North Central
Michigan College

NCMC MASTER COURSE SYLLABUS FOR YEARS 2001-2003

DIVISION/AREA: Business and Technology   DEPARTMENT:

DIVISION DIRECTOR: Robert J. Marsh, Ph.D., P.E.   ORIGINATOR: Eugene Branigan

DEAN OF INSTRUCTION: Timothy Dykstra, Ph.D.

TOTAL HOURS OF INSTRUCTION: 3   LECTURE: 1   LAB: 2   TOTAL CONTACT HOURS: 52.8

COURSE NUMBER: CIS 125   CREDIT HOURS: 3

COURSE TITLE: PC Hardware

TRANSFERABLE   YES: NO: X   TO:

PREREQUISITE(S)/COREQUISITE(S)/ADVISORY: CIS 100

CATALOG DESCRIPTION:
An introduction to computer hardware components and maintenance and upgrade operations a PC owner might perform. This course deals with components such as system boards, adapter cards, hard and floppy disk drives, monitors, memory modules and tape backup units. This course will aid those seeking A+ certification.

GENERAL EDUCATION OUTCOMES:
- Think critically and analytically
- Write and speak effectively
- Independently acquire knowledge

COURSE OBJECTIVES & OUTCOMES:
Upon completion of this course the student should be able to do the following:
- Identify components of a PC
- Identify different operating systems
- Describe the CPU
- Describe how data is processed by the PC
- Know how data is stored and accessed on different media
- Know how the user interacts with the PC

- Install new components
- Add multimedia devices to a PC
- Know how to manipulate the BIOS of a PC
- Maintain the PC
- Troubleshoot problems with the PC

METHODS OF INSTRUCTION: Lecture (1/3), hands on lab exercises (2/3) and problems. Homework problems and exams

METHODS OF EVALUATION:

- Class / Lab participation: 10% of your final mark
  Normal class and lab contributions make up this component. Missing 4 or more classes causes you to lose this 10%.

- Review Questions and Exams: 90% of your final mark
  The chapter review questions will make up the majority of your grade, these are open book homework assignments and will be completed for each chapter. Midterm and final exam questions will come directly from the textbook so preparation for the exams is simple, read the book and study the review questions.

REQUIRED TEXTS: Andrews.   Enhanced Guide to Managing and Maintaining Your PC
                 2001, Course Technology / Thompson Learning

OPTIONAL SUPPLEMENTARY MATERIALS: PC Toolkit

Reasonable accommodations may be provided for students with documented physical, sensory, cognitive, systemic, and/or psychiatric disabilities. Please contact the Education Opportunity Program (EOP) at (231) 348-6687 to arrange services for this course.

TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

Week   Topics   Have read before class

1	Introduction, course info.	
2	How Computers Work	Chapter 1
3	How Software and Hardware Work Together	Chapter 2
4	The System Board	Chapter 3
5	Understanding and Managing Memory	Chapter 4
6	Floppy Drives	Chapter 5
7	Introduction to Hard Drives & Hard Drive Installation and Support	Chapter 6-7
8	Midterm Exam	Chapters 1-7
9	Troubleshooting Fundamentals	Chapter 8
10	Supporting I/O Devices	Chapter 9
11	Multimedia Technology	Chapter 10
12	Electricity and Power Supplies	Chapter 11
13	Supporting Windows 9x	Chapter 12
14	Understanding and Supporting Windows NT Workstation	Chapter 13
1.	Supporting Windows 2000 Professional	Chapter 14
16	Final Exam	Chapters 8-14

APPROVED FOR ADOPTION BY THE CRD/AP COMMITTEE ON _____