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
BMIS 312
ADVANCED OBJECT-ORIENTED PROGRAMMING

COURSE DESCRIPTION
In-depth study of the advanced features of Java, with an emphasis on the “why” as well as the “how to” of programming in the Java language. This course also prepares students for the Sun Certified Java Programmer exam. (Formerly ISYS and CMIS 312)

RATIONALE
Currently, Java is one of the leading development languages used in today’s business and web applications; therefore, students who wish to make their BMIS-related careers more lucrative will want to obtain a practical familiarity with it. BMIS 312 builds on the lessons of BMIS 212 with an emphasis on programming with objects and advanced Java features. While certification is not the main goal, certification makes an individual more attractive and beneficial to potential employers, and to this end, students will want to seriously consider taking the Oracle’s Java Programmer I exam. The purpose of BMIS 312 is first to ground students more firmly in object-oriented development, and secondly to help them to prepare to pass the Java Programmer I exam. (Student’s Choice). Students should note that preparing for and passing the Java Programmer I exam requires considerable study and preparation beyond the requirements of this course. After completion of this course, it is recommended that students wishing to certify take advantage of one or more of the third party test prep programs prior to taking the Java Programmer I exam.

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. Describe the relevance of course material to a biblical worldview.
B. Demonstrate the ability to build object-oriented applications.
C. Employ the use of regular expressions on string and character data types.
D. Compile relevant applications using generic data structures.
E. Apply recursive concepts by using recursion in programming applications.

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 (2)
   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 300–500 words and demonstrate course- and Bible-related knowledge. In addition to the thread, the student is required to reply to at least 2 other classmates’ threads. Each reply must be 250–350 words. At least 1 citation must be included for each thread and reply. Current APA formatting is required for all citations.
D. Assignments (8)
   The student is required to complete 8 assignments that will give him/her an opportunity to demonstrate mastery of the lessons learned during the associated module/week.
E. Quizzes (5)
   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 10 multiple-choice and true/false questions, and have a 20-minute time limit.
F. Final Exam
   The student will complete a comprehensive Final Exam that covers all of the course material. The Final Exam will be open-book/open-notes, contain 50 true/false and multiple-choice questions, and have a 1-hour and 15-minute time limit.

VI. **Course Grading and Policies**

A. Points

   | Course Requirements Checklist | 10 |
Discussion Board Forums (2 at 50 pts ea) &nbsp; 100  
Assignments (8 at 70 pts ea) &nbsp; 560  
Quizzes &nbsp; (5 at 28 pts ea) &nbsp; 140  
Final Exam &nbsp; 200  
**Total** &nbsp; 1010

**B. Scale**  
A = 900–1010  
B = 800–899  
C = 700–799  
D = 600–699  
F = 0–599

**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

### BMIS 312


<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>Deitel &amp; Deitel: ch. 8</td>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2 presentations</td>
<td>Class Introductions</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DB Forum 1</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assignment 1</td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td>Deitel &amp; Deitel: ch. 9</td>
<td>Assignment 2</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>2 presentations</td>
<td>Quiz 1</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>Deitel &amp; Deitel: ch. 10</td>
<td>Assignment 3</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Quiz 2</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>Deitel &amp; Deitel: ch. 14</td>
<td>Assignment 4</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Quiz 3</td>
<td>28</td>
</tr>
<tr>
<td>5</td>
<td>Deitel &amp; Deitel: ch. 16</td>
<td>Assignment 5</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Quiz 4</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>Deitel &amp; Deitel: ch. 18</td>
<td>DB Forum 2</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Assignment 6</td>
<td>70</td>
</tr>
<tr>
<td>7</td>
<td>Deitel &amp; Deitel: ch. 20</td>
<td>Assignment 7</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Quiz 5</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>Deitel &amp; Deitel: ch. 21</td>
<td>Assignment 8</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1 presentation</td>
<td>Final Exam</td>
<td>200</td>
</tr>
</tbody>
</table>

**TOTAL 1010**

DB = Discussion Board

**NOTE:** Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.