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 501
OVERVIEW OF COMPUTER SECURITY

COURSE DESCRIPTION
This course surveys major topics in Computer and Network Security.

RATIONALE
As more and more computing systems rely on networking technology, computer security is more important. In addition, information regarding how to break software and penetrate network defenses is more widely available. As a result, students with high moral character need to learn the techniques used by attackers, both to test the systems for which they are responsible and also to construct solid defenses to protect against these attacks. This course will introduce students to this field of study and provide a comprehensive overview of the area of computer and network security.

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

II. REQUIRED RESOURCE PURCHASES
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. Define the role of planning, management, policies, procedures, and personnel in protecting the confidentiality, integrity, and availability of information.
B. Examine the nature of specific threats, such as malicious code, network attacks, and hostile content.
C. Apply the techniques and methodologies of widely used countermeasures such as access control mechanisms, firewalls, and intrusion detection systems.
D. Integrate biblical principles within the field of computer security.
V. Course Requirements and Assignments

A. Textbook readings 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 (3)

Discussion boards are collaborative learning experiences. Therefore, the student is required to provide a thread in response to the provided prompt for each forum. Each thread must be at least 300 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 150 words. All assertions in your thread and replies must be supported by Reading & Study materials, good examples, thoughtful analysis, and at least 2 scholarly resources.

D. Labs (6)

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. Quizzes (6)

Each quiz will cover the Reading & Study material for the module/week in which it is assigned. Each quiz will be open-book/open-notes, contain 8 multiple-choice and 2 short answer questions, and have a 45-minute time limit.

F. Midterm Exam

The Midterm Exam will cover the Reading & Study material for Modules/Weeks 1–4. The Midterm Exam will be open-book/open-notes, contain 46 multiple-choice and 4 short answer questions, and have a 1-hour and 30-minute time limit.

G. 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 46 multiple-choice and 4 short answer questions, and have a 1-hour and 30-minute time limit.

VI. Course Grading and Policies

A. Points

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (1 at 40 pts, 2 at 50 pts ea)</td>
<td>140</td>
</tr>
<tr>
<td>Labs (6 at 100 pts ea)</td>
<td>600</td>
</tr>
<tr>
<td>Quizzes (6 at 10 pts ea)</td>
<td>60</td>
</tr>
<tr>
<td>Midterm Exam (Modules 1–4)</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam (Modules 1–8)</td>
<td>100</td>
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</tbody>
</table>
B. Scale

C+ = 820–839   C = 780–819   C- = 760–779   F = 0–759

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 class 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 501


<table>
<thead>
<tr>
<th>MODULE/ WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
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<tbody>
<tr>
<td>1</td>
<td>Kim &amp; Solomon: chs. 1–2 1 presentation</td>
<td>Course Requirements Checklist  Class Introductions  DB Forum 1  Quiz 1</td>
<td>10 0 50 10</td>
</tr>
<tr>
<td>2</td>
<td>Kim &amp; Solomon: chs. 3–4 1 presentation Lab 1 Worksheet</td>
<td>Lab 1: Scanning  Quiz 2</td>
<td>100 10</td>
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<tr>
<td>3</td>
<td>Kim &amp; Solomon: ch. 5 1 presentation Lab 2 Worksheet</td>
<td>Lab 2: Enumeration  Quiz 3</td>
<td>100 10</td>
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<tr>
<td>4</td>
<td>Kim &amp; Solomon: ch. 6 1 presentation</td>
<td>DB Forum 2  Midterm Exam</td>
<td>40 100</td>
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<tr>
<td>5</td>
<td>Kim &amp; Solomon: ch. 7 1 presentation Lab 3 Worksheet</td>
<td>Lab 3: Vulnerability Scanning  Quiz 4</td>
<td>100 10</td>
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<tr>
<td>6</td>
<td>Kim &amp; Solomon: chs. 8–9 1 presentation Lab 4 Worksheet</td>
<td>DB Forum 3  Lab 4: Exploitation  Quiz 5</td>
<td>50 100 10</td>
</tr>
<tr>
<td>7</td>
<td>Kim &amp; Solomon: chs. 10–11 1 presentation Lab 5 Worksheet</td>
<td>Lab 5: Malware  Quiz 6</td>
<td>100 10</td>
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<tr>
<td>8</td>
<td>Kim &amp; Solomon: chs. 12, 14–15 1 presentation Lab 6 Worksheet</td>
<td>Lab 6: IT Security Policy  Final Exam</td>
<td>100 100</td>
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**TOTAL** 1010

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.