Tech Prep
In
Computer Science

A consortium of High School, Community College and University Departments

This document contains student competency requirements for the specialized area of:

**Introduction to Computer & Information Technology**

**CS 115**

5 Credits

To receive college credit a student must complete all competencies and demonstrate 80% proficiency. It is requested the high school instructor initial each competency area completed by the student. By initialing these competencies, the instructor is verifying the student has completed the required work at a level that merits college credit.

Revision date: January 2008

When articulating this course for Tech Prep credit, high schools are requested to coordinate with the WWCC Computer Science Department Chair.
Introduction to Computer & Information Technology

COMPETENCY AREAS: Credit Earned

Computer’s Role in Society .................................................. ☐

Computer Structure ........................................................... ☐

Computer Storage and Access .......................................... ☐

Purchasing Computers ...................................................... ☐

E-Mail, Internet and Networks ........................................... ☐

Ethics ................................................................................. ☐

Student Name: ___________________________________________

High School: ______________________________________________

Student WWCC Identification Number: _______________________  

_________________________________________________

(high school instructor signature)

High school instructor signature verifies student has successfully completed 100% of the competencies with 80% proficiency and has been awarded a local high school grade of A or B.

Date: ___________________
Introduction to Computer
& Information Technology
CS 115

Rating Scale for Performance Tasks:

This course provides an in-depth study of computer technology including concepts, terminology, history, usage, ethics, hardware and software.

For individual competencies the following grading criteria will be observed.

4 - Highly Skilled/Proficient
   Student can complete the competency accurately.
   Student can direct others to do the competency.
   Student needs little supervision.
   Written tests, 90%

3 – Skilled/Performs with Minimum Supervision
   Student can perform all parts of the competency.
   Student needs only completed work spot-checked.
   A student meets speed and accuracy requirements (if any).
   Student needs minimum supervision.
   Written tests, 80%

2 - Limited Skills/Performs with Close Supervision
   Student can perform most parts of the competency.
   Student needs help with only the most difficult parts.
   Student needs close supervision.
   Written tests, 70%

1 – Exposure/Introductory
   Student can do simple basics of this competency with very close supervision.

0 - No exposure/Not Taught
   Student has had no exposure to this competency
Introduction to Computer & Information Technology

UNIT 1: Computer’s Role in Society.

1.1 The student shall demonstrate knowledge of the computer’s role in society through preparation and submission of a two to ten page, double spaced paper discussing a minimum of the following:

1.1.1 General societal impact and history of computer development.

1.1.2 Impact on business productivity.

1.1.3 Personal impact. (Impact upon student preparing the report.)

UNIT 2: Computer Structure

2.1 Student must demonstrate knowledge of the structure of the computer through the preparation of a two to ten page illustrated paper that discusses the basic structure of the personal computer. All major common components are to be included.

2.2 Students must demonstrate the ability to use a PC accessing a minimum of three software packages and two input devices.

2.3 Students must demonstrate the knowledge of existing PC User Interfaces.

UNIT 3: Computer Storage and Access

3.1 Student must demonstrate knowledge of data storage and storage devices.

3.2 Student must demonstrate knowledge of file management, access and maintenance.
UNIT 4: Purchasing Computers.

4.1 Student must demonstrate knowledge of key considerations for purchasing personal computers by preparing a two to ten page report providing the following information:

4.1.1 User specifications concerning the projected use of the computer.

4.1.2 Specification of the computer and peripheral devices. Computer must include units for transferring data outside sources, modem, printer and monitor at a minimum.

4.1.3 A detailed price breakdown. Include all cables that do not automatically come with a peripheral device.

UNIT 5: E-Mail, Internet and Networks

5.1 Student shall demonstrate expertise in using Internet basic search techniques.

5.2 Student shall demonstrate efficient and ethical use of e-mail.

5.3 Student shall demonstrate knowledge of networks and how networks communicate.

UNIT 6: Ethics

6.1 Student will demonstrate ethical use of software, hardware and the Internet. Student will be prepared to debate the ethics of the unauthorized use of software, literature, music and works of art.

Student Portfolio documentation requirements:

1) Instructor signature verifying competence
2) Computer Role in Society paper with instructor comments / evaluation
3) Computer Structure paper with instructor comments / evaluation
4) Purchasing Computer paper with instructor comments / evaluation