ISAT 316
Information Assurance I
Welcome!

- David Miller
- NTT Professor
- School of Information Systems and Applied Technologies
Faculty Info

- Email: dmill60@siu.edu
- Phone: 453-8804
- Office: ASA C201

- **Office hours:**
  - Monday, 9:30AM – 1:00PM
  - Wednesdays, 9:30AM – 1:00PM

- If not in office, check the labs!
A little about your professor

• B.S. in Information Systems Technology from Southern Illinois University
  – Primary focus was networking and network security
  – IT courses: Oracle database management, Project management,
  – Systems design

• M.S. in Workforce Education from Southern Illinois University
  – Primary focus was distance education
  – Teaching Assistant for ISAT
Previous Work Experience

• Over 30 years working in the public sector. Retiring soon! YEAH!
• I have worked IT related projects since the early 1980’s: mostly PC repairs, small office network installations and trouble shooting.
• Most recently Lecturer for ISAT
A little about you!

- Name
- Hometown
- Working in IT
- Something else interesting about you
- Why are you here?
- What are your goals?
- What are your expectations?
Back to the class...

- ISAT 316
- Three credit hours
- ASA 113 (208 lab)
- Prerequisite: ISAT 224
Required Textbook

Course Objectives

- Analyze security vulnerabilities of a network and develop a set of solutions for specific networking scenarios.
- Identify security tools including, but not limited to intrusion detection and firewall software.
- Exhibit an understanding of the threats posed by viruses to networks through the development of appropriate protection plans.
- Find and utilize available online resources as they pertain to developing a secure system.
- Develop comprehensive plans for network security using a full range of available tools.
Other Requirements

- SIU email account
- D2L
- Internet access
- Computer you can install applications on
- Word processing program
Course Goals and Topics

- Ethical Hacking Overview
- TCP/IP Concepts Review
- Network and Computer Attacks
- Footprinting and Social Engineering
- Port Scanning
- Enumeration
- Programming for Security Professionals
Course Goals and Topics

- Desktop and Server OS Vulnerabilities
- Embedded Operating Systems
- Hacking Web Servers
- Hacking Wireless Networks
- Cryptography
- Network Protection Systems
Course Policy and Procedure

• Arrive to class on time and prepared.
• Laptops can be used to take notes during class lectures and should be used as a learning tool and not an entertainment device during classroom lectures or at other times when course work is expected.
• No text messaging in class. If you do this, you will be asked to leave.
• Points for quizzes, labs, and other in class assignments will be forfeited in the event of an unplanned absence. Instructor must be notified before class start time for an absence to be excused.
• Participate in class discussions.
• Attend all lab sessions and participate with lab partners.
Course Policy and Procedure

• Turn in homework assignments by due date and time. **Late submissions not accepted.**
• Adhere to the SIUC Student Code of Conduct and any SIUC Information Technology acceptable usage policies.
• Turn all cell phones to off, silent, or vibrate before class begins.
• Read, understand, sign and return the Class Computer Usage and Security Tools Usage Agreement by the fourth class period. Failure to do so will prohibit you from participating in class. **Distance learning students can email a statement agreeing to comply.**
• Participate fully in all group labs and assignments.
• Utilize tact and civility in your communication with the instructor and classmates.
• Submit assignments in either Microsoft Word (DOC/DOCX) or OpenOffice (ODT) format.
Course Grading

• A  100% – 90%
• B  89% – 80%
• C  79% – 70%
• D  69% – 60%
• F  59% or lower
## Grade Composition

<table>
<thead>
<tr>
<th>Grade Type</th>
<th>Quantity and value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (1 per chapter)</td>
<td>14 @ 20 points</td>
<td>280</td>
</tr>
<tr>
<td>Exam1 (Chapter 1 – 7)</td>
<td>1 @ 100 points</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2 (Chapter 8 – 13, Access Control)</td>
<td>1 @ 100 points</td>
<td>100</td>
</tr>
<tr>
<td>Homework (1 per chapter)</td>
<td>14 @ 20 points</td>
<td>280</td>
</tr>
<tr>
<td>Labs</td>
<td>12 @ 20 points</td>
<td>240</td>
</tr>
<tr>
<td><strong>COURSE TOTAL</strong></td>
<td></td>
<td>1000</td>
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</table>
Grade composition

• Exams (Written)

• Quizzes
  – Weekly over chapters via D2L
  – In class over readings or presentations

• Homework assignments

• Labs using virtual machines and NETLAB+
Instructor Communications

- Class info and announcements posted on D2L site
- Email to SIU.edu addresses
- Please put course number in subject
- Please correspond with professionalism
Plagiarism

• Intentional or unintentional will be punished

• All material should be appropriately cited or rewritten in your own words

• It is never acceptable to copy paragraphs from Wikipedia (or other sources) to answer homework questions
Disability Support

If you have a disability that impedes participation with this course, please contact Disability Support Services at 618.453.5738 or DSSsiu@siu.edu.
Emergency Information

- [www.bert.siu.edu](http://www.bert.siu.edu)
- [www.dps.siu.edu](http://www.dps.siu.edu)
- Wireless announcements from [www.siuc.edu](http://www.siuc.edu)
- In event of emergency, listen for instructions
For next class

• Read Chapter 1

• Complete assignment on security news/event/issue
Any Questions??
Tools Usage Agreement

• During the course of SIUC's ISAT 335 class, instructed by David Miller, students will be exposed to principles and knowledge directly relating to computer, information systems, and network security. This includes the introduction of the students to tools and techniques which have valid purposes and applications in specific security or auditing instances, but could be considered harmful to said networks or systems, or even illegal if used under incorrect or inappropriate situations. NTT Lecturer David Miller provides this information as part of coursework aimed at improving a student's ability to understand security of computer networks and systems in order for students to use this knowledge and skills in situations that are legal and authorized.

• In order to attend and participate in these courses, students are required to agree to the terms outlined in this document and corresponding course syllabi. Students who do not agree to these terms and sign and return this document to David Miller will not be able to participate in class.

• I have read and understand the information in the course syllabi as provided to me in class or through the SIU Blackboard system.

• I agree that I will not use any knowledge or tools gained in class for criminal activity.

• I agree that I will only perform class labs or apply knowledge learned in class on the equipment that is designated by the instructor for these purposes.

• I agree that I will not use any of the tools or security knowledge on computer systems or networks that I do not own or have written authorization by the owner to do so.

• I agree to abide by all SIU student codes of conduct and Information Technology and network usage agreements.

• I agree that all information gained in SIUC courses is for educational purposes only.

• I agree that I will not participate in any activities that may be illegal or unethical.

• I agree that I will not perform any activities that may cause degraded computer or network performance, either intentionally or unintentionally, on any network that I do not own completely and is isolated from other networks.

• I agree that I will not hold SIUC, David Miller liable for any lawsuits, either criminal or civil that may result from my intentional or unintentional use of security or computer network skills or tools.

Name of Student

Signature and Date
IMPORTANT DATES *

<table>
<thead>
<tr>
<th>Event</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Class Begins</td>
<td>01/20/2015</td>
</tr>
<tr>
<td>Last day to add a class (without instructor permission)</td>
<td>01/25/2015</td>
</tr>
<tr>
<td>Last day to withdraw completely and receive a 100% refund</td>
<td>02/01/2015</td>
</tr>
<tr>
<td>Last day to drop a course using SalukiNet</td>
<td>04/05/2015</td>
</tr>
<tr>
<td>Last day to file diploma application (for name to appear in Commencement program)</td>
<td>03/13/2015</td>
</tr>
<tr>
<td>Final examinations</td>
<td>5/11–5/15/2015</td>
</tr>
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Note: For outreach, internet, and short course drop/add dates, visit Registrar's Academic webpage [here](http://registrar.siu.edu/)

SPRING SEMESTER HOLIDAYS

- Martin Luther King, Jr.’s Birthday: 01/19/2015
- Spring Vacation: 03/07–03/15/2015

WITHDRAWAL POLICY ~ Undergraduate only

Students who officially register for a session may not withdraw merely by the stopping of attendance. An official withdrawal form needs to be initiated by the student and processed by the University. For the proper procedures to follow when dropping courses and when withdrawing from the University, please visit [http://registrar.siu.edu/pdf/ugradcatalog1314.pdf](http://registrar.siu.edu/pdf/ugradcatalog1314.pdf)

INCOMPLETE POLICY ~ Undergraduate only

An INC is assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all class assignments. An INC must be changed to a completed grade within one semester following the term in which the course was taken, or graduation, whichever occurs first. Should the student fail to complete the course within the time period designated, that is, by no later than the end of the semester following the term in which the course was taken, or graduation, whichever occurs first, the incomplete will be converted to a grade of F and the grade will be computed in the student's grade point average. For more information please visit: [http://registrar.siu.edu/grades/incomplete.html](http://registrar.siu.edu/grades/incomplete.html)

REPEAT POLICY

An undergraduate student may, for the purpose of raising a grade, enroll in a course for credit no more than two times (two total enrollments) unless otherwise noted in the course description. For students receiving a letter grade of A, B, C, D, or F, the course repetition must occur at Southern Illinois University Carbondale. Only the most recent (last) grade will be calculated in the overall GPA and count toward hours earned. See full policy at [http://registrar.siu.edu/pdf/ugradcatalog1314.pdf](http://registrar.siu.edu/pdf/ugradcatalog1314.pdf)

GRADUATE POLICIES

Graduate policies often vary from Undergraduate policies. To view the applicable policies for graduate students, please visit [http://gradschool.siu.edu/about-us/grad-catalog/index.html](http://gradschool.siu.edu/about-us/grad-catalog/index.html)

DISABILITY POLICY

Disability Support Services provides the required academic and programmatic support services to students with permanent and temporary disabilities. DSS provides centralized coordination and referral services. To utilize DSS services, students must come to the DSS to open cases. The process involves interviews, reviews of student-supplied documentation, and completion of Disability Accommodation Agreements. [http://disabilityservices.siu.edu/](http://disabilityservices.siu.edu/)

PLAGIARISM CODE


MORRIS LIBRARY HOURS
[http://www.lib.siu.edu/about](http://www.lib.siu.edu/about)

SAFETY AWARENESS FACTS AND EDUCATION

Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: [http://safe.siu.edu](http://safe.siu.edu)

SALUKI CARES

The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. For Information on Saluki Cares: (618) 453-5714, or siucares@siu.edu, [http://salukicares.siu.edu/index.html](http://salukicares.siu.edu/index.html)

EMERGENCY PROCEDURES

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. We ask that you become familiar with the [SIU Emergency Response Plan](http://salukicares.siu.edu/index.html) and [Building Emergency Response Team (BERT) programs](http://salukicares.siu.edu/index.html). Please reference the Building Emergency Response Protocols for Syllabus attachments on the following pages.

INCLUSIVE EXCELLENCE

SIU contains people from all walks of life, from many different cultures and subcultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well an essential preparation for any career. For more information please visit: [http://www.inclusiveexcellence.siu.edu/](http://www.inclusiveexcellence.siu.edu/)

LEARNING AND SUPPORT SERVICES

Help is within reach. Learning support services offers free tutoring on campus and math labs. To find more information please visit the Center for Learning and Support Services website:

- Tutoring: [http://tutoring.siu.edu/](http://tutoring.siu.edu/)

WRITING CENTER

The Writing Center offers free tutoring services to all SIU students and faculty. To find a Center or Schedule an appointment please visit [http://write.siu.edu/](http://write.siu.edu/)

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY

Our office's main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: [http://diversity.siu.edu/](http://diversity.siu.edu/)

Additional Resources Available:

- **SALUKINET**: [https://salukinet.siu.edu/](https://salukinet.siu.edu/)
- **ADVISEMENT**: [http://advisement.siu.edu/](http://advisement.siu.edu/)
- **SIU ONLINE**: [http://online.siu.edu/](http://online.siu.edu/)

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Spring 2015 R.O'Rourke