knowledge of relevant cryptographic techniques.
- have a critical understanding of computer security with an emphasis on “end-to-end” vulnerabilities.

Topics Covered
- Introduction (2 hours)
- Internet Standards & RFCs (3 hours)
- Conventional Encryption (3 hours)
- Public Key Cryptography (3 hours)
- OS Security Vulnerabilities (3 hours)
- Network Security Administration (3 hours)
- Malicious Software (4 hours)
- Network Authentication (4 hours)
- Email Security (3 hours)
- Software Vulnerability (4 hours)
- Web Security (4 hours)
- Java Security (3 hours)
- IPSEC (1 hour)
- IPSEC/VPNs (1 hour)
- Firewalls (2 hours)
• Designated Approving Authority and Information Systems Security Officer (1 hour)
• Exams (1 hour)

Course Requirements
• Homework assignments (40%)
• Exams (60%)

Syllabus prepared: Spring 2016