

Baton Rouge Community College  
Department of Computer Science  
PC & Network Security

Course SYLLABUS  
Spring 2012

CNET 250 Section 01 - CRN: 24935 12:00 – 12:50 MWF Room: 210 Cypress

**INSTRUCTOR:** David L. Sylvester, Assistant Professor  
Computer Science Department  
247 Cypress Building  
[sylvesterd@mybrcc.edu](mailto:sylvesterd@mybrcc.edu)  
(225) 216-8152

Office Hours:  
10:00 - 12:00 MWF  
1:30 – 3:30 TR

**Credit Hours:** 3

**Contact Hours:** 3

**TEXTBOOK(s):** Introduction to Computer Security  
By: Goodrich & Tamassia  
ISBN: 978-0-321-51294-9

Cryptography and Network Security, 5<sup>th</sup> Ed.  
by: William Stallings  
ISBN: 978-0-13-609704-4

**IMPORTANT LINKS:**

- BRCC's Blackboard – <http://blackboard.mybrcc.edu>
- Class Attendance – <http://www.sy19.com/250>

**MATERIALS:**

- USB Memory Stick (Jump Drive) 512MB or larger
- Students must have regular access to a personal computer system that is Microsoft Windows-based and has an Internet connection.
- An active e-mail address is required.

**All course material must be available for use by second week of school.**

**COURSE DESCRIPTION:** Provides an introduction in basic computer and network security skills, which includes developing a comprehensive approach to information security that embraces both the human and technical dimensions. Introduces fundamental concepts and principles of network security's role, design, threats, policies, and elements of cryptography. Examines protocols, architectures, and technologies for secure systems and services.

**Prerequisites:** None.

**Co-requisites:** None

**Learning Outcomes:** Upon completion of this course, a successful student will be able to: 1. Describe and identify the fundamental concepts and principles of computer and network security; 2. Identify ethical, professional responsibilities, risks and liabilities in computer and network security; 3. Identify, describe and assess external and internal threats to an organization; 4. Explain the basics of cryptology; 5. Describe the inner-workings of popular encryption algorithms, digital signatures, certificates, anti-cracking techniques, and copyright protections; 6. Demonstrate the ability to select among available network security technology and protocols such as IDS, IPS, firewalls, SSL, SSH, IIPSec, TLS, VPNs, etc.; 7. Identify and explain various access control models; 8. Describe the main types of networks security policies; 9. Describe and identify the principles of security design; 10. Describe the inner-workings of today's remote exploitation and penetration techniques; 11. Identify advanced security issues and technologies, such as DDos attack detection and containment and 12. Experience using popular security tools.

This course supports the development of competency in the following areas. Students will:

- Think critically, collect evidence (statistics, examples, testimony) and make decisions based on the evidence, comprehend and analyze texts, and solve problems using methods or critical and scientific inquiry;
- Communicate effectively using standard written English; and
- Use computer technology to access, retrieve, process, and communicate information.

**Assessment Measures:** All learning outcomes will also be assessed using a combination of computer-based (hands-on) applications, examinations and/or project assignment work, and/or in-class written (non-computer based) examinations. 1. Structured use of class time, 2. Instructor-prepared tests, 3. Individual/Group Projects, 4. Homework Assignments.

## GENERAL INFORMATION:

### • Student Conduct in Class Policy

Any acts of classroom disruption that go beyond the normal rights of students to question and discuss with instructors the education process relative to subject content will not be tolerated. Any issues needed to be resolved must be done first by setting up an appointment or meeting with the instructor immediately after class. If not resolved, then set up a meeting with the Department Chair, followed by a meeting with the Dean. **If after evaluating this classroom environment (instructor, fellow students, lab conditions, etc.), you feel uncomfortable in ways that may allow you not to perform as a student in a respectful matter toward others, you are advised to make provisions to find another class setting.**

### • Communication

All course and college communication will be via BRCC email addresses. Students are responsible for regularly checking their email. Immediately contact the IT Help Desk in Governor's 229 if there are problems with your email.

### • Disability Services

If any student in this class has a need for accommodations because of a documented disability, please feel free to discuss them with me privately. The college has professionals to guide, counsel, and assist students with disabilities. The Office of Disability Services, located in the Student Center in Room 241, will evaluate and meet with you to discuss your accommodation needs.

### • Safety Note

A student's safety is important in the learning process. Please report any suspicious activity to the Office of Public Safety at 216-8888 and use the red telephones in the halls and classrooms, the outdoor blue light pole phones, or the garage emergency phones located on all floors.

All students are encouraged to sign up for BRCC's emergency notification system. **FIRSTCALL Emergency Notification** provides enhanced emergency communication through text alert, phone messages, emails, and social media updates. Students can register for FIRSTCall through the student login portal at [www.mybrcc.edu](http://www.mybrcc.edu). Instructions on how to register can be found at the following link: [http://www.mybrcc.edu/index.php?option=com\\_content&view=article&id=491&Itemid=29](http://www.mybrcc.edu/index.php?option=com_content&view=article&id=491&Itemid=29)

The URL for BRCC's safety information is:

[http://www.mybrcc.edu/index.php?option=com\\_content&view=article&id=202&Itemid=195](http://www.mybrcc.edu/index.php?option=com_content&view=article&id=202&Itemid=195)

If necessary, please exit quickly, and once outside continue to a safe distance away from the building. Take your possessions with you.

### • Plagiarism/Cheating

Plagiarism is defined as using and passing off as one's own ideas, data, or writings of another or presenting as one's own idea or product derived from an existing source.

Cheating is defined as obtaining information through fraud or deceit: either by the use of unauthorized notes, books, or other sources prior to or during examinations, or by using information under false pretenses. It includes premeditated cheating, which is defined as conscious, pre-planned, deliberate cheating with materials prepared in advance.

Students are expected to uphold the school's standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work. Students shall be guilty of violating the honor code if they:

1. Represent the work of others as their own.
2. Use or obtain unauthorized assistance in any academic work.
3. Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
4. Give unauthorized assistance to other students.
5. Misrepresent the content of submitted work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the appropriate authority. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

For this class, it is permissible to assist classmates in general discussions of computing techniques. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned projects, assignments, and tasks. In other words, students may not "work together" on graded assignments. Such collaboration constitutes cheating. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own. If you need help on an assignment, contact me or bring concerns to class.

### • Makeup Tests/Assignments

Students are expected to take or submit assignments/tests on the specified due date or as per the instructor's request. **Late work may be submitted only 2 days (following class period), after specified deadline, and one letter grade will be deducted from all late work.**

Students must have backup copies of assignments at all times. Backup copies will prevent loss of work due to viruses, damaged disks, etc. **All assignments and files must be clearly typed and labeled in their respective folders on your jump drive with the student's name, course name, class time, and specific assignment/project information.**

Makeup tests will only be allowed with a doctor's excuse. In unavoidable situations, a student may pre-arrange to take a regularly scheduled test early or at a later date. **Makeup tests (if permitted) must be taken within 1 week of the original test date.**

- **Withdrawing from the Course**

Students are responsible for withdrawing from this course on or before the withdrawal deadline, **Friday, March 23, 2012**, as listed in the Academic Calendar ([web site](#)).

A faculty member has the right to withdraw a student from a class if that student has accumulated three weeks of unexcused absences in the class. Students will be notified by BRCC email if this is done.

- **Do not Shut Down computers or Print without the Instructor's Permission.**
- **All computers are to be used for CNET 250 course work only. No Games.** Students may follow along with the current lesson on the computer. However, no miscellaneous typing on the computers or talking during lecture and instruction time or while another person is reading aloud.
- **Absolutely no talking during test or exam periods (direct all questions to the instructor). Once the test or exam has started, students that do not have their materials for testing may leave quietly to purchase necessary items.**
- **No eating, drinking or dipping in the computer labs.**
- **All cell phones and pagers must be turned off or placed on vibrate. Answer all calls outside of the classroom.**

**STUDENT SERVICES:**

Students can go to the Center for Academic Success, which is located on the 1<sup>st</sup> floor in the Magnolia Library for the following services: Quality Enhancement Plan/First Year Experience, Service Learning, Title III, Tutoring, Writing Center, Math/Science Center, Conversation Partners, Workshops & Class visits, Active-Learning Classroom and Individual Consultations. Their web link is:

[http://www.mybrcc.edu/index.php?option=com\\_content&view=article&id=260&Itemid=358](http://www.mybrcc.edu/index.php?option=com_content&view=article&id=260&Itemid=358)

**LIVE TEXT:**

Live text is an application purchased by BRCC that is used by teachers and students. Everything created in LiveText can be published on the web simply by making the document public. Once public, a document has its own URL and can be viewed by the world. Any document may be published to the WWW. **NOTE: There is a one-time fee for each student that uses LiveText.**

**ATTENDANCE:**

All class assignments are to be done in class. Students are expected to arrive to class on time and remain for the entire class period. If absent for three weeks or more, the instructor has the right to implement the drop-process to remove you from his/her roll. **No make-up quizzes.**

**GRADING SCALE:**

A	90 – 100
B	80 – 89
C	70 – 79
D	60 – 69
F	59 and below
I	Incomplete
W	Withdrawal

**Weight of GRADING:**

40%	Exams (including Mid-Term)
5%	Participation
20%	Final Exam
25%	Projects
10%	Quizzes

**Martin Luther King Holiday (Monday, January 16<sup>th</sup>)**

**Marci Gras Holiday (Monday, February 20<sup>th</sup> thru Wednesday, February 22<sup>nd</sup>)**

**Spring Break (Monday, April 2<sup>nd</sup> thru Saturday, April 7<sup>th</sup>)**

**Final Examination Period**

**Begins - Tuesday, May 8<sup>th</sup>.**

**Ends – Monday, May 14<sup>th</sup>.**

**Commencement: Saturday, May 12<sup>th</sup>.**

**Grades are due by: Thursday, May 17<sup>th</sup>.**

*TENTATIVE COURSE OUTLINE*  
*CNET 250 – Fall 2011*

**Note: All assignments and test dates will be formally announced.**

<b>Week 1 &amp; 2</b>	<b>Chapter 1 (Introduction)</b>
<b>Week 3 &amp; 4</b>	<b>Test 1</b>
	<b>Chapter 2 (Physical Security)</b>
<b>Week 5 &amp; 6</b>	<b>Test 2</b>
	<b>Chapter 3 (Operating System Security)</b>
<b>Week 7</b>	<b>Mid-Term</b>
<b>Week 8 &amp; 9</b>	<b>Chapter 4 (Malware)</b>
	<b>Test 3</b>
<b>Week 10 &amp; 11</b>	<b>Chapter 5 (Network Security I)</b>
	<b>Test 4</b>
<b>Week 12 &amp; 13</b>	<b>Chapter 6 (Network Security II)</b>
	<b>Test 5</b>
<b>Week 14</b>	<b>Chapter 7 (Web Security)</b>
<b>Week 15</b>	<b>Final Examination</b>

## Addendum to Syllabus

**TO:** David L. Sylvester

**DATE:** \_\_\_\_\_

I have read the syllabus for CNET 250. I understand all the requirements, and intend to fulfill them in accordance with the schedule.

All course and college communication will be via BRCC email addresses. Students are responsible for regularly attending class, signing attendance roster on the [www.SYL9.com](http://www.SYL9.com) site and checking their email and [BLACKBOARD](#) accounts. Immediately contact the IT Help Desk in Governor's 229 if there are problems with your email or BLACKBOARD accounts.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Student Signature