SOUTHEAST Technical College

Southeast Tech · · Computer Information Systems

Advanced Object Oriented Programmin

CIS-249 1

Fall Term 2022-2023 School Year   Section 1   3.00 Credits   08/22/2022 to 12/09/2022   Modified 08/16/2022

🖥 Course Description

Provides students with the knowledge necessary to understand, write and debug two and three tier, object-oriented applications using the Java programming language. Topics covered include Object Oriented Application Development (OOAD), UML (Unified Modeling Language), Web server support for Java, Java Beans, Sockets, Ports, and JDBC (Java Database Connectivity). Also covers accessing DBMS (Database Management Systems) using SQL statements imbedded in Java programs and using HTML web pages combined with JSP's (Java Server Pages). A three tier, database driven business application is developed during the course and deployed for use on both a local area network and for use on the Internet. Prerequisite: CIS 149

📶 Outcomes

- Recognize and define certain words, terms, expressions, and phrases associated with object oriented programming (OOP).
- Analyze a problem and design a viable OOP software solution based on the analysis.
- Implement an established software development process (design, implement, document and test).
- Design and implement web-based, multi-tier OOP applications.

◎ Additional Outcomes

📘 Course Materials

Murach's Beginning Java with Eclipse

Author: Joel Murach and Michael Urban
Publisher: Mike Murach & Associates, Inc.
ISBN: 978-1-890774-89-9
Price: $57.50

This text is used in both CIS149 & CIS249.

eBook also available (ISBN 9781943872299)

≔ Deliverables

Assignments

Assignments are to turned in via MyTech while quizzes and tests are to be completed online in the Oracle online curriculum.

✔ Evaluation Procedures and Grading

Criteria

Type	Weight	Topic	Notes
Exams	60%		Four exams will be given after major topics. Exams will consist of open book performance tests including coding, documenting and debugging Java programs. Make-up exams are not available unless mutually agreed to and scheduled *at least 24 hours before the due date.*
Assignments	40%		All assignments have a due date posted on myTech. No assignments will be accepted after the due date unless arrangements have been made with your instructor *at least 24 hours before the due date*

Breakdown

Grade	Range	Notes
A	89.5 to 100	
B	79.5 to 89.49	
C	69.5 to 79.49	
D	59.5 to 6.49	
F	0 to 59.49	

:: Additional Items

📅 Course Outline

When	Topic	Notes
Unit 1 Week 1-4	Arrays, Collections & Generics	In this unit, we'll briefly review material from CIS149, before moving on to Ch. 10 & Ch. 14 from our text.
Unit 2 Week 5-8	Inheritance, Polymorphism & Encapsulation	In this unit we'll cover Ch. 11 & Ch. 12 from our text and (as time allows) Ch. 16
Unit 3 Week 9-12	Intro to Web DB using Java	In this unit, we'll begin working on an n-tier web application using JSPs.
Unit 4 Week 13-16	Advanced OOP Web DB using Java	In this unit we'll continue building out our n-tier web application, adding database support using a JDBC connection to a MySQL database instance.