***Computer Service and Repair***

***First Quarter (1st & 2nd 9 Week)***

***Information Technology Fundamentals***

***2015-2016 Year***

*Instructor: Mrs. Mary A. Fuller*

*Office: Bessemer Center for Technology*

*Mail: 4940 Premiere Parkway Bessemer, Al 35022*

*Prep Period: 1:50 p.m. – 3:30 p.m.*

*Phone: 205.432.3777*

*E-mail: mfuller@bessk12.org*

*Web site:* [*www.bessk12.org*](http://www.bessk12.org)

Prerequisites: Reading, Writing, Basic Math Skills, Hand and Eye Coordination.

**Classroom Fee: $40.00 (Lab Fee ($25.00) - SkillsUSA.org ($15.00)**

**$15.00 for SkillsUSA.org due by September 14, 2015 and $25.00 Lab Fee due by October 19, 2015**

**SkillsUSA Organization:** SkillsUSA.org is a professional organization that is designed to be run by students, for their own growth and benefit. SkillsUSA members develop into well-rounded people with technical, academic and employability skills that will help them get a job and have a successful career. Through chapter meetings, contests, leadership conferences and activities, students will be building these skills. Each chapter chooses plans and conducts its own activities.

**Textbook:** Richard M. Roberts, *Computer Service and Repair, Third Edition*. Goodheart-Willcox Publisher

(G-W Publisher) ISBN-978-1-59070-857-6

**Course Objectives**

Students will gain a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware and software. This course maps fully to CompTIA’s latest 2009 A+ Exam.

|  |
| --- |
| * Explain the role of computers. |
| * Explain what a computer is. |
| * Describe computer data. |
| * Identify the major components of a typical PC. |
| * Describe the power-on sequence of a typical PC. |
| * Explain how the major components interact with each other. |
| * Interpret the common prefixes associated with the computer’s size and speed. |
| * Define electrostatic discharge. |
| * Identify common tools used to service a PC. |

**Specific topic coverage includes:**

* Introduction to a Typical PC
* Operating Systems
* Motherboards
* CPU
* Power Supplies
* Memory
* Input Devices
* Video Display and Audio Systems
* Magnetic Storage Devices
* CD Technology
* Printers
* Portable PCs
* Modems and Transceivers
* Viruses
* PC Troubleshooting

**Web Site**

Supplementary information for the course is available at <http://bessemer.bcst.schoolinsites.com/>

The Web site contains class notes, PowerPoint slides, class announcements, the course syllabus, test dates, and other information for the course.

**E-Mail**

All students are requested to obtain an e-mail account. If you have any questions about the course or need assistance, please contact me in person or by telephone during office hours; or by e-mail at any time. Also, you may submit the end-of-chapter case project assignments in class on the due date or by e-mail with a date stamp at or before   
1:00 P.M. on the due date. E-mail submissions should be submitted as an attachment in Microsoft Word format.

**Grading and Evaluation Criteria**

40% of the grade is based on a midterm and a final examination. Both examinations are cumulative and given in a varied format. An in-class review will be held prior to each examination.

20% of the grade is based on quizzes. Quizzes are announced one day in advance and may vary from ten to fifteen questions that may be in any format.

20% of the grade is based on keeping a class/ project notebook (5-subject). Students are asked to keep this notebook in the classroom to enter their answers to the various end-of-chapter exercises and projects.

20% of grade is based on class participation, and hands-on exercises. Class participation includes class textbook assignments, internet research, individual and group assignments.

**18-Week Course Outline**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Topics** | **Chapter**  **Readings** | **Exams** |
| **1** | Introduction- Info Sheets-Rules & Orientation-Video-Ice Breakers, and Bell Ringers | Handouts | PC Pre-Test |
| **2**  **3** | Introduction to a Typical PC & Safety  (Tools & PC Hardware Functions) | Chapter 1 |  |
| **4** | Operating Systems | Chapter 2 |  |
| **5** | Motherboards & Review | Chapter 3 | Midterm Exam |
| **6** | CPU & Review | Chapter 4 |  |
| **7** | Power Supply | Chapter 5 |  |
| **8** | Memory | Chapter 6 |  |
| **9** | Input Devices & Review | Chapter 7 | Final Exam |
| **10**  **11** | Video and Display Systems | Chapter 8 |  |
| **12** | Magnetic Storage Devices | Chapter 9 |  |
| **13** | CD Technology | Chapter 10 |  |
| **14** | Printers | Chapter 11 |  |
| **15** | Portable PCs & Review | Chapter 12 | Midterm Exam |
| **16** | Modem and Transceivers | Chapter 13 |  |
| **17** | Virus | Chapter 14 |  |
| **18** | PC Troubleshooting & Review | Chapter 15 | Semester Exam-Post Test |

I have carefully read and understood all of the requirements of this syllabus. Parent and Student’s please sign and date on the lines provided below.

Please bring this portion of the document back signed and dated as verification that this syllabus was received.

Date:

Student name: (printed)­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Signature)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent’s name: (printed)­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Signature)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*NOTE:* The Syllabus will be updated as needed.