West Los Angeles College - Summer Semester 2014

Welcome To CS185 – Directed Study

Instructor: Associate Professor Marcus E. Butler, MCSE, CCNA, VCP5-DCV

Course Schedule: Online, Section #: 9565

Please read, and then print this syllabus for reference:

(1) This is a 100% online lab class with optional on-campus lab classes. In general, this format is called hybrid.

(2) There are no exams or homework assignments. There are, of course, lab configuration assignments completed using NetLAB. Cisco router/switch and VMware ICM based labs are reserved using NetLAB. Instructions for accessing NetLAB are below.

Access NetLAB at the following IP address: netlab.wlac-csit.com

NetLAB accounts have been created and activated as follows:

Student Name = John Brown, SID #: 883456789

Username: jobr56789, Password: summer2014 (use when logging-in for the first time only)

After you login you will be requested to create your own personal (unique) Username and Password while creating your user profile. Once you create your own unique Username and Password you must be sure to remember it or write it down, because I do not have access to it.

Also, be sure to provide your email address when completing your user profile. If you fail to provide a valid email address in your profile you may miss important announcements generated by the website.

(3) You will schedule your own labs, but you are expected to complete on average four or five labs a week. Most labs should take less than 2.0 hours to complete. You are expected to complete a certain number of labs per week. Your progress will be tracked via the NetLAB system.

(4) You can and will prepare for your labs by using the materials provided in the Cisco Academy website, the LabSim training CD, Cisco optional textbook or VMware eBook. This includes; reading the Cisco Academy modules, viewing multimedia lectures and lab configuration demos, reviewing fact sheets, performing lab simulation exercises.

(5) We will use "Private Messages" on the left-hand menu to communicate with each other. I will use ETUDES announcement system to publish important information. Once the course begins all questions, issues, or problems should be brought to my attention by sending emails to INSTRUCTOR (Marcus Butler) using the ETUDES "Private Message" system. In other words after the course start date do not sent emails related to this course to my WLAC email address.

(6) All other college/class rules will be enforced.
**Instructor Contact Information**

Instructor: Associate Professor Marcus E. Butler  
Office on Campus: CE230  
Office/Lab Hours: Will be announced  
E-Mail: Butlerm@wlac.edu

**Course Student Learning Outcomes – SLO’s**

1) At the end of the course, the successful student will be able to explain, define and discuss security and data protection concepts.

2) At the end of the course, the successful student will be able to secure network environments using security tools and implement network security features.

3) At the end of the course, the successful student will be able to detect network intrusions and apply the appropriate solution to avoid future intrusions.

**Course Objectives and Prerequisites**

Course Objective:

**CS185 is a lab course that supports Network Security students.** This is a security review course covering topics discussed in CS980 or CS985. Students will review by completing all security labs outlined in the following table.

All labs are completed using NetLAB. NetLAB access is 24/7 and you may schedule lab for anytime or any day.
Suggested Prerequisites:

**Security Students:** CS980 (Introduction to Computer and Information Security) or equivalent experience

Course Materials

Required Course Material:

The NetLAB Student User Manual/Documentation is the only required materials. The manual is available as PDF document at the following link. There is no charge for this documentation:


Optional Cisco/Security Course Material:

**TestOut/LabSim Training Software Consisting of:**

- Course Simulation (multimedia lectures)
- Lab Simulation (hands-on lab exercises)
- Exam Simulation (contents-based practice exams)

Use the following instructions to place your order directly with TestOut:

- What to order: Security Pro
- Where to order: [www.testout.com](http://www.testout.com)
- Promotional Code: 14-346TA
- School Name: West Los Angeles College (enter exactly as shown)
- Instructor Name: Marcus Butler

This software requires Internet access. Full functionality/access is available for one year. Academic pricing: $89 + Shipping + Tax. If you have any problem with ordering online you can reach Kelly Jorgensen at KJorgensen@testout.com or call 800.877.4889, Ext 234.
Security Students: Schedule for Lab Assignments & Grading

A Security student is someone who has successfully completed CS980/CS985 or has the equivalent experience. Each security student will be given access to his or her own pod for completing labs.

Pod Overview: http://www.netdevgroup.com/content/cybersecurity/topologies/

The schedule is provided for your convenience. You have some flexibility as to when you complete lab configuration assignments. To complete most labs you should stay on a weekly schedule. Plan to do at least four or five labs a weeks. This pace will allow you to complete all the Suggested Labs for CS185.

CS185 is a Pass/Fail course meaning you are awarded a letter grade for the course. In order to receive your one-unit credit for this course you must complete all assigned lab.

Here are some more suggestions to help you get started:

1. All labs are completed online using NetLAB.

2. There are a total of 25 labs. Labs must be completed in sequence.

3. If you have not completed any security courses, then you should consider taking CS987 during the Fall 2014 semester.

4. All labs are numbered and again must be completed sequentially.

5. You should preview each lab before proceeding. NetLAB provides a lab preview for each lab as a link when you schedule a lab.

Read the NetLAB Users Manual to learn how to reserve labs using the Scheduler. Labs under the Scheduler have Exercise Names. Each exercise includes complete lab instructions under the Preview Lab hyperlink. Before performing a lab you should always print out a copy of the Preview Lab for that particular lab.

Course Grading Scale

There are a total of 250 points based on 10-points for each assigned lab.

<table>
<thead>
<tr>
<th>COURSE GRADE</th>
<th>POINT RANGE</th>
<th>% RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A”</td>
<td>250 – 225</td>
<td>100% - 90%</td>
</tr>
<tr>
<td>“B”</td>
<td>224 – 200</td>
<td>89% - 80%</td>
</tr>
<tr>
<td>“C”</td>
<td>199 – 175</td>
<td>79% - 70%</td>
</tr>
<tr>
<td>“D”</td>
<td>174 – 150</td>
<td>69% - 60%</td>
</tr>
<tr>
<td>“F”</td>
<td>149 - 0</td>
<td>59% - 0</td>
</tr>
</tbody>
</table>
# Security Labs: Suggested Schedule

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>LABS</th>
<th>LABS DESCRIPTIONS</th>
</tr>
</thead>
</table>
| 1<sup>ST</sup> | 6/16/2014   | CNSS Lab 1, CNSS Lab 2, CNSS Lab 3 | Lab 1: Virtual Environment Overview  
Lab 2: Packet Analysis  
Lab 3: Cryptography in Information Assurance                                      |
| 2<sup>ND</sup> | 6/23/2014   | CNSS Lab 4, CNSS Lab 5, CNSS Lab 6 | Lab 4: Access Control/Audit  
Lab 5: Policy  
Lab 6: Information Storage and Backup                                              |
| 3<sup>RD</sup> | 6/30/2014   | CNSS Lab 7, CNSS Lab 8, CNSS Lab 9 | Lab 7: Vulnerability/Risk Assessment  
Lab 8: Computer Forensics  
Lab 9: Physically Security                                                             |
| 4<sup>TH</sup> | 7/7/2014    | COMPTIA Lab 1, COMPTIA Lab 2, COMPTIA Lab 3, COMPTIA Lab 4, COMPTIA Lab 5 | Lab 1: Network Devices & Technologies  
Lab 2: Secure Network Admin. Principles  
Lab 3: Protocols and Default Network Ports - TCP  
Lab 4: Protocols and Default Network Ports - Remote  
Lab 5: Secure Implementation of Wireless Networking                                  |
| 5<sup>TH</sup> | 7/14/2014   | COMPTIA Lab 6, COMPTIA Lab 7, COMPTIA Lab 8, COMPTIA Lab 9, COMPTIA Lab 10 | Lab 6: Incident Response Procedures  
Lab 7: Analyze and Differentiate Types of Malware  
Lab 8: Analyze and Differentiate Types of Apps Windows  
Lab 9: Analyze and Differentiate Types of Apps Attacks  
Lab 10: Mitigation and Deterrent Techniques - Forensic                               |
| 6<sup>TH</sup> | 7/21/2014   | COMPTIA Lab 11, COMPTIA Lab 12, COMPTIA Lab 13, COMPTIA Lab 14, COMPTIA Lab 15, COMPTIA Lab 16 | Lab 11: Mitigation and Deterrent Techniques – PW Cracking  
Lab 12: Discovering Security Threats and Vulnerabilities  
Lab 13: Importance of Data Security – Data Theft  
Lab 14: Importance of Data Security – Data Security  
Lab 15: Authentication and Authorization  
Lab 16: General Cryptography Concepts                                                  |
|       | 7/27/2014   | Semester Ends         |                                                                                   |
Please Note:

"Students with disabilities who believe they may need accommodations in this class are encouraged to contact Supportive Services (310) 287-4450, FACE 16, as soon as possible to better ensure such accommodations are implemented in a timely fashion."

Drop Policy

If you choose to drop a course, it is your responsibility to do so by the end of the second week of class if you wish to receive a tuition refund. For compressed eight week semesters, you must drop by the end of the first week to receive a tuition refund. You will not be automatically dropped from your class for lack of participation.

If you drop a class after the fourth week of the semester has passed, you will receive a "W" grade for that class. If you drop a class after the tenth week has passed, you will receive an "F" grade for that class. If you drop a class after the second week has passed in a compressed eight week semester, you will receive a "W" grade for that class. If you drop a class after the fifth week has passed in a compressed eight week semester, you will receive an "F" grade in that class.

Important Drop Dates for Summer 2014:

- Get a full refund: 6/24/14
- Last day to add a class:
  - Online: 6/16/14
  - In-person: 6/24/14
- File for "pass/no pass": 6/24/14
- Drop class without a "W": 6/24/14
- Drop class with a "W": 7/18/14

Special Needs and Disabled Students Policy

If you are a student with a disability and require accommodations, please send me a Private Message. The sooner I am aware of your eligibility for accommodations, the quicker I will be able to assist the Disabled Students Programs & Services (DSP&S) Office in providing them. The DSP&S Office provides special assistance in areas including: registration assistance, specialized tutoring, academic and career guidance counseling, instructor liaison, special instruction and testing assistance. You can contact the Director of the DSP&S Office, Adrienne Foster, at fosteraa@wlac.edu describing the accommodations that are necessary.
**Academic Integrity Statement**

Academic integrity is a fundamental value of higher education and WLAC; therefore, acts of cheating, plagiarism, falsification or attempts to cheat, plagiarize or falsify will not be tolerated in this course. It is your responsibility to understand what plagiarism is and you can read about it here: http://www.plagiarism.org.

Any student caught cheating or plagiarizing will be subject to disciplinary action.

**Online Student Resources**

Online Student Helpdesk: [http://www.wlac.edu/online/helpdesk.asp](http://www.wlac.edu/online/helpdesk.asp)

Course Login: [http://www.wlac.edu/online/logininfo.asp](http://www.wlac.edu/online/logininfo.asp)

Technical Requirements: [https://etudes-nq.fhda.edu/portal/site!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa](https://etudes-nq.fhda.edu/portal/site!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa)

ETUDES FAQ: [http://www.wlac.edu/online/etudesfaq.asp](http://www.wlac.edu/online/etudesfaq.asp)

WLAC Homepage: [http://www.wlac.edu](http://www.wlac.edu)

WLAC Online Homepage: [http://www.wlac.edu/online](http://www.wlac.edu/online)

WLAC Online Counseling: [http://www.wlac.edu/online/counselingonline.asp](http://www.wlac.edu/online/counselingonline.asp)

WLAC Online Tutoring: [http://www.wlac.edu/online/tutoring.asp](http://www.wlac.edu/online/tutoring.asp)


WLAC Bookstore: [http://store450.collegestoreonline.com](http://store450.collegestoreonline.com)


Strategies for Online Learners: [http://www.uidaho.edu/eo/dist8.html](http://www.uidaho.edu/eo/dist8.html)

Be a Successful Online Student: [http://www.ion.uillinois.edu/resources/tutorials/pedagogy/StudentProfile.asp](http://www.ion.uillinois.edu/resources/tutorials/pedagogy/StudentProfile.asp)

Tips for Online Success: [http://www.ion.uillinois.edu/resources/tutorials/pedagogy/tips.asp](http://www.ion.uillinois.edu/resources/tutorials/pedagogy/tips.asp)