

COURSE SYLLABUS DSC113: COMPUTER PROGRAMMING I SUMMER QUARTER 2025

QUARTER: SUMMER QUARTER 2025

COURSE SYLLABUS FOR: DSC113 COMPUTER PROGRAMMING I

CREDIT HOURS: 5 CREDITS

INSTRUCTOR:

INSTRUCTOR EMAIL:

INSTRUCTOR OFFICE HOURS:

COURSE DESCRIPTION: This course introduces the basic concepts of object-oriented programming including class design, simple data types, arithmetic and logic operators, repetition structures, arrays and object data structures, problem-solving, algorithm design, procedural abstractions and software design, modular programming, debugging, testing, and documentation.

PREREQUISITES: Introduction to algebra

TEXT: Introduction to Java Programming and Data Structures, Liang, 11th Edition, ISBN: 9780134670942

LATE WORK POLICY: All students are expected to submit homework assignments electronically on the date specified on the syllabus No late homework will be accepted and the student will receive a "0" (zero) for the homework assignment. Should the student refuse to complete the assigned work for the class, it could result in the student failing the class. All work assigned is expected to be completed on the date assigned. The instructor reserves the right to

alter the schedule as necessary. Please be sure to check your email/Moodle for any changes to the schedule.

PLAGIARISM AND COPYRIGHT INFRINGEMENT POLICY: Work that is found to be plagiarized receives a grade of zero and often causes a student to fail a class. Documentation of plagiarism is added to the student's academic file as a violation of accepted student conduct and is subject to disciplinary action. Plagiarism is the use of another person's exact words, or their ideas written in the student's words without giving the original author credit.

Plagiarism can result from any of the following:

- Quote material directly without using quotation marks.
- Paraphrase the original so that many of the phrases are the same as the original. A
 good rule is no more than 3 or 4 words in a row should be the same as the original.
- Copy the original sentence pattern, substitution synonyms for key words.

100%

Neglect to indicate the source of the original material.

ASSESSMENTS:

Total

Content	
Lab Assignments	40%
Midterm Exam	25%
Final Exam	25%
Participation	10%

COURSE GRADE: A = 93%-100%

B = 85%-92%

C = 77%-84%

D = 70%-76%

F = below 70%

TENTATIVE CLASS SCHEDULE:

(Subject to change)

Week	Content Covered	Assignments & Assessment Due
Week 1:	Computer basics and programming languages Flow chart, pseudocode develop, compile and execute Java programs Java basics: identifiers, data types, arithmetic operators Evaluate Java expressions, Scanner and Math classes	Lab:Program 1-Friday
Week 2:	Conditional operators and selections Generating random numbers and more selections Introduction to mathematical functions Characters, Strings and String class	Lab:Program 2-Friday
Week 3:	More on String operations and console input and output The need of loops and for loop While and do while loops	Lab:Program 3-Friday Midterm Exam-Thursday
Week 4:	Defining and calling a method Passing parameters to a method and method returning a value Introduction of arrays and single-dimensional array Passing arrays to methods, method returning an array, Arrays class, arrays comparison, sorting and searching	Lab:Program 4-Friday
Week 5:	Multidimensional Arrays Defining classes and creating objects using constructors Array of objects and passing objects to methods Java library classes, immutable Objects and classes	Lab:Program 5-Thursday Final Exam- Friday