INTRODUCTION TO COMPUTERS & OPERATING SYSTEMS W/LAB
CST 1010

Class Hours: 2
Laboratory Hours: 3
Credit Hours: 3
Date Revised: Fall 00

Catalog Course Description:

A study of current and projected uses of computers in business, scientific, educational, and engineering fields. Topics include hardware, software and software uses, systems, social issues, and options in those fields using computer systems. Emphasis is on microcomputers, word processing, spreadsheets and other application packages found in business and industry today. The course is for Non-CST majors only

Entry Level Standards:

The entry level student is not expected to have familiarity with computers. The student should be able to use a standard keyboard and maintain 23 words per minute with 5 or fewer errors.

Prerequisites:

None

Textbook(s) and Other Reference Materials Basic to the Course:

Office 2000 Brief Concepts and Techniques, by Gary Shelly
Qty 2 - DS/HD 3-1/2" Floppy Diskettes w/blank labels
Suggested Optional Supplementals: Outside reading (related magazines) is strongly encouraged.

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Lab</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Using Computers</td>
<td>Intro to Windows</td>
</tr>
<tr>
<td>2</td>
<td>Application Software and World Wide Web</td>
<td>Windows Operating Systems</td>
</tr>
<tr>
<td>3</td>
<td>Continuation of Application Software</td>
<td>Windows Operating Systems</td>
</tr>
<tr>
<td>4</td>
<td>Central Processing Unit</td>
<td>Intro to Word Processing</td>
</tr>
<tr>
<td>5</td>
<td>Continuation of CPU</td>
<td>MS Word</td>
</tr>
</tbody>
</table>
6 Input Processing  
Lab: MS Word

7 Output Processing  
Lab: Intro to Spreadsheet

8 Introduction to Computer Memory  
Lab: Excel

9 Continuation of Storage  
Lab: Excel

10 The Internet  
Lab: Internet

11 Operating Systems and Utilities  
Lab: Internet

12 Communication and Network  
Lab: Email

13 Database and Information Management  
Lab: Database

14 Multimedia  
Lab: Database

15 Security and Privacy, Reviews

16 Final Test

II. Course Objectives*

A. Develop a working understanding of the terminology associated with modern day computers and associated equipment. III

B. Become familiar with applications software found in business and industry. IV

C. Become familiar with the Word Processor. IV

D. Become familiar with microcomputer operating systems and the PC microcomputer equipment. II,IV

E. Become familiar with spreadsheet and application software. IV

F. Become familiar with a variety of computer hardware devices. II

G. Become familiar with the effect the computer has had on society and the job market. IX

H. Develop an understanding of how the computer can be utilized for other classes/coursework. VII

I. Demonstrate a fundamental knowledge of the concepts of data, entry, checking, storage and retrieval. II,IV

J. Demonstrate a fundamental knowledge of the need for security, data accuracy and ethical standards. III
*Roman numerals after course objectives reference goals of the Computer Science Technology program.

III. Instructional Processes*:

Students will:

1. Use Windows, DOS commands and utilities to perform practical tasks for personal computing. *Communication Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Active Learning Strategy*

2. Use computer software packages for submitting lab assignments. *Active Learning Strategy, Communication Outcome, Technological Literacy Outcome*

3. Use the Internet in discovering new information in solving problems. *Communication Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome*

4. Practice the elements of the work ethic such as punctuality, professionalism, dependability, and contribution. *Personal Development Outcome, Transitional Strategy*

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

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

1. Demonstrate proficient use of terminology associated with computers, software and applications products. A,B,C,D,E,F,G,H,I,J

2. Demonstrate an understanding of the use of hardware, firmware, LAN, and systems terminology. A,B,C,D,E,F,G,H,I,J

3. Log-on/boot-up terminal and microcomputer systems. A,E,I,J

4. Demonstrate effective use the word processor software product. B,C,H

5. Use DOS and Windows environment. D,H

6. Demonstrate proficient use of the keyboard and mouse in accessing programs, data and/or files. C,D,F

7. Perform access activities using on-line utilities with email and the Internet. B,D,H

8. Demonstrate proficient use of the desktop tools and menus. A,D,H


10. Gain an understanding of networking and main frame environments. A,F,I


12. Transfer data files to/from one storage device to another. B,D,I

13. Produce reports using a computer, software product and media resources. B,C,H,I,J
14. Demonstrate proficient use of all PC resources in accessing files, entering data, keying commands and utilizing the microcomputer. A,B,C,D,E,F,G,H,I,J

15. Demonstrate proficient use of the spreadsheet and other software products. B,E,H

16. Read documentation associated with a public domain and/or commercial software product. A,I

17. Identify external, internal and peripheral computer devices and demonstrate a working knowledge of the function of each. A,F

18. Read articles from magazines associated with the field and write short briefs about the topics. G

19. Research newspapers and/or local agencies to develop an understanding of the current local and national computer trends. G,H

20. Demonstrate an understanding of the need for data accuracy and security. H,I

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

Students are evaluated primarily on the basis of tests and laboratory assignments. Each instructor must provide more details the first week of class.
There will be a minimum of three major tests. There will be no makeup tests unless prior arrangements are made with the instructor.

B. Laboratory Expectations:

Lab assignments must be completed and submitted at the expected date and time. There will be a penalty for submitting late assignments. Students will receive an "F" in the course if at least 70% of total lab credits are not earned.

C. Field Work:

N/A

D. Other Evaluation Methods:

This information, if applicable, will be provided by the instructor in full detail during the first week of class via syllabus supplement.

E. Grading Scale:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>93 – 100</td>
<td>A</td>
</tr>
<tr>
<td>88 – 92</td>
<td>B+</td>
</tr>
<tr>
<td>83 – 87</td>
<td>B</td>
</tr>
<tr>
<td>77 – 82</td>
<td>C+</td>
</tr>
<tr>
<td>70 – 76</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
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VI. Policies:
Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.