

Information Technology Applications I

Waverly High School

COURSE DESCRIPTION:

Information Technology Applications I is a one-semester class exploring the uses of the computer in today's world. The course covers terminology, computer concepts, applications, and the operation of a computer system. Students will have hands-on experience with the microcomputer. Applications will include word processing, database, and spreadsheet.

COURSE OUTCOMES:

CAREER PREPARATION

Program Outcome: Explore career opportunities and projected trends nationally and internationally; investigate required education, training, and experience; and develop an individual educational plan. (BE Essential Learning 12.3.1)

- The successful student will be able to Identify career opportunities existing in the technology area.

COMMUNICATIONS

Program Outcome: Students will understand principles of effective communication. (BE Essential Learning 12.4.0)

The successful student will be able to:

- Explain the concept and terminology of telecommunications.
- Work cooperatively, share responsibilities, accept supervision, and assume leadership roles. (R/W 12.3.1, R/W 12.4.1)

TECHNOLOGY

Program Outcome: Students will understand the operation, applications, and function of computers and related technology in a constantly changing global society. They will demonstrate competency by creating, accessing, manipulating, and analyzing information. (BE Essential Learning 12.10.1)

The successful student will be able to:

- Describe the evolution of information processing.
- Explain the basic operations of a digital computer system and the terminology associated with a digital computer.
- Explain the purpose, operation, and care of the basic components of a microcomputer system (e.g. the central processing unit, memory, and speed). (S 12.6.1)
- Analyze primary storage and of the various types of secondary storage.
- Identify input and output devices and their uses.
- Use an integrated software package to complete word processing, draw, database, spreadsheet, and desktop publishing activities (e.g. Microsoft Office) (M 8.2.4, M 8.6.3)
- Apply introductory presentation concepts.
- Select and apply current information technology systems to enhance their business and personal lives.

COURSE OUTLINE:

From the Application Book:

Word Processing Unit:

- Creating and Managing Files
- Document Basics
- Working with Basic Writing Tools
- Creating and Printing a Document
- Using Basic Formatting Techniques
- Enhancing Documents
- Using Timesaving Features
- Working with Tables
- Working with Graphic Objects

Spreadsheet Unit:

- Understanding Workbook Basics
- Using Formulas and Functions
- Creating, Printing, and Distributing Worksheets
- Formatting and Editing the Worksheet
- Using Excel's Workbook Features
- Working with Charts

Mail Merge Unit:

- Working with Database Features
- Advanced Database Features

From the Literacy book:

Chapter 1: Our Digital World

- Examples of Digital Technologies
- Advantages of using a computer over manual
- The computer Process
- Components of the Computer System
- Categories of Computers
- Wireless Communication

Chapter 2: Input and Processing

- Input and Processing Technology
- Types of Input Devices
- How Computers Process Data
- Components of the System Unit
- Types of Memory
- Expanding a Computer's Capabilities

Chapter 3: Output and Storage

- Types of Output
- Display Devices
- Types of Printers
- Other Types of Output
- Storage Devices and Media
 - Magnetic Storage Devices and Media
 - Optical Storage Devices