

Information Technology Fundamentals I & II

Course Syllabus

Program

Information Technology

Mrs. Amy Stewart

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Course Description

Information Technology Fundamentals I covers the explanation of technology and computer hardware and software basics, peripheral devices, mobile technology, and compatibility issues associated with computer hardware.

Information Technology Fundamentals II is a continuation of topics from ITF I and addresses additional technology topics including functions, introduction to networking, security risks and prevention, preventative maintenance of computers, coding and databases. Students should be prepared to take the CPAS Exam at the end of the course. (The MS-CPAS, or the Mississippi Career Planning and Assessment System, is the test given to secondary and postsecondary CTE completers, and the results are used to measure technical-skill attainment.)

Prerequisite Course(s)

Information Technology Fundamentals II requires satisfactory completion of ITF I.

Required Materials

Text: CompTIA A+ Guide (Provided by Mrs. Stewart)

TestOut IT Fundamentals Pro (Class lab)

3-Ring Binder (or a section of a binder dedicated to IT)

USB Drive (optional)

Course Fee

Information Technology Fundamentals I - \$30 lab fee

Culminating Product(s)

In this course, the student will participate in discussions, in-class activities including but not limited to class projects, labs, and other hands-on activities.

Course Goals & Outline

Information Technology Fundamentals I (1st Semester)

Unit 1 - Introduction to Information Technology

1. Research educational, occupational and leadership opportunities in IT.
2. Identify, discuss and apply safety procedures in the computer classroom and lab.
3. Publish and communicate with peers, experts and other audiences using technology.

Unit 2 - Software

1. Compare and contrast commonly used operating systems and their functions and features.
2. Identify common software applications and the purpose of each.
3. Demonstrate software management best practices.

Unit 3 - Hardware

1. Identify internal computer components and the purpose of each.
2. Compare and contrast common computer connectors.
3. Identify basic wired and wireless peripherals and the purpose of each.
4. Compare and contrast the common computing devices and their purposes.
5. Set up and troubleshoot a basic workstation.

Information Technology Fundamentals II (2nd Semester)

Unit 4 - Security

1. Define basic security threats.
2. Define security best practices.
3. Explain confidentiality, integrity and availability (CIA).
4. Describe authentication, authorization and accounting.

Unit 5 - Small Office and Home (SOHO) Networking

1. Discuss the advantages of networking.
2. Setup and configure a basic SOHO router.
3. Differentiate between various internet connection.
4. Discuss basic networking concepts.
5. Discuss network file storage types and locations.
6. Discuss SOGO-networking devices.

Unit 6 - Coding and Database

1. Discuss various programming languages.
2. Analyze and use the various logic and programming techniques.
3. Classify fundamental data types and their characteristics.
4. Utilize a programming language to create a simple program.
5. Discuss database concepts.
6. Create a basic database.

Grade Scale A = 90% - 100% B = 80% - 89% C = 70% - 79% D = 60% - 69% F = Below 60%

Percent Distribution - Daily Grades/Evaluations - 30% Tests/Projects - 50% Exams - 20%

Classroom and Lab Policies All DeSoto County Schools Policies and Procedures listed in the Student Handbook will be followed throughout the entire school year.

Code of Conduct

1. I will follow all policies and procedures set forth in the Acceptable Use Policy of the Desoto County Public School System.
2. I understand that using cell phones in class is strictly prohibited unless prior approval is received from the instructor.
3. I will use only images for which I have appropriate legal permission to use (i.e. in the public domain).
4. I will use discussion posts to discuss school-related content only, will use a respectful tone of voice when posting.
5. I will use appropriate grammar instead of texting language and refrain from using sarcasm to avoid misinterpretation.
6. I will not use my posts to promote personal websites or chat rooms.
7. I will not reveal any personal information of others or myself on any Internet site. This includes telephone numbers, addresses, emails, etc.
8. I will not post photos or videos showing myself or classmates without permission.
9. I will only submit my own, original thoughts, ideas and work products. Plagiarism and cheating on any assignment will not be tolerated.
10. I will come to class prepared and bring needed material including but not limited to pen, paper, binder and USB Drive.
11. I understand that I must take a Safety Test and make a 100% before proceeding with the course to ensure safety of all students and teachers.
12. I understand that there is a \$30 lab fee associated with this course and it is due August 21, 2020.
13. I understand that it is my sole responsibility to inform the instructor when I will be absent from class and that I am responsible for making up any missed work.
14. I understand that there will be a certification test associated with this course.