

**SNORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b> CPT	<b>PREFIX NO:</b> 114	<b>EFFECTIVE DATE</b> May 2007	<b>NEXT REVIEW DATE</b> Fall 2008		
<b>TITLE:</b> Computers and Programming		<b>CREDITS</b> 3	<b>CONTACTS</b>		
			<b>CLASS</b>	<b>LAB</b>	<b>TOTAL</b>
			3	0	3

**PREREQUISITES:** Keyboarding skills or permission of instructor

**DESCRIPTION:** This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory and input/output devices. Programming is done in a modern high-level procedural language.

**TEXTBOOK(S) OR ALTERNATIVE:** Information Technology In The 21<sup>st</sup> Century, Milligan, Glencoe, 2002

**MATERIALS (\*specifying those to be purchased by student):**

- \* Flowcharting Template
- Diskette (For Backup Purposes - optional)

**CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):**

**ACADEMIC DISHONESTY:**

Students are reminded of the college policy regarding Academic Dishonesty as outlined in the Student Code Handbook. Should a student break college policy and complete any assignment not entirely his/her own work or by using unauthorized materials, said student will receive a grade of 0/F on that assignment.

**ATTENDANCE:**

The student will be dropped after their: 9<sup>th</sup> 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.

**TARDY:**

The student will be marked as tardy when arriving after the class roll has been called. Three (3) tardies will constitute one (1) absence.

**EXCESSIVE ABSENCES:**

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.

**DISABILITIES STATEMENT:**

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 College Catalog)

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.

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.

It mandatory that all students prominently display a valid NETC photo ID at all times.

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.

COMPUTER USER RESPONSIBILITES:

Software

Software is protected by copyright and licensed for use by NETC only. Software may not be removed, 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.*

RESOURCES (A-V, persons, tools/equipment):

Personal Computers

Lab Assistants

**COURSE TOPICAL OUTLINE** (List topics and sub-topics of course) and  
**Calendar or approximate length of time devoted to topic.**

**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 2007

Word Defaults, Wordwrap

Creating, Saving and Printing a Document

Enhancing basic document

Introduction to Microsoft Excel 2007

Creating, Saving and printing a Spreadsheet

Editing and Formatting a Spreadsheet

Formulas and Functions

Introduction to Access 2007

Creating, saving, and adding records to a Table. Printing records,  
Modifying Structure, Adding additional records and Editing records,  
and Deleting records

Querying a Database (viewing select fields and using simple and  
compound conditions)

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.

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

1. Identify the components of a computer system;
2. Identify the steps of program development;
3. Design, code, test, debug and document elementary structured programs in a modern high-level structured language that require conditional processing and looping;
4. Use application packages to perform word processing, spreadsheets, and databases;
5. Use Windows operating systems.

**COLLEGE-WIDE COMPETENCY:**

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.

**INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:**

Lectures  
Projects  
Tests  
Class handouts

**EVALUATIVE METHODS TO APPRAISE OBJECTIVES:**

**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.

**FLOWCHARTING AND BASIC:**

The bulk of this material will be presented in lectures and in class handouts. It is imperative that students 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.

**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  
B = 92 - 85  
C = 84 - 78  
D = 77 - 70  
F = BELOW 69

**FINAL PERCENTAGE WEIGHT**

40% Projects  
20% Tests  
20% Research Paper  
20% Final

There will be no retests or makeup tests given. 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 one (1) week later than assigned. A grade of "F" will be assigned the work if the time schedule is not met.