CIS/CSE 643: Computer Security (Online Course in Fall’13)

Instructor: Professor Wenliang (Kevin) Du, Ph.D.
URL: http://www.cis.syr.edu/~wedu/Teaching/cse643/

Course Description: In this course, student will systematically study the fundamental principles of computer system security, including authentication, access control, capability, security policies, sandbox, software vulnerabilities, and web security. Most of these principles will be studied within the scope of concrete systems, such as Linux and Windows. The course emphasizes "learning by doing", and requires students to conduct a series of lab exercises. Through these labs, students can enhance their understanding of the principles, and be able to apply those principles to solve real problems.

There will be 10 hands-on lab exercises (can be done at home). All these labs will be done in a virtual machine environment, using a pre-built Ubuntu VM image. Through these exercises, students are supposed to learn the attacks by performing them in a restricted environment; they will also play with a number of security tools to understand how they work and what security guarantee they provide. Students should have known the basic concepts of operating systems.

Instructor: Professor Du has been teaching this class at SU since 2003. He has been working in the field of computer and network security since 1996. All the labs used in this class are developed by him and his students, and over 200 schools worldwide are using his labs.

How does this online course work?

This course is the online session of CIS/CSE 643, which is offered to the on-campus students. All the lectures will be recorded, and uploaded to Blackboard for online students by 5:00pm on the same day. A sample lecture video can be found from the following URL (an HTML5-enabled browser is needed): http://www.cis.syr.edu/~wedu/online/Capability.html. Here are some specific requirements:

1. The requirements, including the projects and deadlines, are the same for both online and on-campus students.
2. Online students are expected to come to SU to take the final exam or do so at some designated places under the supervision of authorized personnel. The time for final exam is 5:15pm – 7:15pm on Thursday December 12th, 2013.
3. Dedicated office hours will be provided to online students.

Registration: Register for CIS/CSE643 (Section U800, class numbers 30246 and 17992) from Myslice, or contact the University College.