

FORSYTH PUBLIC SCHOOLS

# Business



# Curriculum

CURRICULUM COMMITTEE:

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Aligned to Framework for Business Education in Montana and  
the National Business Education Standards

Adopted August 2023

**BUSINESS CURRICULUM  
REVISIONS 2023  
Two Pathways**

	Information Technology	Finance
<b>Junior High 7<sup>th</sup> Grade</b>	<b>Introduction to Computers – 7<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>● Keyboarding Skills</li> <li>● Formatting in word processing and spreadsheets using Microsoft and Google</li> <li>● E-mail management</li> <li>● Internet Browsing</li> </ul>	<b>Introduction to Computers – 7<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>● Keyboarding Skills</li> <li>● Formatting in word processing and spreadsheets using Microsoft and Google</li> <li>● E-mail management</li> <li>● Internet Browsing</li> </ul>

	<ul style="list-style-type: none"> <li>● User interface software &amp; hardware file management</li> <li>● Digital Citizenship – basic</li> <li>● Programming with Scratch</li> </ul>	<ul style="list-style-type: none"> <li>● User interface software &amp; hardware file management</li> <li>● Digital Citizenship – basic</li> <li>● Programming with Scratch</li> </ul>
<b>Junior High 8<sup>th</sup> Grade</b>	<b>Computer Foundations – 8<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>● Keyboarding skills</li> <li>● Creating business documents utilizing word processing and spreadsheets.</li> <li>● Presentation software</li> <li>● Digital Citizenship – intermediate</li> <li>● Cyber Security</li> <li>● Programming with Scratch and JavaScript</li> <li>● Website Development HTML</li> </ul>	<b>Computer Foundations – 8<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>● Keyboarding skills</li> <li>● Creating business documents utilizing word processing and spreadsheets.</li> <li>● Presentation Software</li> <li>● Digital Citizenship – intermediate</li> <li>● Cyber Security</li> <li>● Programming with Scratch and JavaScript</li> <li>● Website Development HTML</li> </ul>
<b>YEAR 1 Freshmen</b>	<b>Computer Applications</b> <ul style="list-style-type: none"> <li>● Advanced applications in word processing and spreadsheets, determining appropriate usage.</li> <li>● Database management</li> <li>● Create presentations using multiple multimedia programs and communication skills.</li> <li>● Desktop Publishing with Publisher, Canva and Adobe Express.</li> <li>● Web page development with JavaScript.</li> <li>● Programming with JavaScript</li> </ul>	<b>Computer Applications</b> <ul style="list-style-type: none"> <li>● Advanced applications in word processing and spreadsheets, determining appropriate usage.</li> <li>● Database management</li> <li>● Create presentations using multiple multimedia programs and communication skills.</li> <li>● Desktop Publishing with Publisher, Canva and Adobe Express.</li> <li>● Web page development with JavaScript.</li> <li>● Programming with JavaScript</li> </ul>
	<b>Information Technology</b>	<b>Finance</b>
	<b>Multimedia Development</b> <ul style="list-style-type: none"> <li>● Video &amp; Audio Production</li> </ul>	<b>Accounting</b>

<p><b>YEAR 2</b> <b>Sophomore</b></p>	<ul style="list-style-type: none"> <li>● Graphic Design</li> <li>● Web Design</li> <li>● Digital Citizenship</li> <li>● Presentation Software</li> <li>● Animation</li> <li>● IT Careers</li> </ul>	<ul style="list-style-type: none"> <li>● Accounting profession opportunities.</li> <li>● Financial Reports and Statements.</li> <li>● Financial Analysis and interpreting financial statements.</li> <li>● Accounting Principles of assets, liability, equity, revenues, and expenses.</li> <li>● Accounting cycle</li> </ul>
<p><b>YEAR 3</b> <b>Junior</b></p>	<p><b>Programming &amp; Application Development</b></p> <ul style="list-style-type: none"> <li>● Current devices &amp; components.</li> <li>● Solve problems with operating systems.</li> <li>● Create &amp; use applications for business functions.</li> <li>● Project Management</li> <li>● Program with Python and other languages.</li> <li>● Security &amp; Risk Management</li> <li>● IT's impact on Society</li> <li>● Digital Citizenship</li> </ul>	<p><b>Business Math &amp; Personal Finance</b></p> <ul style="list-style-type: none"> <li>● Earning &amp; Reporting Income</li> <li>● Banking Services (checking, savings, CD's.)</li> <li>● Loans and Credit Cards</li> <li>● Managing Finances &amp; Budgeting</li> <li>● Saving &amp; Investing</li> <li>● Costs and Benefits of purchasing, leasing &amp; renting.</li> <li>● Insurance</li> <li>● Risk Management</li> <li>● Business Costs, Profit &amp; Loss</li> <li>● Sales &amp; Marketing</li> </ul>
<p><b>YEAR 4</b> <b>Senior</b></p>	<p><b>Digital Photography &amp; Desktop Pub.</b> (Part of the Art department)</p>	<p><b>Business Economics</b></p> <ul style="list-style-type: none"> <li>● Allocation of Resources (scarcity, economic growth, economic indicators.)</li> <li>● Economic Systems</li> <li>● Economic Institutions and Incentives.</li> <li>● Markets &amp; Prices</li> <li>● Market Structures</li> <li>● Productivity</li> <li>● Role of Government</li> </ul>

		<ul style="list-style-type: none"> <li>• Global Economic Concepts</li> <li>• Aggregate Supply &amp; Demand</li> </ul>
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### CLASS OFFERINGS ALTERNATING YEARS

Some of the curriculum in these pathways will be offered on alternating years to allow one teacher to cover two pathways. The class suggestions are based on a seven-period day:

	YEAR 1	YEAR 2
1 <sup>st</sup>	<b>7<sup>th</sup> Grade “Intro to Computers”</b> alternates daily with PE. Two sections of students whereby one is in PE while the other section is in computers.	<b>7<sup>th</sup> Grade “Intro to Computers”</b> alternates daily with PE. Two sections of students whereby one is in PE while the other section is in computers.
2 <sup>nd</sup>	<b>8<sup>th</sup> Grade “Computer Foundations”</b> alternates daily with PE. Two sections of students whereby one is in PE while the other section is in computers.	<b>8<sup>th</sup> Grade “Computer Foundations”</b> alternates daily with PE. Two sections of students whereby one is in PE while the other section is in computers.
3 <sup>rd</sup>	<b>Introduction to Computers for HS</b>	<b>Introduction to Computers for HS</b>
4 <sup>th</sup>	<b>Introduction to Computers for HS</b>	<b>Introduction to Computers for HS</b>
5 <sup>th</sup>	<b>Business Math/Personal Finance</b>	<b>Business Math/Personal Finance</b>
6 <sup>th</sup>	<b>Accounting &amp; Multimedia Development</b> will be offered the same period, as classes will alternate with teaching of theory one day and practice the next, but there will be one advanced offering in each pathway.	<b>Business Economics &amp; Programming &amp; Application Development</b> will be offered the same period, as classes will alternate with teaching of theory one day and practice the

		next, but there will be one advanced offering in each pathway.
7 <sup>th</sup>	PREP	PREP

## **BUSINESS ACCOUNTING**

### **Finance Career Pathway**

### **STRAND 1: ACCOUNTING**

#### **STANDARD 1: The Accounting Profession**

Plan, staff, lead and organize human resources in finance to enhance employee productivity and job satisfaction. As well as, create and maintain positive, ongoing relationships with finance customers.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.1.1

#### **Explain the role that accountants play in business and society.**

- a. Describe the current and historical regulatory environment of the accounting profession.
- b. Identify the major-policy setting bodies in the accounting profession and explain their role.
- c. Explain how current events impact the accounting profession.
- d. Explain the need for a code of ethics in accounting and the ethical responsibilities required of accountants.
- e. Explain how accounting information is used to allocate resources in the business and personal decision-making process.

HSBUS.ACT.1.2

#### **Describe career opportunities in the accounting profession.**

- a. State and explain the role, service or mission of student and professional accounting organizations and associations.
- b. State and explain the professional designations and certifications in the accounting profession.

- c. Explain the educational requirements for various careers, professional designations and certifications in the accounting profession.
- d. Explain the skills and competencies needed to be successful in the accounting profession.
- e. Describe the areas of specialization within the accounting profession and careers that require a knowledge of accounting.

HSBUS.ACT.1.3

**Demonstrate the skills and competencies required to be successful in the accounting profession and/or in an accounting-related career.**

- a. Deliver a speech and make a presentation.
- b. Perform research and communicate in writing the results of the research.
- c. Demonstrate ethical decision-making skills and conduct in a business scenario.
- d. Apply analytical and critical-decision making skills.
- e. Identify and use information technology productively.
- f. Exhibit leadership skills.
- g. Demonstrate the ability to work within a team concept.

**STANDARD 2: Financial Reports**

Determine effective tools, techniques and systems to communicate and deliver value to finance customers, as well as access, plan, monitor and manage day-to-day activities to ensure effective and efficient finance operations.

**STANDARDS**

HSBUS.ACT.2.1

**GOALS and PERFORMANCE OBJECTIVES**

**Use an annual report and financial statements to make informed business decisions.**

- a. Identify sources for obtaining financial reports.
- b. Describe the users and uses of financial information.
- c. Identify the sections in an annual report and explain the purpose of each section.
- d. Explain the role of management and the auditor in preparing the issuing an annual report.
- e. Identify and explain the types of audit opinions.
- f. Explain the role of accounting and regulatory organizations in relation to financial reports.
- g. Describe the information provided in each financial statement and how the statements articulate with each other.
- h. Describe the relationship between assets, liabilities, and equity on the balance sheet.
- i. Identify and explain the classifications within assets, liabilities, and equity.
- j. Identify the different formats of an income statement.
- k. Identify the classifications in an income statement and explain their relationship to each other (revenue, expense, gains, losses).

- l. Describe changes in the ownership structure using the statement of equity.
- m. Explain how and why the conceptual framework of accounting and generally accepted accounting principles provide guidance and structure for preparing financial statements.
- n. Describe the different forms of business ownership and the advantages and disadvantages of each form.
- o. Explain how the different forms of business ownership are reported in the financial statements.
- p. Identify the different types of business operations.
- q. Explain how the different types of business operations are reflected in the financial statements.
- r. Identify and explain the business activities reported in a statement of cash flows (operating, investing, financing).

### **STANDARD 3: Financial Analysis**

Plan, manage and maintain the use of financial resources to protect solvency and employ financial risk-management strategies and techniques used to minimize business loss.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.3.1

**Assess the financial condition and operating results of a company and analyze and interpret financial statements and information to make informed business decisions.**

- a. Discuss the information that can be obtained from analyzing financial statements.
- b. Recognize the primary areas of analysis (trend analysis, profitability, liquidity, capital structure) and explain the information that can be obtained from each type of analysis.
- c. Perform a horizontal and vertical analysis of the income statement and balance sheet.
- d. Assess profitability by calculating and interpreting financial ratios (gross profit margin, operating profit margin, net profit margin, return on assets, return on operating assets, sales turnover).
- e. Assess liquidity and solvency by calculating and interpreting financial ratios (working capital, current ratio, quick ratio, cash ratio, inventory turnover, accounts receivable turnover, operating cycle).
- f. Compare and contrast debt and equity financing and explain the impact on the financial statements.
- g. Assess capital structure by calculating and interpreting financial ratios (debt ratio, long-term debt ratio, debt-to-equity ratio, Times-Interest-Earned ratio).
- h. Research industry averages and explain their use in assessing the financial condition, operating results, profitability, liquidity and capital structure.
- i. Apply information technology to conduct financial analysis.
- j. Identify and explain common methods for manipulating financial statement and financial ratios.
- k. Describe the ethical and legal implications resulting from the manipulation of financial statements and financial ratios.
- l. Use the statement of cash flow to analyze business activities (operating, investing, financing).
- m. Analyze cash flow from operating activities to assess profitability and liquidity.



## **STANDARD 4: Accounting Principles**

Utilize tools, strategies and systems to plan, monitor, manage and maintain the use of financial resources, as well as plan, monitor and manage day-to-day activities to ensure effective and efficient finance operations.

### **STANDARDS**

HSBUS.ACT.4.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions and the preparation of financial statements utilizing the conceptual framework for financial reporting.**

- a. Describe and explain the conceptual framework of accounting and generally accepted accounting principles and assumptions.
- b. Discuss the U.S. GAAP the International Financial Reporting Standards (IFRS) Convergence Project and explain the role of the Financial Accounting Standards Board (FASB), Securities and Exchange Commission (SEC), and International Accounting Standards Board (IASB).
- c. Explain the key differences between U.S. GAAP and IFRS.
- d. Define assets, liabilities, equity, revenue, expenses, gains, and losses.
- e. Distinguish between the accrual basis of accounting and the cash basis of accounting and discuss the impact each has on the financial statements.

HSBUS.ACT.4.2

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the ASSETS of a company.**

- a. Explain the accounting methods used to determine the value of accounts receivable to be reported on the balance sheet and describe the effect on the income statement.
- b. Record transactions for accounts receivable, including uncollectible accounts, write-offs, and recoveries.
- c. Explain the difference between the periodic and perpetual inventory methods.
- d. Determine the cost of inventory for merchandising and manufacturing businesses and apply appropriate valuation methods.
- e. Identify and describe the cost flow assumptions for inventory and explain the impact on the balance sheet and income statement.
- f. Describe the criteria used to distinguish between capital expenditures and revenue expenditures.
- g. Determine the costs of property, plant and equipment, natural resources and intangible assets
- h. Explain the purpose of cost allocation.
- i. Identify, calculate and record depreciation, depletion and amortization and explain the impact on the financial statements.

- j. Determine the impact on the financial statements when assets are sold, disposed, or rendered obsolete.

HSBUS.ACT.4.3

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the LIABILITIES of a company.**

- a. Record transactions for accounts payable and other short-term debt.
- b. Determine the initial valuation of long-term debt instruments and their impact on the financial statements.
- c. Record transactions for long-term debt instruments.
- d. Calculate the cost of borrowed funds and determine the impact on the financial statements.

HSBUS.ACT.4.4

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the EQUITY of a company.**

- a. Explain how operating results, capital contributions and distribution of earnings affect equity for the various types of ownership structures.
- b. Identify and describe the different classes of stock and explain the rights afforded each class of stock.
- c. Record equity-related transactions.
- d. Explain how the acquisition and sale of company's own stock affects the financial statements.
- e. Differentiate between stock splits and stock dividends and explain how each affects equity.

HSBUS.ACT.4.5

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the REVENUES of a company.**

- a. Describe the criteria used to determine revenue recognition.
- b. Record revenue-related transactions.

HSBUS.ACT.4.6

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the EXPENSES of a company.**

- a. Describe the criteria used to determine expense recognition.
- b. Record expense-related transactions.

HSBUS.ACT.4.7

**Identify and describe generally accepted accounting principles (GAAP), and explain how the application of GAAP impacts the recording of financial transactions especially looking at the GAINS and LOSSES of a company.**

- a. Distinguish between revenue and gains.
- b. Distinguish between expenses and losses.
- c. Record transactions resulting in gains and losses.

## **STANDARD 5: Accounting Process**

Access, evaluate and disseminate financial information to enhance financial decision-making processes.

### **STANDARDS**

HSBUS.ACT.5.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Complete the steps in the accounting cycle in order to prepare the financial statements.**

- a. Explain the purpose of the accounting system.
- b. Explain the purpose of journals the ledgers and their relationship.
- c. Describe the impact of technology on the accounting process.
- d. Identify and explain the advantages and disadvantages of different types of accounting systems.
- e. Differentiate between accounting and bookkeeping.
- f. Describe and analyze how business transactions impact the accounting equation.
- g. Apply the double-entry system of accounting to record business transactions and prepare a trial balance.
- h. Explain the need for adjusting entries and record adjusting entries.
- i. Explain the purposes of the closing process and record closing entries.
- j. Prepare the financial statements for the different types of business operations and ownership structures.
- k. Describe the relationship between the closing process, the financial statements and the post-closing trial balance.

## **BUSINESS COMPUTER APPLICATIONS**

**Required course for all high school students.**

**Information Technology Career Pathway**

## **STRAND 7: INFORMATION TECHNOLOGY**

### **STANDARD 1: Impact on Society**

Explain the implications of IT on business development and describe trends in emerging and evolving computer technologies and their influence on IT practices.

### **STANDARDS**

HSBUS.IT.1.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Assess the impact of information technology in a global society.**

- a. Describe the impact of technology on the knowledge and skills needed for success in the workplace.
- b. Describe how information technology affects worker-management relationships (e.g., outsourcing, mobile communications, and cloud computing).
- c. Identify and evaluate how information technology developments change the way users do their work.
- d. Describe how information technology creates greater interdependence among workers, organizations, and nations.
- e. Explain how information technology has contributed to worker productivity and teamwork.
- f. Analyze the potential societal effect of widespread reliance on information technology.
- g. Analyze how human ingenuity and technology satisfy specific human needs.
- h. Evaluate the cause and effect of technological solutions on society

## **STANDARD 2: Information Literacy**

Compare key functions and applications of software and determine maintenance strategies for computer systems, as well as demonstrate effective professional communication skills and practices.

### **STANDARDS**

HSBUS.IT.2.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Gather, evaluate, use, cite, and disseminate information from technology sources through internet browsing.**

- a. Demonstrate the ability to find and download files and compress and unzip files.
- b. Define e-commerce and its implications for business and industry.
- c. Use online searching as a research tool and evaluate the validity of information found on the site(s).
- d. Use electronic media such as e-books and electronic encyclopedias to assist with research projects.
- e. Comply with the rules of copyright laws and plagiarism.
- f. Evaluate the accuracy, relevance, and comprehensiveness of retrieved information.
- g. Draw conclusions and make generalizations based on information gathered.
- h. Access, exchange, organize, and synthesize information.
- i. Analyze the effectiveness of information resources to support collaborative tasks, research, publications, communications, and increased productivity.

## **STANDARD 3: Digital Citizenship**

Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.3.1

### **Demonstrate respectful, responsible and ethical behavior in a digital world.**

- a. Identify how social media is used to learn across the curriculum.
- b. Discuss basic issues related to responsible use of technology and describe personal or legal consequences of inappropriate use.
- c. Explain the consequences of illegal and unethical use of information technologies.
- d. Demonstrate respectful and responsible use and creation of media and technology.
- e. Demonstrate the appropriate and legal use of intellectual property.
- f. Demonstrate legal and ethical behaviors when using information technologies.
- g. Identify aspect of global connectivity and its implications.
- h. Demonstrate appropriate etiquette when using information technologies.
- i. Discuss the process of safely buying and selling online.
- j. Review acceptable use policies for legal and ethical use of information.

## **STANDARD 4: Devices and Components**

Perform standard computer backup and restore procedures to protect IT information and demonstrate knowledge of the hardware components associated with information systems.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.4.1

### **Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; and repair hardware.**

- a. Describe interrelationships between device components and supportive applications.

## **STANDARD 5: Operating Systems**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services. Also, recognize and analyze potential IT security threats to develop and maintain security requirements.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.5.1

**Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with various types of operating system utilities.**

- a. Define the difference between application and operating system software.
- b. Explain the purposes of operating system software.
- c. Define and use multitasking.
- d. Create, view, copy, move, rename and delete folders and files.
- e. Create backup copies.
- f. Identify and access drives.
- g. Properly startup and shutdown a system.

### **STANDARD 6: Input Technologies**

Describe trends in emerging and evolving computer technologies and their influence on IT practices.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.6.1

**Use various input technologies to enter and manipulate information appropriately.**

- a. Maintain proper input techniques such as touch keyboarding.
- b. Enter and manipulate numeric data using the touch method on a 10-key keypad.
- c. Develop touch keyboarding skills at acceptable speed and accuracy levels of 40 wpm with 90% accuracy.
- d. Proofread and edit copy for accuracy, content, correct grammar, spelling and punctuation.

### **STANDARD 7: Applications**

Compare key functions and applications of software and determine maintenance strategies for computer systems.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.7.1

**Identify, evaluate, select, install, use, upgrade, troubleshoot, and customize applications.**

- a. Select appropriate application software for specific tasks.
- b. Choose emerging application software including but not limited to web applications and freeware.
- c. Import and export text, data, and images between software programs.

- d. Use collaborative application tools.
- e. Sequence and define steps of an information processing cycle.

HSBUS.IT.7.2

**Identify, evaluate, use, troubleshoot and customize word processing applications.**

- a. Explain the purposes, functions, and common features of word processing software.
- b. Input, edit, store, and output letters, reports, tables and other documents.
- c. Convert files to a variety of common protocols including (but not limited to) PDF and rich text format.
- d. Integrate word processing with other applications.

HSBUS.IT.7.3

**Identify, evaluate, use, troubleshoot and customize spreadsheet applications.**

- a. Use functions such as sum, max, min, count, if, round and average to create appropriate formulas.
- b. Design, create and edit worksheets that permit users to use conditional formatting.
- c. Test spreadsheet formulas and design for accuracy.
- d. Integrate spreadsheets with other applications.

HSBUS.IT.7.4

**Identify, evaluate, use, troubleshoot and customize presentation software applications.**

- a. Create slide shows using presentation software designed for a specific audience and purpose.
- b. Utilize creative techniques to design presentations.
- c. Demonstrate knowledge of the principles of slide design and layout.
- d. Design, create, and import data/graphics/scanned images, format, and produce a variety of slide shows using presentation software.
- e. Integrate scanned images, sound and/or video clips, text and other data into side shows.
- f. Create handouts using presentation software.
- g. Create and apply custom colors.
- h. Create self-running and portable (e.g. pack and go) slide shows.
- i. Utilize presentation hardware including but not limited to projectors, clickers and speakers.
- j. Integrate presentation software with other applications.

**STANDARD 8: Digital Media**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

**STANDARDS**

HSBUS.IT.8.1

**GOALS and PERFORMANCE OBJECTIVES**

**Use and create digital media.**

- a. Define common multimedia terms.
- b. Define how multimedia is transforming business and industry at the local and international level.
- c. Identify and apply principles and techniques of presentation design to a variety of hard copy and digital documents.
- d. Integrate scanned images, sound and/or video clips, text and other data into a variety of documents.
- e. Use digital media and integrate the images/video into a variety of documents.
- f. Create and use custom colors in a variety of documents.
- g. Explore compatible graphic formats and means for converting, compressing and decompressing files.
- h. Use electronic media such as e-books and electronic encyclopedias to assist with research projects.
- i. Identify and select various imaging software and hardware appropriate for tasks.
- j. Define and recognize linked objects in a multimedia application.
- k. Identify and describe electronic and microform storage media appropriate for a variety of tasks.

HSBUS.IT.8.2

**Use and create digital media utilizing desktop publishing software.**

- a. Explain the purposes, functions, and common features of desktop publishing software.
- b. Define common desktop publishing terms.
- c. Explore some of the differences between word processing and desktop publishing.
- d. Define, create, edit, and use master pages and/or style sheets.
- e. Use common layout procedures such as flowing text, typographic design, leading, kerning, and word space.
- f. Demonstrate knowledge of the principles of graphic design and layout.
- g. Utilize creative techniques to design simple publications.
- h. Use desktop publishing software to design, create, and format a variety of publications that are distribution-ready.
- i. Demonstrate knowledge of desktop publishing templates.
- j. Create and apply custom colors.
- k. Integrate text and graphic files into documents.
- l. Demonstrate knowledge of phot and graphic editing including but no limited to cropping, colorization, and sizing.

**STANDARD 9: Web Development and Design**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.9.1

**Design, develop, test, implement, update, and evaluate web solutions.**



- a. Explain the purposes, functions, and common features of web page development.
- b. Define common web page development terms.
- c. Create web pages using web page development software and wizards.
- d. Apply and understand web page restrictions when formatting and inserting text, tables and borders, colors, fill and shading patterns, graphics, and multimedia.
- e. Insert hyperlinks to other web pages and/or web site.
- f. Demonstrate the ability to view a web page on a browser.
- g. Insert additional web pages to current web site.
- h. Demonstrate successful navigation between web pages, checking and repairing links.
- i. Create web pages using custom, or redesigned, web page templates.
- j. Discuss some of the differences between creating personal web pages and web pages designed for e-commerce.
- k. Demonstrate the ability to publish web pages to the Internet.

## **STANDARD 10: Database Management Systems**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.10.1

#### **Use, plan, develop, and maintain database management systems.**

- a. Explain the purposes, functions, and common features of database software.
- b. Define common database terminology.
- c. Define the interrelationships between fields, records, primary fields, files, and databases.
- d. Demonstrate knowledge of the advantages and disadvantages of file management versus relational database software.
- e. Use database software to complete common file management techniques such as saving, retrieving, and printing documents.
- f. Design and modify an appropriate database structure.
- g. Insert, edit, and delete records.
- h. Query and sort data from files and databases.
- i. Use spell checking and online help.
- j. Plan, create, modify, and print reports.
- k. Locate requested information on a computer printout.
- l. Edit and verify printout information and totals.
- m. Identify and describe electronic and microform storage media appropriate for a variety of tasks.
- n. Integrate database with other applications.

## **STANDARD 16: End-use Support and Training**

Demonstrate effective professional communication skills and practices that enable positive customer relationships.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.16.1

**Develop the technical and interpersonal skills and knowledge to train and support the user community through active listening.**

- a. Demonstrate courteous attention when listening to others.
- b. Follow oral directions.
- c. Evaluate effectiveness of digital and spoken presentations.
- d. Use questioning techniques for understanding.
- e. Identify the barriers to listening.

HSBUS.IT.16.2

**Develop the technical and interpersonal skills and knowledge to train and support the user community.**

- a. Demonstrate positive nonverbal communication.
- b. Differentiate between positive and negative communication styles.
- c. Use courtesy and tact when communicating with others.
- d. Respect the rights and feelings of others.
- e. Work cooperatively with peers and authority figures.
- f. Describe qualities of a person with a positive work ethic.
- g. Demonstrate respect for diversity.

HSBUS.IT.16.3

**Develop the technical and interpersonal skills and knowledge to train and support the user community through written communication.**

- a. Communication competencies such as reading and comprehending written communications and information.
- b. Use correct spelling, grammar, word and number usage, punctuation and formatting.
- c. Adapt language and style for specific audiences.
- d. Document properly both print and digital sources to avoid plagiarism.
- e. Proofread business documents to ensure that they are clear, correct, concise, complete, consistent, and courteous.
- f. Identify factors affecting the readability of text.

HSBUS.IT.16.4

**Develop the technical and interpersonal skills and knowledge to train and support the user community through spoken communication.**

- a. Organize thoughts to reflect logical thinking before speaking.
- b. Identify vocal segregates such as um, uh, er, like, etc.
- c. Use speed, tone, emphasis, and volume to deliver content professionally.
- d. Use strategies to reduce or eliminate vocal segregates such as um, uh, er, like, etc.
- e. Discuss the importance of taking responsibility for all spoken communication.
- f. Establish rapport and build credibility with the audience.

HSBUS.IT.16.5

**Develop the technical and interpersonal skills and knowledge to train and support the user community with e-mail management.**

- a. Compose, read, send, reply, and forward messages to an individual or group.
- b. Demonstrate the ability to create an address book for individuals and groups.
- c. Compose and send e-mail messages using an address book.
- d. Attach files to an e-mail message.
- e. Create folders for storing and organizing e-mail messages.
- f. Sort, retrieve, and delete messages.
- g. Use proper e-mail etiquette

# **BUSINESS ECONOMICS**

## **Finance Career Pathway**

### **STRAND 5: ECONOMICS & PERSONAL FINANCE**

#### **STANDARD 1: Allocation of Resources**

Utilize tools, strategies and systems to plan, monitor, manage and maintain the use of financial resources looking at the basic economic concepts of scarcity, choice, and opportunity costs.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ECON.1.1

**Assess opportunity costs and trade-offs involved in making choices about how to use scarce economic resources.**

- a. Explain the concept of marginal benefit vs. marginal cost and how it relates to rational decision making.
- b. Evaluate the trade-offs of alternatives for solving societal problems according to economic goals (e.g., economic growth, equity, efficiency, security, employment, stability, and freedom).
- c. Suggest what a business or nation should do if economic resources are under-utilized and when a business or nation might choose to store resources.
- d. Explore common recommendations and alternatives for what a business or nation could do to stimulate economic growth.
- e. Explain the effects of leading economic indicators on a personal financial plan.

#### **STANDARD 2: Economic Systems**

Determine effective tools, techniques and systems to communicate and deliver value to finance customers, as well as describe and follow laws regulations and ethical standards that affect finance operations and transactions.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ECON.2.1

**Explain why societies develop economic systems, identify the basic features of different economic systems, and analyze the major features of the U.S. economic system.**

- a. Analyze existing economies and how they answer the following three basic economic questions every economy system must answer:
  - \*What goods and services should be produced?
  - \*How should the goods and services be produced?
  - \*For whom should the good and services be produced?
- b. Explain how change in one component of the circular flow of economic activity (household, business, government, or foreign) affects other components.
- c. Analyze how economic systems, resources and culture affect each other.
- d. Analyze how wages and prices are determined in command or centrally planned and market economies.
- e. Critique command, mixed, and market economies based on the U.S. economic goals of freedom, efficiency, equity, security, employment, stability, and growth.
- f. Debate the advantages and disadvantages and identify the winners and losers from different examples of government intervention in the economy.

## **STANDARD 3: Economic Institutions and Incentives**

Plan, organize and manage a finance organization/department. Plan, monitor and management day-to-day activities required to sustain continued business functioning.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ECON.3.1

**Analyze the role of core economic institution and incentives in the U.S. economy.**

- a. Explain how specific financial and nonfinancial incentives influences economic behavior of individual sin different ways.
- b. Provide illustrations of how the market system requires a give-and-take between institutions and individuals.
- c. Explain the roles of profit and competition in a market-oriented economy.
- d. Identify major functions of the public sector in a market economy.
- e. Analyze ways in which a society's allocation of resources will be affected by its laws, public policy, and taxation.
- f. Identify how certain historical events (e.g., the Depression, 1980s savings and loan crisis, September 11, housing market crisis of 2008) have influenced the banking system and other financial institutions.

## **STANDARD 4: Markets and Prices**

Manage a financial product or service mix in order to respond to market opportunities.

## **STANDARDS**

HSBUS.ACT.4.1

## **GOALS and PERFORMANCE OBJECTIVES**

**Analyze the role of markets and prices in the U.S. economy.**

- a. Analyze the relationship of relative price to scarcity when prices are set by the market forces of supply and demand.
- b. Identify determinants of supply and demand.
- c. Demonstrate an understanding of the supply and demand curves that show increases and decreases in quantity supplied and quantity demanded.
- d. Demonstrate an understanding of the supply and demand curves when there are increases and decreases in supply and demand and explain why these changes occur.
- e. Illustrate how a change in price affects quantity demanded or quantity supplied.
- f. Explain and illustrate how the equilibrium price changes according to changes in supply or demand.
- g. Explain and illustrate how a market reacts to shortages and surpluses with no government intervention.
- h. Explain and illustrate how a market reacts to governmental intervention (e.g., price ceilings, price floors, and regulations).
- i. Describe the concept of elasticity and inelasticity.
- j. Explain how efficient production and allocation of goods and services in a market economy are based on pricing information.
- k. Explain why changes in prices of resources create incentives/disincentives for resource allocation in the U.S. economy.
- l. Identify the effect of changes in the relative price of a substitute or complementary good on supply and demand.
- m. Identify the quality and quantity of human capital as a major determinant of a worker's income.

### **STANDARD 5: Market Structures**

Access, evaluate and disseminate financial information to enhance financial decision-making processes and determine effective tools, techniques and systems to communicate and deliver value to finance customers.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.5.1

**Analyze the different types of market structures and the effect they have on the price and the quality of the goods and services produced.**

- a. Describe the characteristics of an oligopoly and identify examples in the current market.
- b. Describe how collusion affects market competition.
- c. Discuss the major barriers to new firms entering a market and how the barriers affect the level of competition in an industry.
- d. Examine U.S. laws and government regulations that are designed to impact competition.

## **STANDARD 6: Productivity**

Employ financial risk-management strategies and techniques used to minimize business loss.

### **STANDARDS**

HSBUS.ACT.6.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Explain the importance of productivity and analyze how specialization, division of labor, investment in physical and human capital, and technological change affect productivity and global trade.**

- a. Assess opportunity costs and economic risks involved when investing in physical and human capital to increase productivity.
- b. Discuss the effects of government expenditures, regulations, and tax policies on productivity.
- c. Explain how investment in research and development affects productivity.
- d. Distinguish between fixed, variable, explicit, and the implicit costs.
- e. Explain the principle of diminishing returns and illustrate how it relates to productivity.
- f. Explain the law of profit maximization (i.e., marginal cost equals marginal revenue).
- g. Differentiate between lowest total cost, lowest marginal cost, and lowest average cost.
- h. Distinguish between short-run average cost and long-run average costs.
- i. Analyze the impact of the global economy of U.S. business.

## **STANDARD 7: The Role of Government**

Describe and follow laws, regulations, and ethical standards that affect finance operations and transactions.

### **STANDARDS**

HSBUS.ACT.7.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Analyze the role of government in economic systems, especially the role of government in the U.S. economy.**



- a. Define and give examples of progressive, regressive, and proportional taxes and their effect on specific income groups.
- b. Give examples of taxes based on the principles of benefits received and ability to pay.
- c. Evaluate the equity of taxes based on income, wealth, and consumption.
- d. Explain how government's redistribution of income through taxation, spending, and assistance/entitlement programs affects the people and businesses in an economy.
- e. Identify monetary policies (open market securities reserve requirement, discount rate) used by the Federal Reserve System to regulate the economy.
- f. Identify fiscal policies used by the federal government to regulate the economy.
- g. Discuss the history of banking in the United States, how monetary and fiscal policies have evolved, and how monetary and fiscal policies have been in opposition or in harmony with each other.
- h. Differentiate between monetary and fiscal policies and identify when it may be appropriate to use a given policy.
- i. Analyze the effect of national debt or surplus on the economy.
- j. Investigate the effects of government actions and economic conditions on personal financial planning.

### **STANDARD 8: Global Economic Concepts**

Consider the environmental, social and economic impacts of decisions. Work productively in teams while using cultural/global competence.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.8.1

**Examine the role of trade, protectionism, and monetary markets in the global economy.**

- a. Determine how the supply and demand of a currency affects its foreign exchange rate.
- b. Differentiate between currency appreciation and currency depreciation.

- c. Analyze how a change in the value of a nation's currency (appreciation or depreciation) can affect the level of its imports and exports.
- d. Compare and contrast absolute and comparative advantage.
- e. Analyze different countries to determine the comparative advantage of individuals within those countries for making and trading goods and services.
- f. Discuss the advantages and disadvantages and distributive effects of trade restrictions (e.g., tariffs, quotas, and embargoes).
- g. Appraise free trade agreements between and among nations.
- h. Distinguish between the balance of trade and the balance of payments.
- i. Evaluate the impact of international economic unions on the global community and the influence these unions have on the member nations and on different groups within those nations.

### **STANDARD 9: Aggregate Supply and Aggregate Demand**

Plan, manage, and maintain the use of financial resources to protect solvency.

#### **STANDARDS**

HSBUS.ACT.9.1

#### **GOALS and PERFORMANCE OBJECTIVES**

**Analyze how the U.S. economy functions as a whole and describe selected macroeconomic measures of economic activity.**

- a. Analyze the causes and effects of demand-pull and cost-push inflation.
- b. Calculate the real interest rate (nominal minus rate of inflation).
- c. Compare and contrast the different stages of the business cycle (e.g., recovery, expansion, trough, and peak).

- d. Identify the components of the labor force.
- e. Differentiate between the types of unemployment (frictional structural, cyclical, and seasonal).
- f. Interpret the Consumer Price Index (CPI) in relationship to purchasing power.
- g. Discuss major factors that affect the level of a country's Gross Domestic Product (GDP) (e.g., quantity and quality of national resources, human capital, and capital stock).
- h. Locate the per capita GDP of various nations to compare the levels of economic well-being.
- i. Identify and analyze leading economic indicators and the methods of using the indicators to understand the state of the economy.

**BUSINESS**  
**COMPUTER FOUNDATIONS**  
**8<sup>th</sup> Grade Level**  
**Information Technology Career Pathway**

**STRAND 7: INFORMATION TECHNOLOGY**

**STANDARD 1: Impact on Society**

Explain the implications of IT on business development and describe trends in emerging and evolving computer technologies and their influence on IT practices.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.1.1

**Assess the impact of information technology in a global society.**

- a. Analyze how human ingenuity and technology satisfy specific human needs

**STANDARD 2: Information Literacy**

Compare key functions and applications of software and determine maintenance strategies for computer systems, as well as demonstrate effective professional communication skills and practices.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.2.1

**Gather, evaluate, use, cite, and disseminate information from technology sources through internet browsing.**

- a. Demonstrate the ability to find and download files and compress and unzip files.
- b. Use media players to play video and sound files.
- c. Understand and comply with the rules of copyright laws and plagiarism

**STANDARD 3: Digital Citizenship**

Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.3.1

**Demonstrate respectful, responsible and ethical behavior in a digital world.**

- a. Explore the possibilities and perils of digital communications.
- b. Discuss and apply internet safety practices.
- c. Identify how social media is used to learn across the curriculum.
- d. Demonstrate the appropriate and legal use of intellectual property.
- e. Demonstrate legal and ethical behaviors when using information technologies.
- f. Identify aspect of global connectivity and its implications.
- g. Demonstrate appropriate etiquette when using information technologies.
- h. Review acceptable use policies for legal and ethical use of information.

**STANDARD 4: Devices and Components**

Perform standard computer backup and restore procedures to protect IT information and demonstrate knowledge of the hardware components associated with information systems.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.4.1

**Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; and repair hardware.**

- a. Evaluate the capabilities and limitations of devices for user needs.
- b. Identify examples of emerging technologies.

**STANDARD 5: Operating Systems**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services. Also, recognize and analyze potential IT security threats to develop and maintain security requirements.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

- JHBUS.IT.5.1      **Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with various types of operating system utilities.**
- a. Describe features of operating systems that can be personalized.
  - b. Differentiate between operating systems and applications.

**STANDARD 6: Input Technologies**

Describe trends in emerging and evolving computer technologies and their influence on IT practices.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

- JHBUS.IT.6.1      **Use various input technologies to enter and manipulate information appropriately.**
- a. Maintain proper input techniques such as touch keyboarding.
  - b. Develop touch keyboarding skills at acceptable speed and accuracy levels of 35 wpm with 90% accuracy.
  - c. Proofread and edit copy for accuracy, content, correct grammar, spelling and punctuation.

**STANDARD 7: Applications**

Compare key functions and applications of software and determine maintenance strategies for computer systems.

## **STANDARDS**

JHBUS.IT.7.1

## **GOALS and PERFORMANCE OBJECTIVES**

### **Identify, evaluate, select, install, use, upgrade, troubleshoot, and customize applications.**

- a. Select appropriate application software for specific tasks.
- b. Describe and use emerging application software including but not limited to web applications and freeware.
- c. Use reference materials, such as on-line help, tutorials, and manuals available for application software.
- d. Identify, select, and apply the feature of software products, such as galleries, templates, and macros.
- e. Evaluate application software products in terms of their features.
- f. Import and export text, data, and images between software programs.

JHBUS.IT.7.2

### **Identify, evaluate, use, troubleshoot and customize word processing applications.**

- a. Explain the purposes, functions, and common features of word processing software.
- b. Proofread and edit documents for accuracy and content, and for correct grammar, spelling, and punctuation.
- c. Input, edit, store, and output letters, reports, tables and other documents.
- d. Convert files to a variety of common protocols including (but not limited to) PDF and rich text format.
- e. Integrate word processing with other applications.

JHBUS.IT.7.3

### **Identify, evaluate, use, troubleshoot and customize spreadsheet applications.**

- a. Use spreadsheet software to complete common file management techniques such as saving, retrieving, printing, and merging documents.
- b. Enter, edit, and copy text, formulas and values.
- c. Apply formatting functions such as fonts, styles, size, column width and row height.
- d. Change numeric formats for data.
- e. Create and format graphs from worksheet data.
- f. Navigate the worksheet by using the mouse or by a variety of keystrokes.
- g. Use spellchecking and the help menu.
- h. Use functions such as sum, max, min, count, if, round and average to create appropriate formulas.

JHBUS.IT.7.4

### **Identify, evaluate, use, troubleshoot and customize presentation software applications.**

- a. Explain the purposes, functions, and common features of presentation software.
- b. Define common presentation software terms.
- c. Create slide shows using presentation software designed for a specific audience and purpose.
- d. Set up and apply type styles, paragraph formats and tabs/indents to a variety of presentations.

- e. Design, create, and import data/graphics/scanned images, format, and produce a variety of slide shows using presentation software.
- f. Integrate scanned images, sound and/or video clips, text and other data into side shows.

### **STANDARD 8: Digital Media**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.8.1

**Use and create digital media.**

- a. Define common multimedia terms.
- b. Define how multimedia is transforming business and industry at the local and international level.

JHBUS.IT.8.2

**Use and create digital media utilizing desktop publishing software.**

- a. Explain the purposes, functions, and common features of desktop publishing software.
- b. Define common desktop publishing terms.

### **STANDARD 9: Web Development and Design**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**



JHBUS.IT.9.1

**Design, develop, test, implement, update, and evaluate web solutions.**

- a. Explain the purposes, functions, and common features of web page development.
- b. Define common web page development terms.
- c. Apply and understand web page restrictions when formatting and inserting text, tables and borders, colors, fill and shading patterns, graphics, and multimedia.
- d. Insert hyperlinks to other web pages and/or web site.
- e. Demonstrate the ability to view a web page on a browser.
- f. Insert additional web pages to current web site.
- g. Demonstrate successful navigation between web pages, checking and repairing links.
- h. Demonstrate the ability to publish web pages to the Internet.

**STANDARD 12: Programming and Application Development**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services.

**STANDARDS**

JHBUS.IT.12.1

**GOALS and PERFORMANCE OBJECTIVES**

**Design, develop, test, and implement programs and applications.**

- a. Identify and explain programming structures.
- b. Use scripting languages in application development.
- c. Code common tasks using application development tools.

**STANDARD 16: End-use Support and Training**

Demonstrate effective professional communication skills and practices that enable positive customer relationships.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.16.1

**Develop the technical and interpersonal skills and knowledge to train and support the user community through active listening.**

- a. Demonstrate courteous attention when listening to others.
- b. Follow oral directions.
- c. Evaluate effectiveness of digital and spoken presentations.
- d. Use questioning techniques for understanding.
- e. Identify the barriers to listening.

JHBUS.IT.16.2

**Develop the technical and interpersonal skills and knowledge to train and support the user community.**

- a. Demonstrate positive nonverbal communication.
- b. Differentiate between positive and negative communication styles.
- c. Use courtesy and tact when communicating with others.
- d. Respect the rights and feelings of others.
- e. Work cooperatively with peers and authority figures.
- f. Describe qualities of a person with a positive work ethic.
- g. Demonstrate respect for diversity.

JHBUS.IT.16.3

**Develop the technical and interpersonal skills and knowledge to train and support the user community through written communication.**

- a. Communication competencies such as reading and comprehending written communications and information.
- b. Use correct spelling, grammar, word and number usage, punctuation and formatting.
- c. Adapt language and style for specific audiences.
- d. Document properly both print and digital sources to avoid plagiarism.
- e. Proofread business documents to ensure that they are clear, correct, concise, complete, consistent, and courteous.
- f. Identify factors affecting the readability of text.

JHBUS.IT.16.5

**Develop the technical and interpersonal skills and knowledge to train and support the user community with e-mail management.**

- a. Compose, read, send, reply, and forward messages to an individual or group.
- b. Demonstrate the ability to create an address book for individuals and groups.
- c. Compose and send e-mail messages using an address book.
- d. Attach files to an e-mail message.
- e. Create folders for storing and organizing e-mail messages.
- f. Sort, retrieve, and delete messages.

- g. Use proper e-mail etiquette

**BUSINESS**  
**JH INTRODUCTION TO COMPUTERS**  
**7<sup>th</sup> Grade Level**  
**Information Technology Career Pathway**

**STRAND 7: INFORMATION TECHNOLOGY**

**STANDARD 1: Impact on Society**

Explain the implications of IT on business development and describe trends in emerging and evolving computer technologies and their influence on IT practices.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.1.1

**Assess the impact of information technology in a global society.**

- a. Describe how information technology changes social mores, including approaches toward work, family, school, and other cultures

**STANDARD 2: Information Literacy**

Compare key functions and applications of software and determine maintenance strategies for computer systems, as well as demonstrate effective professional communication skills and practices.

**STANDARDS**

JHBUS.IT.2.1

**GOALS and PERFORMANCE OBJECTIVES**

**Gather, evaluate, use, cite, and disseminate information from technology sources through internet browsing.**

- a. Explain the purposes, functions, and common feature of Internet browsing.
- b. Define common Internet browsing terms.
- c. Identify the different parts and buttons of an Internet browser.
- d. Introduce student to a variety of internet browsers.

- e. Demonstrate adding web sites to favorites/bookmarks listings.
- f. Demonstrate accessing and identifying a web site by its URL or domain.
- g. Perform searches by using a variety of search techniques including but not limited to Boolean operators and advanced search options.

### **STANDARD 3: Digital Citizenship**

Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.3.1

**Demonstrate respectful, responsible and ethical behavior in a digital world.**

- a. Identify and explore basic privacy issues associated with technology.
- b. Explore the risks and dangers of sharing personal information in a digital world (e.g., digital footprint, cyberbullying).
- c. Explain the consequences of illegal and unethical use of information technologies.
- d. Demonstrate respectful and responsible use and creation of media and technology.
- e. Demonstrate the appropriate and legal use of intellectual property.
- f. Demonstrate appropriate etiquette when using information technologies.
- g. Review acceptable use policies for legal and ethical use of information.

### **STANDARD 4: Devices and Components**

Perform standard computer backup and restore procedures to protect IT information and demonstrate knowledge of the hardware components associated with information systems.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.4.1

**Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; and repair hardware.**

- a. Identify devices appropriate for specific tasks.

## **STANDARD 5: Operating Systems**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services. Also, recognize and analyze potential IT security threats to develop and maintain security requirements.

### **STANDARDS**

JHBUS.IT.5.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with various types of operating system utilities.**

- a. Define the difference between application and operating system software.
- b. Navigate the basic operating system.
- c. Manage files and folders.

## **STANDARD 6: Input Technologies**

Describe trends in emerging and evolving computer technologies and their influence on IT practices.

### **STANDARDS**

JHBUS.IT.6.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Use various input technologies to enter and manipulate information appropriately.**

- a. Develop proper input techniques such as touch keyboarding.
- b. Enter and manipulate numeric data using the touch method on a 10-key keypad.
- c. Identify appropriate input technology for various tasks.
- d. Develop touch keyboarding skills at acceptable speed and accuracy levels of 30 wpm with 90% accuracy.
- e. Proofread and edit copy for accuracy, content, correct grammar, spelling and punctuation.
- f. Explore the use of speech recognition software.

## **STANDARD 7: Applications**

Compare key functions and applications of software and determine maintenance strategies for computer systems.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.7.1

#### **Identify, evaluate, select, install, use, upgrade, troubleshoot, and customize applications.**

- a. Identify the major types of application software and explain their purpose or use.
- b. Select appropriate application software for specific tasks.

JHBUS.IT.7.2

#### **Identify, evaluate, use, troubleshoot and customize word processing applications.**

- a. Explain the purposes, functions, and common features of word processing software.
- b. Define common word processing terminology.
- c. Use word processing software to complete common file management techniques such as saving, retrieving, printing, and merging documents.
- d. Demonstrate editing functions including find and replace, cutting, pasting, and importing and exporting text and graphics.
- e. Apply layout and insert functions including tabs, margins, hanging indents, word-wrap, columns, headers and footers, and tables.
- f. Apply formatting functions including fonts, sizes, styles, and positioning.
- g. Apply word processing functions including spell checking, thesaurus, grammar checking, and the help functions of the software.
- h. Proofread and edit documents for accuracy and content, and for correct grammar, spelling, and punctuation.

JHBUS.IT.7.3

#### **Identify, evaluate, use, troubleshoot and customize spreadsheet applications.**

- a. Explain the purposes, functions, and common features of spreadsheet software.
- b. Define common spreadsheet terms.
- c. Use spreadsheet software to complete common file management techniques such as saving, retrieving, printing, and merging documents.
- d. Enter, edit, and copy text, formulas and values.
- e. Apply formatting functions such as fonts, styles, size, column width and row height.
- f. Change numeric formats for data

## **STANDARD 12: Programming and Application Development**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.12.1

**Design, develop, test, and implement programs and applications.**

- a. Identify and explain programming structures.
- b. Use scripting languages in application development.
- c. Code common tasks using application development tools.

## **STANDARD 16: End-use Support and Training**

Demonstrate effective professional communication skills and practices that enable positive customer relationships.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

JHBUS.IT.16.1

**Develop the technical and interpersonal skills and knowledge to train and support the user community through active listening.**

- a. Demonstrate courteous attention when listening to others.
- b. Follow oral directions.
- c. Evaluate effectiveness of digital and spoken presentations.
- d. Use questioning techniques for understanding.
- e. Identify the barriers to listening.

JHBUS.IT.16.2

**Develop the technical and interpersonal skills and knowledge to train and support the user community.**

- a. Demonstrate positive nonverbal communication.
- b. Differentiate between positive and negative communication styles.
- c. Use courtesy and tact when communicating with others.
- d. Respect the rights and feelings of others.

- e. Work cooperatively with peers and authority figures.
- f. Describe qualities of a person with a positive work ethic.
- g. Demonstrate respect for diversity.

JHBUS.IT.16.3

**Develop the technical and interpersonal skills and knowledge to train and support the user community through written communication.**

- a. Communication competencies such as reading and comprehending written communications and information.
- b. Use correct spelling, grammar, word and number usage, punctuation and formatting.
- c. Adapt language and style for specific audiences.
- d. Document properly both print and digital sources to avoid plagiarism.
- e. Proofread business documents to ensure that they are clear, correct, concise, complete, consistent, and courteous.
- f. Identify factors affecting the readability of text.

JHBUS.IT.16.4

**Develop the technical and interpersonal skills and knowledge to train and support the user community through spoken communication.**

- a. Organize thoughts to reflect logical thinking before speaking.
- b. Identify vocal segregates such as um, uh, er, like, etc.
- c. Use speed, tone, emphasis, and volume to deliver content professionally.
- d. Use strategies to reduce or eliminate vocal segregates such as um, uh, er, like, etc.
- e. Discuss the importance of taking responsibility for all spoken communication.
- f. Establish rapport and build credibility with the audience.

JHBUS.IT.16.5

**Develop the technical and interpersonal skills and knowledge to train and support the user community with e-mail management.**

- a. Explain the purposes, functions, and common features of e-mail management.
- b. Define common e-mail terminology
- c. Compose, read, send, reply, and forward messages to an individual or group.



# **BUSINESS MATH & PERSONAL FINANCE**

## **Finance Career Pathway**

This course equates to M 108 - Business Mathematics as a dual credit course at two-year colleges in the Montana University system. It is a study of math and terminology used by business and industry. The course will begin with a review of the fundamental principles of arithmetic and percentages. Payroll, bank records, interest, notes, discounts, markup, inventory, depreciation, and stocks and bonds will be covered. This course does not fulfill General Education requirements for an AA, AS or Bachelor's degree.

### **STRAND 5: ECONOMICS & PERSONAL FINANCE**

#### **STANDARD 1: Personal Decision Making**

Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision making in the finance industry.

##### **STANDARDS**

##### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.PF.1.1

**Use a rational decision-making process as it applies to the roles of citizens, workers, and consumers.**

- a. Differentiate between types of decisions and identify those for which a formal decision-making process should be used.
- b. Apply the decision-making process to various types of decisions at different stages of the life cycle.
- c. Apply the concept of marginalism to choice making.
- d. Analyze the effects of leading economic indicators on a personal financial plan.
- e. Analyze the effects of ethics on business and financial management decisions.
- f. Examine the impact of advertising, peer pressure and family history on personal financial decisions.

#### **STANDARD 2: Earning and Reporting Income**

Plan, staff, lead and organize human resources in finance and describe and follow laws, regulations and ethical standards that affect finance operations and transactions.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.PF.2.1

**Identify various forms of income and analyze factors that affect income as a part of the career decision-making process.**

- a. Discuss how income from employment is affected by factors such as supply and demand, geographic location, level of education, type of industry, union membership, productivity, skill level, and work ethic.
- b. Analyze the impact of sociological, economic, and technological changes on future jobs.
- c. Compare and contrast compensation packages that include varying levels of wages and benefits.
- d. Analyze how career choice, education, and skills affect income and goal attainment.
- e. Describe the different types of taxes (progressive, regressive, and proportional).
- f. Explore potential tax deduction and credits on a tax return.
- g. Calculate personal tax liabilities for various types of taxes (e., property, income, sales, FICA, and Medicare).
- h. Explain the impact of taxes on personal financial planning.
- i. Calculate net pay.
- j. Investigate employee benefits and incentives.

HSBUS.PF.2.2

**Analyze income sources and steps to protect personal and financial information.**

- a. Understand various sources of income.
- b. Differentiate between total earnings and net pay.
- c. Understand the importance of safeguarding your personal financial information.
- d. Identify steps to restore personal and financial security.

**STANDARD 3: Managing Finances and Budgeting**

Utilize tools, strategies and systems to plan, monitor, manage and maintain the use of financial resources and plan, organize and manage day-to-day activities required to sustain continued business functioning.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ECON.3.1

### **Develop and evaluate a spending/savings plan.**

- a. Use financial concepts and tools to make personal decisions regarding spending.
- b. Define financial planning.
- c. Describe the benefits of financial planning.
- d. Understand the components of a spending plan.
- e. Review how financial goals can be met by using a spending plan.
- f. Analyze the spending plan process.
- g. Construct and use a personal spending/savings plan and evaluate it according to short- and long-term goals.
- h. Illustrate how income and spending patterns change throughout the life cycle for the typical person and family

## **STANDARD 4: Saving and Investing**

Employ financial risk-management strategies and techniques used to minimize business loss.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.4.1

### **Evaluate savings and investment options to meet short- and long-term goals.**

- a. Describe the importance of saving, and list the advantages and disadvantages of different savings and investment options.
- b. Differentiate between savings and investing.
- c. Identify reasons to develop a savings plan.
- d. Define the 70-20-10 rule associated with savings and investing.
- e. Apply criteria for choosing a savings or investment instrument (e.g., market risk, inflation risk, interest rate risk, liquidity, and minimum amount needed for investment).
- f. Distinguish between the rights and responsibilities of owners of debt and equity investments.
- g. Explain why individuals should change their savings and investing plans throughout their life cycles.
- h. Differentiate between interest, dividends, capital gains, and rent from property.
- i. Describe how saving and investing influence economic growth (capital formation).
- j. Evaluate the tax incentives available for certain investments.
- k. Identify costs for investments.
- l. Identify income sources for investments.

## **STANDARD 5: Buying Goods and Services**

Plan, manage and maintain the use of financial resources to protect solvency and plan, as well as, organize and manage a finance organization/department.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.5.1

**Apply a decision-making model to maximize consumer satisfaction when buying goods and services.**

- a. Compare the costs and benefits of purchasing, leasing, and renting.
- b. Describe consumer assistance services provided by public and private organizations (e.g., government, the Better Business Bureau, and manufacturers).
- c. Examine the impact of advertising and marketing on consumer demand and decision-making in the global marketplace.
- d. Research consumer advocacy groups that address consumer rights and responsibilities and describe how an individual can participate.
- e. Calculate the costs of utilities, services, maintenance, and other expenses involved in independent living.
- f. Describe the role that supply and demand and market structure play in determining the availability and price of goods and services.
- g. Explain how a consumer can identify and report fraudulent behavior and practices.

**STANDARD 6: Banking and Financial Institutions**

Determine effective tools, techniques and systems to communicate and deliver value to finance customers as well as access, evaluate and disseminate financial information to enhance financial decision-making processes.

**STANDARDS**

HSBUS.ACT.6.1

**GOALS and PERFORMANCE OBJECTIVES**

**Evaluate services provided by financial deposit institutions to transfer funds.**

- a. Identify the difference between debit cards, credit cards, and other banking services.

- b. Examine the use of banks and other financial institutions from a global consumer perspective (e.g., immigrants to the U.S., fear of banks, cash-based systems in some countries, safety of deposits made in banks in other countries).
- c. Identify other means of transferring funds (e.g., money orders and certified checks).
- d. Evaluate products and services and related costs and fees associated with financial institutions in terms of personal banking needs.
- e. Describe and demonstrate the steps involved in the bank reconciliation process.
- f. Compare and contrast various forms of endorsement.
- g. Compare costs and benefits of online and traditional banking.
- h. Analyze privacy and security issues associated with financial transactions.
- i. Explain how certain historical events have influenced the banking system and other financial institutions.
- j. Identify the functions of the Federal Reserve System.

## **STANDARD 7: Using Credit**

Manage a financial product or service mix in order to respond to market opportunities.

### **STANDARDS**

HSBUS.ACT.7.1

### **GOALS and PERFORMANCE OBJECTIVES**

**Analyze factors that affect the choice of credit, the cost of credit, and the legal aspects of using credit.**

- a. Understand the risks and consequences of borrowing money.
- b. Compare installment and non-installment credit.
- c. Identify the advantages and disadvantages of using credit.

- d. Analyze various sources and types of credit (e.g., short- and long-term) and related costs.
- e. Select an appropriate form of credit for a particular buying decision.
- f. Compare and contrast the various aspects of credit (e.g., APR, grace period, incentive buying, methods of calculating interest, and fees).
- g. Explain credit ratings and credit reports and describe why they are important to consumers.
- h. Describe the relationship between a credit rating and the cost of credit.
- i. Identify strategies for effective debt management.
- j. Analyze the sources of assistance for debt management.
- k. Research rights and responsibilities of consumers according to credit legislation (e.g., truth-in-lending, fair credit reporting, equal credit opportunity, and fair debt collection).
- l. Compare and contrast the legal aspects of different forms of credit (e.g., title transfer, responsibility limits, collateral requirements, and co-signing).
- m. Describe legal and illegal types of credit that carry high interest rates (e.g., pay-day loans, rent-to-buy agreements, and loan sharking).
- n. Identify the components listed on a credit report and explain how that information is used and how it is received by and reported from the credit reporting agencies.
- o. Identify specific steps that consumers can take to minimize their exposure to identity theft.
- p. Identify specific steps that should be taken by a victim of identity theft.
- q. Explain the implications of foreclosure and bankruptcy.

## **STANDARD 8: Protecting Against Risk**

Employ financial risk-management strategies and techniques used to minimize business loss.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.ACT.8.1

**Analyze choices available to consumers for protection against risk and financial loss.**

- a. Identify the type of insurance associated with different types of risk (e.g., automobile, personal and professional liability, home and apartment, health, life, long-term care, disability).
- b. Explain why insurance needs change throughout the life cycle.

- c. Identify various suppliers of insurance (e.g., public and private).
- d. Explain the role of insurance in financial planning as a wealth-building and wealth-preservation tool.



# **BUSINESS**

## **MULTIMEDIA DEVELOPMENT**

### **Information Technology Career Pathway**

Multimedia encompasses: video and audio production, graphic design, web design, digital publishing, any presentation software, and animation.

## **STRAND 7: INFORMATION TECHNOLOGY**

### **STANDARD 1: Impact on Society**

Explain the implications of IT on business development and describe trends in emerging and evolving computer technologies and their influence on IT practices.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.1.1

**Assess the impact of information technology in a global society.**

- a. Analyze how developments in information technology affect the supply/demand characteristics of the job market.
- b. Illustrate how information technology changes organization structures.
- c. Examine how information technology changes the breadth and level of worker responsibilities.
- d. Evaluate how information technology transforms business processes and relationships.
- e. Assess how information technology changes the manner in which training is offered and implemented.
- f. Identify emerging trends in information technology and predict influences on business and industry.
- g. Analyze and compare society's influence on information technology and information technology's influence on society.

## **STANDARD 2: Information Literacy**

Compare key functions and applications of software and determine maintenance strategies for computer systems, as well as demonstrate effective professional communication skills and practices.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.2.1

**Gather, evaluate, use, cite, and disseminate information from technology sources.**

- a. Synthesize information from data sources to formulate decisions across the curriculum.
- b. Analyze and use mathematical and/or statistical methods to manipulate data into useful information.
- c. Present analyzed information in a meaningful format.

## **STANDARD 3: Digital Citizenship**

Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.3.1

**Demonstrate respectful, responsible and ethical behavior in a digital world.**

- a. Recognize the importance of your digital footprint and manage it professionally.
- b. Recognize responsible use of digital commerce.
- c. Recognize how information technology contributes to lifelong learning.
- d. Implement organization policies and procedures dealing with legal and ethical issues.
- e. Compare and contrast various types of license agreements (e.g., open source, multiple license agreements, single-user installation, site license).
- f. Read, interpret, and adhere to software license agreements and legal mandates.
- g. Analyze legal and ethical dilemmas within the framework of current laws and legislation (e.g., virus development, hacking, threats, phishing).

## **STANDARD 6: Input Technologies**

Describe trends in emerging and evolving computer technologies and their influence on IT practices.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.6.1

**Use various input technologies to enter and manipulate information appropriately.**

- a. Select appropriate input technology to optimize performance.
- b. Apply a variety of input technologies to maximize productivity.
- c. Use a variety of input technologies to optimize academic and workplace performance.
- d. Create media using a variety of input technologies.

**STANDARD 8: Digital Media**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.8.1

**Use and create digital media.**

- a. Interpret, analyze, and determine meaning for digital media production.
- b. Demonstrate knowledge and communication through the various multimedia programs.
- c. Analyze and develop multimedia delivery solutions for the appropriate audience.
- d. Create and edit an original high-end, professional quality media production.
- e. Analyze and select appropriate digital media formats and properties (e.g., plug-ins, codecs, compression).
- f. Analyze digital media delivery tools and their effect on business functions.
- g. Develop digital media delivery system solutions (e.g., streaming media servers, custom authored media).
- h. Select and integrate digital media appropriate for various platforms.
- i. Prepare students to obtain software industry certification(s) needed for a chosen career path.

**STANDARD 9: Web Development and Design**

Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.

**STANDARDS**      **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.9.1

**Design, develop, test, implement, update, and evaluate web solutions.**

- a. Identify client and target audience needs.
- b. Create content that is readable, accessible, searchable, and sticky.
- c. Explain and use various Internet protocols.
- d. Research and apply accessibility guidelines and laws affecting website design.
- e. Assess website content in terms of organization policies and federal and state laws.
- f. Research and analyze hosting and domain name solutions.
- g. Compare and contrast the features of web development applications.
- h. Use digital media optimize for website integration.
- i. Install and configure web development applications and plug-ins.
- j. Design, develop, and deliver advanced web content and applications using authoring tools.
- k. Build dynamic web elements utilizing scripting, coding, and database integration.
- l. Create a comprehensive website using industry design standards.
- m. Test, implement, and evaluate the website.
- n. Build websites to support mobile platforms.
- o. Develop organizations policy for website content and access.

**STANDARD 18: Information Technology Careers**

Demonstrate effective professional communication skills and practices that enable positive customer relationships.

**STANDARDS**

HSBUS.IT.18.1

**GOALS and PERFORMANCE OBJECTIVES**

**Explore career opportunities in information technology.**

- a. Examine education, experience, skills, and personal requirements for career in information technology.
- b. Describe the impact of technological change on information technology positions and the resulting need for lifelong learning.
- c. Identify the benefits of industry certifications and higher education for various information technology careers.

# **BUSINESS**

## **PROGRAMMING & APPLICATION DEVELOPMENT**

### **Information Technology Career Pathway**

This course examines the computing field and how it impacts the human condition through the exciting world of big data and data science. The course introduces computational thinking using the Python programming language. Students expand their ability to solve problems with Python by learning to deploy lists, files, dictionaries and object-oriented programming. Data science libraries are introduced that enable data to be manipulated and displayed. Students will also use different programming languages that may include HTML, JavaScript, Java, C+, etc. They will also use robotic tools (Edison, micro:bit) to aid in their computational thinking.

## **STRAND 7: INFORMATION TECHNOLOGY**

### **STANDARD 1: Impact on Society**

Explain the implications of IT on business development and describe trends in emerging and evolving computer technologies and their influence on IT practices.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.1.1

**Assess the impact of information technology in a global society.**

- a. Analyze how developments in information technology affect the supply/demand characteristics of the job market.
- b. Illustrate how information technology changes organization structures.
- c. Examine how information technology changes the breadth and level of worker responsibilities.
- d. Evaluate how information technology transforms business processes and relationships.
- e. Assess how information technology changes the manner in which training is offered and implemented.
- f. Identify emerging trends in information technology and predict influences on business and industry.
- g. Analyze and compare society's influence on information technology and information technology's influence on society.

### **STANDARD 2: Information Literacy**

Compare key functions and applications of software and determine maintenance strategies for computer systems, as well as demonstrate effective professional communication skills and practices.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.2.1

**Gather, evaluate, use, cite, and disseminate information from technology sources.**

- a. Synthesize information from data sources to formulate decisions across the curriculum.
- b. Analyze and use mathematical and/or statistical methods to manipulate data into useful information.
- c. Present analyzed information in a meaningful format.

### **STANDARD 3: Digital Citizenship**

Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

### **STANDARDS**

### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.3.1

**Demonstrate respectful, responsible and ethical behavior in a digital world.**

- a. Recognize the importance of your digital footprint and manage it professionally.
- b. Recognize responsible use of digital commerce.
- c. Recognize how information technology contributes to lifelong learning.
- d. Implement organization policies and procedures dealing with legal and ethical issues.
- e. Compare and contrast various types of license agreements (e.g., open source, multiple license agreements, single-user installation, site license).
- f. Read, interpret, and adhere to software license agreements and legal mandates.
- g. Analyze legal and ethical dilemmas within the framework of current laws and legislation (e.g., virus development, hacking, threats, phishing).

### **STANDARD 4: Devices and Components**

Perform standard computer backup and restore procedures to protect IT information and demonstrate knowledge of the hardware components associated with information systems.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.4.1

**Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; and repair hardware.**

- a. Troubleshoot and repair computer hardware and resolve related application problems.
- b. Obtain hardware certification(s) needed for a chosen career path.
- c. Evaluate and recommend devices to solve specific problems.
- d. Analyze cost benefit and life cycle of devices.
- e. Evaluate device vendors, warranties, and purchasing options.

## **STANDARD 5: Operating Systems**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services. Also, recognize and analyze potential IT security threats to develop and maintain security requirements.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.5.1

**Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with various types of operating system utilities.**

- a. Compare and contrast the functions, features, and limitations of different operating systems and utilities (e.g., open source, mobile, and proprietary operating systems).
- b. Select operating systems and utilities appropriate for specific hardware, software, and tasks.
- c. Install and customize operating systems and utilities.
- d. Diagnose and repair installation and operational problems of operating systems.
- e. Identify and use appropriate help resources (e.g., help desks, online help, and manuals) to install, configure, upgrade, diagnose, and repair operating systems and utilities.

## **STANDARD 6: Input Technologies**

Describe trends in emerging and evolving computer technologies and their influence on IT practices.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.6.1

**Use various input technologies to enter and manipulate information appropriately.**

- a. Select appropriate input technology to optimize performance.
- b. Apply a variety of input technologies to maximize productivity.
- c. Use a variety of input technologies to optimize academic and workplace performance.
- d. Create media using a variety of input technologies.

## **STANDARD 7: Applications**

Compare key functions and applications of software and determine maintenance strategies for computer systems.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.7.1

**Identify, evaluate, select, install, use, upgrade, troubleshoot, and customize applications.**

- a. Evaluate providers, licensing, and purchasing options.
- b. Use the collaborative features of applications to accomplish organizational tasks.
- c. Apply advanced features of applications for productivity.
- d. Evaluate the effectiveness of applications to solve specific problems.
- e. Diagnose and solve problems resulting from an application's installation and use.
- f. Use applications to analyze data for making good business decisions.
- g. Obtain software industry certification(s) needed for a chosen career path.
- h. Demonstrate the transferability of skills between applications.
- i. Diagnose and solve application problems.
- j. Select and integrate productivity software products appropriate for various computer platforms.
- k. Identify, evaluate, and select software specific to an organizational function and/or industry.
- l. Analyze cost benefit and life cycle of applications.
- m. Create training materials for applications.

## **STANDARD 11: Project Management and Systems Analysis**

Demonstrate the use of cross-functional teams in achieving IT project goals and describe quality assurance practices and methods employed in producing and providing quality IT products and services.

## **STANDARDS**

## **GOALS and PERFORMANCE OBJECTIVES**



HSBUS.IT.11.1

**Analyze and design projects and information systems using appropriate management and development tools.**

- a. Identify and explain the steps in the systems development life cycle.
- b. Identify and describe various structured analysis and design tools.
- c. Use project management to manage information systems development projects.
- d. Analyze a current system using structured systems analysis tools.
- e. Define system requirements using structured systems analysis tools.
- f. Incorporate appropriate user interface design principles.
- g. Identify and apply appropriate application development tools.
- h. Develop a conversion plan.
- i. Develop design specifications for record types, output and data stores.
- j. Create appropriate documentation for information systems.
- k. Develop a testing plan.
- l. Develop a training plan.

**STANDARD 12: Programming and Application Development**

Describe quality assurance practices and methods employed in producing and providing quality IT products and services.

**STANDARDS**

**GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.12.1

**Design, develop, test, and implement programs and applications.**

- a. Identify and define object-oriented programming terminology.
- b. Demonstrate the ability to code using object-oriented programming.

- c. Identify and explain programming structures.
- d. Differentiate between source and object code
- e. Choose the appropriate language or applications development tool for specific tasks.
- f. Use scripting languages in application development
- g. Apply design principles to programming tasks.
- h. Develop programs and applications for a variety of platforms.
- i. Select and incorporate appropriate compiler.
- j. Code common tasks using application development tools.
- k. Code a program solution in more than one programming language.
- l. Test, debug, and document code.
- m. Maintain and reengineer existing code.
- n. Develop programs and applications for a variety of platforms.
- o. Design 3D and gaming environments in relationship to the development of applications.
- p. Explore immersive and visualization techniques.
- q. Prepare students to obtain software industry certification(s) needed for a chosen career path.

#### **STANDARD 14: Information Technology Planning & Acquisition**

Demonstrate the use of cross-functional teams in achieving IT project goals.

##### **STANDARDS**

##### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.14.1

**Plan the selections and acquisition of information technologies.**

- a. Identify and analyze user needs within an organization.
- b. Research and identify information technology solutions to meet organizational needs.
- c. Compare, contrast, and identify potential solutions to meet the needs for an organization.

#### **STANDARD 15: Security and Risk Management**

Describe the use of computer forensics to prevent and solve information technology crimes and breaches.

##### **STANDARDS**

##### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.15.1

**Design and implement security and risk management policies and procedures for information technology.**

- a. Analyze security, privacy, and risk management issues.
- b. Identify potential risks to enterprise systems from physical or cyber threats.

- c. Implement configuration management strategies.

### **STANDARD 17: Information Technology and Business Functions**

Demonstrate the use of cross-functional teams in achieving IT project goals and explain the implications of IT on business development.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.17.1

**Describe the information technology components of business functions and explain their interrelationships.**

- a. Identify and examine information systems and their impact on the enterprise (e.g., Enterprise Resource Planning (ERP) systems).
- b. Identify and explain the major components of marketing and sales information technologies and their interrelationships.
- c. Identify and explain the major components of accounting and finance information technologies and their interrelationships.
- d. Identify and explain the major components of manufacturing and logistics information technologies and their interrelationships.
- e. Identify and explain the major components of research and development information technologies and their interrelationships.
- f. Identify and explain the major components of human resource management information technologies and their interrelationships.

### **STANDARD 18: Information Technology Careers**

Demonstrate effective professional communication skills and practices that enable positive customer relationships.

#### **STANDARDS**

#### **GOALS and PERFORMANCE OBJECTIVES**

HSBUS.IT.18.1

**Explore career opportunities in information technology.**

- a. Examine education, experience, skills, and personal requirements for career in information technology.

- b. Describe the impact of technological change on information technology positions and the resulting need for lifelong learning.
- c. Identify the benefits of industry certifications and higher education for various information technology careers.