## University of Arkansas – Fort Smith 5210 Grand Avenue P.O. Box 3649 Fort Smith, AR 72913 479-788-7000

# General Syllabus CS 1053 Computer Hardware

Credit Hours: 3 Lecture Hours: 3 Laboratory

Hours: 0

Prerequisite: MATH 1403 College Algebra or higher math, or exemption by placement

score

Effective Catalog: 2018-2019

#### I. Course Information

### A. Catalog Description

Introduction to the physical components, component concepts, interaction of components, and how components respond to instructions by software. Components examined include power supplies, motherboards, processors, memory, storage devices, input/output devices, computer video devices, network devices, and basic computer maintenance and troubleshooting.

#### **B.** Additional Course Information

This is a foundation course which will provide the student with knowledge and skills that will enable understanding, troubleshooting, and repairing of basic computer problems.

#### **II.** Student Learning Outcomes

#### A. Subject Matter

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

- 1. Understand the roles that the various physical parts of a computer play and how they work together.
- 2. Troubleshoot PC computer hardware problems.
- 3. Select appropriate computer parts and install them.
- 4. Disassemble and reassemble a personal computer.

## **B.** University Learning Outcomes

This course enhances student abilities in the following area:

#### **Analytical Skills**

**Critical Thinking Skills:** Students will utilize analytical skills to identify and analyze a hardware related problem and develop a solution.

## III. Major Course Topics

- A. Working inside a computer
- B. Power supplies
- C. Motherboards
- D. Processors
- E. Memory
- F. Storage devices
- G. Input/output devices
- H. Network essentials
- I. Maintenance and troubleshooting