

Course Competencies Template - Form 112

GENERAL INFORMATION			
Name: Diane King	Phone #: 7-7021		
Course Prefix/Number: CTS2102	Course Title: Operating System Principles		
Number of Credits: 4			
Degree Type	<input type="checkbox"/> B.A. <input type="checkbox"/> B.S. <input type="checkbox"/> B.A.S <input type="checkbox"/> A.A. <input checked="" type="checkbox"/> A.S. <input type="checkbox"/> A.A.S. <input type="checkbox"/> C.C.C. <input type="checkbox"/> A.T.C. <input type="checkbox"/> V.C.C		
Date Submitted/Revised: 11-4-2009	Effective Year/Term: 2011-1		
<input type="checkbox"/> New Course Competency <input checked="" type="checkbox"/> Revised Course Competency			
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework): <input type="checkbox"/> Yes <input type="checkbox"/> No			
The above course links to the following Learning Outcomes: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility </td> </tr> </table>		<input type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective	<input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility
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Course Description (limit to 50 words or less, <u>must</u> correspond with course description on Form 102): Students will become familiar with operating system functions and commands. Windows and Unix operating systems are covered. Topics include file management, backup and recovery procedures, multiuser functionality, communications and establishing interfaces. Prerequisites: CGS1060, COP 1332, and COP 1334. Laboratory fee. (3hr. lecture; 2hr lab).			
Prerequisite(s): CGS1060; COP1332; COP1334	Corequisite(s):		

Course Competencies: (for further instruction/guidelines go to: <http://www.mdc.edu/asa/curriculum.asp>)

Competency 1: The student will demonstrate an understanding of operating systems technologies by:

1. Describing the differences between mainframe, microcomputer and network operating systems.
2. Describing the uses of the various operating systems.
3. Describing options available in various operating systems.
4. Describing appropriate startup procedures for various operating systems.
5. Describing the Internet resources available to those interested in pursuing additional knowledge of operating systems currently available.

Competency 2: The student will demonstrate an understanding of various operating systems by:

1. Describing logon and logout procedures.
2. Describing differences in graphical and command line interfaces.
3. Describing the differences in the command structure for various operating systems.
4. Using editors in the various operating systems to create a file.
5. Describing the role of the system administrator.

Competency 3: The student will demonstrate an understanding of various file systems by:

1. Describing the structure of the file system in each operating system.
2. Describing the uses of system partitions.

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3. Creating, modifying, copying, moving and deleting files.
4. Using various commands to find files and combine files.

Competency 4: The student will demonstrate an understanding how to create batch processed operating system scripts by:

1. Describing the use of script files in various operating systems.
2. Retrieving information from a file using a script.
3. Retrieving operating system variables using a script.
4. Joining files using a script.
5. Formatting the output of files using a script.

Competency 5: The student will demonstrate an understanding how to perform advanced file processing by:

1. Using operating system commands to select information within a file.
2. Describing the use of pipes.
3. Using operating system command structures to manipulate data.

Competency 6: The student will demonstrate an understanding of shell programming by:

1. Describing the program development cycle.
2. Describing the differences in high-level languages.
3. Creating a prototype of an application.
4. Using the Bash shell (Bourne Again Shell) as the default shell.
5. Describing the functions of environment variables and shell variables.
6. Creating an application that uses shell operators.
7. Describing sequential and decision logic.
8. Describing control logic structures.

Competency 7: The student will demonstrate an understanding of operating system utilities by:

1. Describing the utilities available for file processing.
2. Describing operating system utilities used for initialization.
3. Utilizing system status utilities.

Competency 8: The student will demonstrate an understanding of remote access to an operating system by:

1. Describing a dial-up network connection.
2. Configuring various operating systems for dial-up connections.
3. Using telnet in various operating systems.

Competency 9: The student will demonstrate an understanding how to install an operating system by:

1. Describing the installation process of various operating systems.
2. Gathering the required information about the computer in order to install an operating system.
3. Installing various operating systems on a computer.

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