

COLLEGEWIDE COURSE OUTLINE OF RECORD

EECT 128, INTRODUCTION TO C PROGRAMMING

COURSE TITLE: Introduction to C Programming
COURSE NUMBER: EECT 128
PREREQUISITES: EECT 112 Digital Fundamentals.
SCHOOL: Technology
PROGRAM: Electronics and Computer Technology
CREDIT HOURS: 3
CONTACT HOURS: Lecture: 2 Lab: 2
DATE OF LAST REVISION: Fall, 2012
EFFECTIVE DATE OF THIS REVISION: Fall, 2013

CATALOG DESCRIPTION: An introduction to the “C” programming language. No programming experience is needed. After completing this course the students will have a good understanding of programming concepts, and terminology and should be able to pick up another programming language if interested. The course is designed to prepare students to use C to solve technical problems such as programming microprocessors.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Explain the purpose and principles of object-oriented and modular software design techniques.
2. Demonstrate step-by-step solutions to problems using correct problem solving technique.
3. Write, compile, and debug C programs.
4. Correctly use C variables and constants.
5. Use mathematical and I/O library functions.
6. Use decision constructs such as *if* and *switch/case* statements.
7. Use looping constructs such as *while* and *for*.
8. Implement data in arrays.
9. Write interactive programs using Windows input and output and graphics methods.
10. Access data using pointers.

COURSE CONTENT: Topical areas of study include –

Background history
Structured, modular, and object-oriented programming
Using flowcharts
Number systems representation/conversion in C
Preprocessor Commands
Standard I/O in “C”
Arithmetic operators
Data types and variables and scope rules

Functions in C
Selection structure, relational and logical operators
Bit wise operations
Repetition structure (Loops)
Pointers
C Strings
One and two dimensional arrays
Searching arrays
Structures

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

COPYRIGHT STATEMENT:

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

ADA STATEMENT:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.