

Northeastern Technical College

Computers and Programming

INSTRUCTOR: Polly McLain
COURSE TITLE: Computers and Programming
COURSE PREFIX AND NO.: CPT 114
CREDIT HOURS: 3.0
PHONE: 921-1452 or 1-800-921-7399 extension 1452
OFFICE: Room 535
E-MAIL: pmclain@netc.edu

PREREQUISITES: Keyboarding skills or permission of instructor .

COURSE DESCRIPTION:

This is an introductory course to computer concepts, usage and programming. Topics will include basic concepts of computer architecture, files, memory and input/output devices. Programming will be done in a modern high-level procedural language (QBasic).

Upon successful completion of this course, the student should be competent to perform the following: Identify the components of a computer system; Identify the steps of program development; Design, code, test, debug and document elementary structured programs in a modern high-level structured language that require conditional processing and looping; Use application packages to perform word processing, spreadsheets, and databases; Use Windows operating systems.

TEXTBOOK(S):

Information Techonology In The 21st Century, Milligan, First Edition, McGraw-Hill Publishing Co., 2002

MATERIALS: (* Denotes those to be purchased by the Student)

* Flowcharting Template
Diskette (For Backup Purposes - optional)

GRADING:

Part 1: Textbook:

Tests will be given on the textbook material. These tests will be primarily objective with some short problems depending on the materials being covered.



Part 2: Flowcharting and BASIC:

The bulk of this material will be presented in lectures and in class handouts. It is imperative that you attend class because of this. If the student misses a class, it is his/her responsibility to obtain the materials from another student. **The Instructor is not responsible for updating the student on missed work.**

Flowcharting projects should be done neatly and with a template. Programming projects must include the following: Narrative, Program Listing, Sample Output and a Structured Flowchart.

Part 3: Research Paper:

The student must prepare a research paper on a computer-related topic. The Instructor prior to start of research must approve this topic. This paper must be at least 3 pages in length and no more than 5 pages, and prepared in MLA format. Research must include a minimum of 4 sources, 2 of which must come from the Internet.

GRADING SCALE:

A -----	100-93	Final Grade	
B -----	92-85	Projects -----	40%
C -----	84-78	Test -----	20%
D -----	77-70	Research Paper -----	20%
F	Below 69	Final -----	20%

There will be no retests or makeup tests given without a valid excuse for missing the exam. A grade of "F" will be recorded for any test missed. If a problem arises, a test may be taken early at an earlier agreed upon time.

All projects will be given a due date. TEN (10) points will be subtracted from the grade for late projects.

No project will be accepted more than 1 week later than assigned. A grade of "F" will be assigned the work if the time schedule is not met.

ATTENDANCE:

The student will be dropped after their:

9th absence for *Monday/Wednesday/Friday* DAY students;

6th absence for *Tuesday/Thursday* DAY students;

and **3rd** absence for *Evening* students.

NOTE: Summer students may miss no more than 2 absences at night or 8 during the day. .

The Student will be marked as Tardy when arriving after the class roll has been called. Three (3) tardies will constitute one absence.

In the event that the student misses more than the allowable absences, the Instructor, who will complete a Withdrawal form, with a grade of "F", will drop the Student. **IF the Student wishes to withdraw from the class, the STUDENT must complete a Withdrawal form, which can be found in the Student Development Office of the College.** The Student will receive a grade of "W" if the work completed to date is acceptable; a grade of "WF" will be assigned if the work is unacceptable.



****Important:***

It is the responsibility of the **STUDENT** to make arrangements to make-up any work missed due to an absence. The Student will receive a grade of “F” for any projects not completed due to an absence.

CLASS POLICY:

During either a test or lab project, anyone caught exchanging information or copying someone else’s work will receive a grade of “F” for the project or test. Also, there is to be no food or beverages in the computer lab at any time.

All lab diskettes are to be turned in to the Instructor before the student leaves the classroom. NO diskettes are to be taken from the classroom and NO diskettes are to be brought into the classroom from other areas.

No radio or headphones are allowed in the classrooms.

Electronic communication devices (pagers, cell phones, etc) are not allowed in the classroom. On call emergency personnel should see the instructor for an exemption. . (See Catalog, Page 40)

Students are required to prominently display a valid NETC photo ID at all times.

Computer user responsibilities. (See Catalog, Page 26).

- Software - protected by copyright and licensed for use by NETC only. Software may not be removed, transferred, copied or modified.
- Hardware - Computers are available for use only during scheduled or assigned hours. Student users have priority. Users may not abuse or alter any computer capabilities or settings.
- Web Access - NETC provides access to the Internet for educational and research purposes. The College prohibits use of computer facilities for hacking accounts at NETC or any other location, games, chatting, personal e-mailing, downloading programs, changing settings, browsing offensive sites or transmitting illegal, unlawful or immoral information. NETC computers may not be used for personal gain or profit. Access to personal e-mail accounts without specific permission is prohibited due to e-mail delivery of viruses.

NOTE - The NETC Computer Center monitors computer use with capabilities to track violations of computer user responsibilities. The College will impose disciplinary action for violations.

WRITTEN ASSIGNMENTS:

The Instructor reserves the right to refuse any paper, which is messy or unreadable or appears to be copied. Incorrect grammar and spelling errors will be noted. Papers will be graded on the basis of content, organization, grammar, spelling, and neatness. Papers containing any plagiarized material will result in a grade of “F” on the paper.



IMPORTANT

Students with disabilities are encouraged to contact the Vice-President for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Vice-President for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See Catalog, Page 28).

TENTATIVE CLASS SCHEDULE

Concepts

What is a Computer?

Data and Information

Components of a Computer System

Computer Software

Fundamentals of Using Windows XP

World Wide Web via Microsoft Internet Explorer

Research Paper

Introduction to Microsoft Word

Word defaults, Word wrap

Creating, Saving, and Printing a Document

Enhancing basic document

Introduction to Microsoft Excel

Creating, Saving and Printing a Spreadsheet

Editing and Formatting a spreadsheet

Formulas and Functions

Introduction to Access

Creating, saving, and adding records to a Table.

Printing records, Modifying structure, Editing and Deleting records

Querying a Database

Steps of program development

Design, code, test, debug and document elementary structured programs

Design, code, test, debug and document elementary structured programs that require conditional processing and looping,



COMPETENCIES

Upon successful completion of this course, the student should be competent to perform the following:

Course Competencies:

COURSE COMPETENCY	METHOD OF ASSESSING SKILL
Identify the components of a computer system	Test
Identify the steps of program development	Projects/Test
Design, code, test, debug and document elementary structured programs in a modern high-level structured language that require conditional processing and looping	Projects/Test
Use application packages to perform word processing, spreadsheets, and databases	Projects
Use Windows operating systems	Projects

College-Wide Competency:

NETC COMPETENCY	METHOD OF ASSESSING SKILL
The Student will be able to identify and use sources of information by utilizing information processing skills compatible with job demands in a computer-literate society	Tests and Projects

Learning Outcomes for the course:

Graduates will develop programming solutions.

