CIP No. 47.0104

ICS 125
Alpha Number

Computer Repair And Maintenance
Course Title

Course Description
Introduces the fundamentals of installing hardware and software and maintaining microcomputers.

Course prepared by: BIT Department April 2008

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<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<td>Lecture</td>
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<td>16</td>
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<td>Laboratory</td>
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<td>Clinical</td>
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<td>Total Credit Hours</td>
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Purpose of Course: Degree Requirement
Degree Elective X
General Education
Certification
Developmental
Other

Prerequisite(s) ICS 101, English 90's

Signature, Chair Curriculum and Assessment Committee
Mary Kei Ono
Date 11/5/2012

Signature, Dean of Academic Affairs
Keith L. Aiona
Date 11/5/12

Signature, Vice President of Academic and Student Affairs
Date 11/5/12

Last Date reviewed or revised: November 2012
I. Course Title

A. General Learning Outcomes

The student will:

1. Describe current and emerging microcomputer computer architecture (LA 1)
2. Configure, install, and upgrade hardware and software to meet specific user needs (LA 3, 4)
3. Diagnose and repair hardware and software problems (LA 3, 4)
4. Identify, evaluate, select, install, use, upgrade, and customize operating systems (LA 3, 4)

B. Student Learning Outcomes

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

1. Explain the purpose, operation, and care of microcomputer hardware components.
2. Select, install, configure, and upgrade hardware, operating systems, and supportive software.
3. Identify and use appropriate help resources to isolate, identify, and resolve microcomputer hardware and software problems.
4. Diagnose and repair installation and operational problems of operating systems and utilities; customize to meet specific user needs.

III. Course Content

This course introduces the fundamentals of installing and maintaining microcomputers.

1. Operating systems/Windows
2. PC Repair Fundamentals
3. Form Factors and Power Supplies
4. Processors and Chipsets
5. Motherboards
6. Memory and Hard Drives
7. Input/Output and Multimedia Devices
8. Internet and Security
9. Printers and Scanners

IV. Methods of Instruction

1. Demonstration
2. Audio-visual aids
3. Supervised practice
4. Lecture

V. Equipment and Materials

1. Computer Lab with several “open” computers and assorted parts
2. Computer projector
3. Electronic Storage Device
VI. Suggested Methods of Evaluation

1. Participation
2. Assignments
3. Tests

Letter grades will be assigned per CMI Grading System.