



COURSE NUMBER: CSCI 127

CREDITS: 3

**COURSE TITLE: INTRODUCTION TO COMPUTER SCIENCE
AND PROGRAMMING II - LABORATORY**

CO-REQUISITES: CSCI125

Weekly Hours: 3

Lecture: 0

Lab: 3

Total Hours: 3

Total Weeks: 13

COURSE DESCRIPTION:

This course is a practical introduction to program development and testing in Java. It is intended for students taking CSCI125 at the same time to reinforce the concepts taught, such as program design, appropriate use of data types and control structures, fundamental algorithms, elementary data structures, abstract data types, object-oriented programming through practical lab assignments and programming projects.

TEXTBOOK: Tony Gaddis, Godfrey Muganda: Starting Out with Java: From Control Structures through Data Structures, 3rd Edition. Pearson. 2016. ISBN 0134038177 • 9780134038179.

LEARNING OUTCOMES:

By successful completion of this course, students should be able to:

- Use appropriate tools for software development
- Develop, test and evaluate programs
- Use good and defensive programming style
- Use appropriate data types, data structures, and control structures to solve problems
- Use recursive algorithms to solve problems
- Develop object oriented programming solutions



COURSE CONTENT:

Week	Topic	Chapter
Week 1	Introduction to program development in Java	
Week 2	Introduction to program development tools	2
Week 3	Introduction to Java, File IO	3,4
Week 4	Methods, Functional decomposition	5
Week 5	Problem solving with methods, Debugging / Midterm Project	
Week 6	Object Oriented Design	6
Week 7	Using Array Structures	7
Week 8	Sorting and Searching Algorithms	7
Week 9	Recursive Algorithms, Object Oriented Design	16, 8
Week 10	Program development and testing/ Final Project	
Week 11	Enumerated data types, Text processing and Wrapper classes	8, 9
Week 12	Abstract Data Types, Inheritance	10
Week 13	Polymorphism, Exception Handling	11

EVALUATION:

Attendance	5%
Lab Assignments	30%
Midterm Project	30%
Final Project	35%
Total	100%



CHEATING:

Students cheating on tests and exams will receive a “F” grade in this course.

If a student misses an exam, a mark of zero will be assigned unless there are extenuating circumstances. In such cases, the proportion of grade assigned to the missed exam will be added to the proportion assigned to the final exam. The final exam will be held during exam week. NO consideration will be given to any student wishing to write the exam at any other time than that assigned.

It is a student’s responsibility to know and follow the school’s policies regarding cheating on exams.

The school’s policy regarding electronic devices is that any student who has a cell phone or other unauthorized electronic device (ie. Ipad, laptop, playbook, etc.) on their person or around their desk during an exam will be guilty of cheating and will a grade of “F” for the course.