

CSC 301 - A CONTEMPORARY PROGRAMMING LANGUAGE

CREDIT HOURS: 1-3

PREREQUISITES: 6 hours of computer science or the equivalent. Additional prerequisites may vary with different languages.

GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

Language constructs and applications area. Control structures, Input-Output, data structures. Use of language in problem solution implementation. May be repeated once for a different language.

PURPOSE OF COURSE

To introduce, and cover in breadth and depth, an important contemporary subject that is not yet in the curriculum. The specific goals depend on the specific subject.

EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Apply a disciplined approach to problem solving and algorithm design.
2. Utilize the following: strategies for problem solving, techniques for analyzing problems and defining requirements, tools for representing algorithms, and methods for verifying and validating algorithms and programs.
3. Write programs in a contemporary programming language.
4. Design and, by means of the programming language being learned, implement imperative solutions to moderately complex problems.
5. Demonstrate a solid knowledge of and an ability to properly use these programming features and facilities: data types, fundamental data structures (arrays, records, and arrays of records) control structures, procedures, functions, parameters, text files, and binary files.
6. Work cooperatively on software development projects.

CONTENT

Depends on the specific subject.

TEXTBOOK

Depends on the specific subject.

REFERENCES

Depends on the specific subject.