

UNION COUNTY COLLEGE MASTER COURSE SYLLABUS

COURSE NUMBER & NAME: CST 115 - Introduction to Computer Programming

LECTURE/LAB HOURS: 2 lecture and 2 laboratory hours per week.

CREDITS: 3 credit hours.

PREREQUISITES: ENG 096, MAT 019, or MAT 022

COURSE DESCRIPTION: This course is an introduction to computers and programming. Topics include: components of the computer system, problem solving techniques, processing data, manipulating files, creating mathematical functions, controlling processes using the BASIC programming language.

REQUIRED MATERIALS (CHECK WITH BOOKSTORE FOR LATEST EDITION):

Click on the Cranford Campus Bookstore link below.

<http://www.bkstr.com/webapp/wcs/stores/servlet/StoreCatalogDisplay?storeId=10686&langId=-1&catalogId=10001>

Additional Resources: USB 2.0 Flash Drive

COURSE OBJECTIVES/STUDENT LEARNING OUTCOMES/CORE COMPETENCIES:

At the completion of the course, the student will:

1. Understand the major components of a microprocessor and a computer system
2. Learn the history of computer programming
3. Comprehend the steps needed to develop a computer program
4. Learn the generic commands inherent to any computer programming language.
5. Use the internet to retrieve information to be used for the basis for assignments.
6. Understand basic Boolean operations.
7. Use knowledge gained in class for a basis for self-directed learning.
8. Acquire proficiency in the retrieving, analyzing, summarizing, and critiquing information.

Union County College does not discriminate and prohibits discrimination, as required by state and/or federal law, in all programs and activities, including employment and access to its career and technical programs.

Experiential Learning:

Students must complete an experiential learning activity that connects course content to career applications. This activity may be a content specific assignment or practical skill that is applied within a course assignment. This assignment supports the general education learning outcomes of scientific/critical thinking and quantitative reasoning; oral and written communication; and information literacy/technological competency.

Americans with Disabilities Act (ADA):

Union County College offers reasonable accommodations and/or services to persons with disabilities. Any student who has a documented disability and wishes to self-identify should contact the Coordinator of Disability Support Services at (908) 709-7164, or email disabilitysvc@ucc.edu. Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. In order to receive accommodations, students must be registered with Disability Support Services. Students should register with the office as soon as possible. Accommodations are not official until the Faculty Accommodations Alert Form(s) are issued from the student to his/her instructor(s).

Family Educational Rights and Privacy Act (FERPA):

The FERPA Statement can be found at <https://www.ucc.edu/admissions/the-family-education-rights-and-privacy-act/>

TOPICAL OUTLINE FOR THE COURSE:

Week 1	Introduction of the course: Hardware and Software
Week 2	Programming Introduction
Week 3	Variables and Constants (numeric and string)
Week 4	Assignment Statement; Arithmetic Operators
Week 5	Hierarchy of Calculations
Week 6	Output: PRINT, LPRINT, Statements
Week 7	Data Input: READ, DATA, RESTORE, INPUT Statements
TEST 1	
Week 8	Formatting the output: PRINT USING Statement
Week 9	Transfer of control: IF...THEN...ELSEIF
Week 10	Program Logic: Flowcharts, Relational operators
Week 11	Accumulators and Counters
Week 12	Looping: FOR/NEXT, DO/LOOP, WHILE...WEND Statements
TEST 2	
Week 13	Subscripted variables – single and double, DIM Statement

Week 14 Subroutines: SUB, ENDSUB, and CALL Statements

Week 15 Graphics LINE, CIRCLE, and PAINT Commands

FINAL EXAM

COURSE ACTIVITIES:

Course activities vary from course to course and instructor to instructor. Below is a listing of some of the activities students can anticipate in this course:

Reading assignments: students will engage and review topics.

Class discussions: students will actively participate in discussions and critiques.

Lectures: This format will include question and answer sessions to provide interactivity between students and instructor.

Computer laboratory: Students will practice computer programming statements and commands and programming techniques in exercises using computers.

STUDENT EVALUATION:

The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, quizzes, class participation, projects, and homework assignments.

See individual instructor's course handouts for grading systems and criteria (point value for each assessment component in course, e.g., tests, papers, presentations, attendance), number of papers and examinations required in the course, and testing policy including make-ups and/or retests.

GRADING STANDARD:

A	Excellent
B+	Very Good
B	Good
C+	Above Average
C	Satisfactory
D+	Below Average
D	Unsatisfactory
F	Failing

For other grades, see the current UCC catalog.

COLLEGE POLICIES:

The current college catalog and student handbook are important documents for understanding your rights and responsibilities as a student in the UCC classroom. Please read your catalog and handbook as they supplement this syllabus, particularly for information regarding:

- Academic Integrity Policy
- Student Behavior Code

NOTIFICATION FOR STUDENTS WITH DISABILITIES

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ADDITIONAL SUPPORT/LABS:

UCC provides confidential advising and counseling services free to all students through the Counseling Services Department. For more information about advising and counseling services, contact the Counseling Services Department at 908.709.7075, or visit the website at:

<http://www.ucc.edu/admissions/counseling/>.

UCC offers free academic support to all students registered for transfer and institutional credit-bearing courses at UCC, through the Academic Learning Centers (ALCs). For more information, call (908) 709-7526 or visit the ALC website at www.ucc.edu/academics/ALC.