Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.
COURSE SYLLABUS

CSCI 651
ADVANCED TOPICS IN COMPUTER SECURITY

COURSE DESCRIPTION

A study of advanced technical challenges in cyber security as the field continues to evolve. Current developments in the industry and research advances will dictate specific areas in the course per semester.

RATIONALE

This course is part of the Cyber Security graduate degree program. This course provides a study of advanced technical challenges in cyber security as the field continues to evolve, ranging far beyond secure coding to outlining rigorous processes and practices for managing systems and software operations. This course presents current developments in the industry and research advances in Cybersecurity and Cybercrime.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:
A. Analyze the assumptions of deterrence theory and its utility.
B. Identify hype and exaggeration of hacking incidents found in the media.
C. Explain the active role of Nation State actions in recent cyber-attacks.
D. Describe the tactics used in cyberspace to promote terrorist ideologies between and within terrorist groups.

V. COURSE REQUIREMENTS AND ASSIGNMENTS
A. Textbook readings and lecture presentations

B. Course Requirements Checklist
   After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (4)
   Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum. Each thread must be at least 450 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 2 other classmates’ threads. Each reply must be at least 250 words.

D. Labs (2)
   The student will complete labs associated with the course material. Each lab will have specific instructions for tasks, along with deliverables, to be completed in the virtual lab environment.

E. Research Paper Outline and Bibliography
   The student will complete a basic outline for the given topic in current APA format. Three research questions will be submitted as well as a preliminary bibliography of at least 3 sources.

F. Research Paper
   The student will write a 2,750–3,250-word research-oriented paper in current APA format that focuses on security engineering. The paper must include at least 3 references in addition to the course textbook and the Bible.

G. Quizzes (2)
   Each quiz will cover the Reading & Study material for the assigned modules/weeks. Each quiz will be open-book/open-notes, contain 20 multiple-choice and true/false questions, and have a time limit of 2 hours.

H. Final Exam
   The Final Exam will cover all the Reading & Study material for the course. The Final Exam will be open-book/open-notes, contain 22 multiple-choice and short answer questions, and have a time limit of 2 hours.

VI. COURSE GRADING AND POLICIES

A. Points

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (4 at 75 pts ea)</td>
<td>300</td>
</tr>
<tr>
<td>Labs (2 at 150 pts ea)</td>
<td>300</td>
</tr>
<tr>
<td>Research Paper Outline and Bibliography</td>
<td>50</td>
</tr>
<tr>
<td>Research Paper</td>
<td>150</td>
</tr>
<tr>
<td>Quizzes (2 at 50 pts ea)</td>
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</tr>
<tr>
<td>Final Exam</td>
<td>100</td>
</tr>
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</table>
B. Scale

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\begin{align*}
A &= 940–1010 \\
A- &= 920–939 \\
B+ &= 900–919 \\
B &= 860–899 \\
B- &= 840–859 \\
C+ &= 820–839 \\
C &= 780–819 \\
C- &= 760–779 \\
F &= 0–759
\end{align*}
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C. Late Assignment Policy

If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the course will not be accepted.
4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.
# COURSE SCHEDULE

CSCI 651


<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taylor: chs. 1–2 1 presentation</td>
<td>Course Requirements Checklist Class Introductions Quiz 1</td>
<td>10 0 50</td>
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<tr>
<td>2</td>
<td>Taylor: chs. 3–4 1 presentation</td>
<td>DB Forum 1</td>
<td>75</td>
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<tr>
<td>3</td>
<td>Taylor: chs. 5–6 1 presentation</td>
<td>Lab 1</td>
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<td>4</td>
<td>Taylor: chs. 7–8 1 presentation</td>
<td>Research Paper Outline and Bibliography Quiz 2</td>
<td>50 50</td>
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<td>5</td>
<td>Taylor: chs. 9–10 1 presentation</td>
<td>DB Forum 2</td>
<td>75</td>
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<tr>
<td>6</td>
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<td>DB Forum 3 Lab 2</td>
<td>75 150</td>
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<tr>
<td>7</td>
<td>Taylor: chs. 13–14 1 presentation</td>
<td>Research Paper</td>
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<tr>
<td>8</td>
<td>Taylor: ch. 15 1 presentation</td>
<td>DB Forum 4 Final Exam</td>
<td>75 100</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>101010</strong></td>
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DB = Discussion Board

**NOTE:** Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on Friday.