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 <u>not</u> be used to purchase course materials.

LIBERTY UNIVERSITY

COURSE SYLLABUS

CSIS 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 BMIS 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 CSIS-related careers more lucrative will want to obtain a practical familiarity with it. CSIS 312 builds on the lessons of CSIS 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 CSIS 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. Blackboard recommended browsers

D. 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. Demonstrate the ability to manipulate string and character data types.

D. Compile relevant applications using generic data structures.

E. Demonstrate an understanding of stack and recursive operations.

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.

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.

F. Final Exam

The student will complete a comprehensive Final Exam that covers all of the course material.

VI. Course Grading and Policies

A. Points

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

B. Scale

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

C. Quizzes/Tests/Exams

For timed quizzes/tests/exams, the student is required to complete the quiz/test/exam within the assigned time. Points will not be granted for questions completed after the time limit.

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.

LIBERTY UNIVERSITY

COURSE SCHEDULE

CSIS 312

Textbooks: Deitel & Deitel, *Java: How to Program* (2015).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Deitel & Deitel: ch. 8 2 presentations	Course Requirements Checklist Class Introductions DB Forum 1 Assignment 1	10 0 50 70
2	Deitel & Deitel: ch. 9 2 presentations	Assignment 2 Quiz 1	70 28
3	Deitel & Deitel: ch. 10 1 presentation	Assignment 3 Quiz 2	70 28
4	Deitel & Deitel: ch. 14 1 presentation	Assignment 4 Quiz 3	70 28
5	Deitel & Deitel: ch. 16 1 presentation	Assignment 5 Quiz 4	70 28
6	Deitel & Deitel: ch. 18 1 presentation	DB Forum 2 Assignment 6	50 70
7	Deitel & Deitel: ch. 20 1 presentation	Assignment 7 Quiz 5	70 28
8	Deitel & Deitel: ch. 21 1 presentation	Assignment 8 Final Exam	70 200
		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**.