Minnesota Business, Marketing, and Information Technology Frameworks:

Accounting and Finance Cluster [Updated January 2024]

Accounting and Finance Cluster

The Accounting and Finance Cluster includes the study of recording, managing, and strategizing about the financial resources of a business. Students develop skills in creating budgets and financial records, analyzing financial performance, and developing business financial strategies. Application of knowledge and skills takes place in classroom, simulated, and real-world settings.

Cluster Courses

Introductory Courses	Intermediate Courses	Advanced Courses
18 Personal Finance and Money Management 20 Accounting 1: Foundations 21 Accounting 2: Partnerships & Corporations	19 Finance and Investing 22 Accounting 3: Managerial 24 Microeconomics	23 Accounting 4: Specialized 25 Macroeconomics 26 AP Accounting

Career Pathways

Career pathways developed through courses in this cluster include:

- Accountant
- Auditor
- Financial Advisor
- Investment Banker
- Securities and Investments Specialist
- Stock Broker
- Insurance Appraiser

Experiential Learning and Work-Based Learning

Experiential Learning opportunities should be embedded throughout a CTE Business and Marketing program, and could include industry tours, job shadowing experiences, service learning experiences, and student-led business operations. Work-based Learning (WBL) experiences as a continuation and application of classroom learning can also be developed. Work-based Learning includes both internship and Youth Apprenticeship opportunities for approved WBL programs with licensed WBL coordinators. Experiential Learning is a required component of every business, marketing, and instructional technology education program, with the intention that opportunities will be available for every student. Through involvement in Experiential Learning activities, students experience multiple career pathway occupations, learn expected workplace behavior, develop industry-specific technical skills, and are given opportunities to apply academic and occupational skills in the workplace or a simulated workplace environment.

Social-Emotional Learning

Helping students develop social and emotional competence is an essential component in their preparation to be successful adults. Career and Technical Education (CTE) classrooms and workplaces should foster the acquisition and application of the knowledge, skills and attitudes needed for social and emotional development. These include: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Explicit teaching of, and regular student rehearsal of, these skills will lead to greater academic, social, and career outcomes.

Career Technical Student Organizations: Business Professionals of America (BPA) and DECA

Student participation in career technical student organizations (CTSOs) is considered as essential component of a quality career and technical education program. Minnesota Business Professionals of America (BPA) and Minnesota DECA provide students with opportunities for growth through education, competition, community service and professional development. Career and leadership development activities are embedded throughout the entire career cluster through classroom instruction and projects, as well as the DECA and BPA competitive event programs.

Assessing Competencies with Formative and Summative Assessments

Employability skill performance indicators and benchmarks (found at the beginning of this document) are typically assessed with "formative assessments." The goal of formative assessment is to monitor student progress during an instructional unit to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. Formative assessments help students identify their strengths and weaknesses and target areas of needed improvement. They also help teachers recognize where students are struggling so that problems can be addressed in a timely manner. Formative assessments generally have low or no point value.

Career pathway technical skill performance indicators and benchmarks (identified by Table C course name and code later in the document) are typically assessed with "summative assessments." The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against the performance indicator or benchmark to which the unit was aligned. Summative assessments have point values which generally are factored into a final course grade.

Resources Utilized in Frameworks Development

Performance Indicators/Standards and Measures/Benchmarks were developed from the following sources:

- Minnesota Common Core Competencies
- National Business Education Association Standards
- Jump$tart National Standards in K-12 Personal Finance
- National Council on Economic Education
- States' Career Clusters Initiative
- MBA Research National Standards for Business Administration

Employability Skills: Accounting and Finance Cluster

NOTE: These are for general embedding in all Business/Marketing courses. They are NOT part of course alignment during the Program Approval process.

Topic/Strand 1: Academic Foundations

Performance Indicator/Standard	Measures/Benchmarks
AF01.01 Apply mathematical concepts to solve business problems and make business decisions.	AF01.01.01 Identify patterns and relationships among business data elements. AF01.01.02 Use estimation techniques to predict the reasonableness of a mathematical solution. AF01.01.03 Interpret graphical and numerical data to make conclusions on business performance. AF01.01.04 Recommend solutions to business problems based on data analysis. AF01.01.05 Create mathematical models to communicate data from projections, results, and recommendations.
AF01.02 Read and apply print and electronic information in task completion and business decision making.	AF01.02.01 Interpret facts and meaning from print and electronic business materials. AF01.02.02 Comprehend and apply written directions to complete business tasks.
AF01.03 Convey ideas and information in writing from print and electronic materials.	AF01.03.01 Compose multi-paragraph documents that present information clearly, succinctly, and accurately. AF01.03.02 Create and edit written communications with correct grammar, spelling, punctuation, and capitalization. AF01.03.03 Utilize career pathway technical concepts and terminology in written communications. AF01.03.04 Evaluate the reliability of information obtained from a variety of sources. AF01.03.05 Reference/cite sources of information created by others.
AF01.04 Convey ideas and information from print and electronic materials in verbal communication.	AF01.04.01 Communicate effectively with team members to foster positive relationships and accomplish project goals. AF01.04.02 Communicate effectively with customers to foster positive relationships that enhance the business image. AF01.04.03 Utilize career pathway technical concepts and terminology in verbal communications.

Topic/Strand 2: Employability and Career Development

Performance Indicator/Standard	Measures/Benchmarks
AF02.01 Identify and demonstrate positive work behaviors and personal qualities sought by employers.	AF02.01.01 Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation. AF02.01.02 Demonstrate flexibility and willingness to learn new knowledge and skills.
AF02.02 Develop knowledge and skills for an effective transition from school to career.	AF02.02.01 Investigate education and occupational opportunities using a variety of resources (e.g., speakers, research, job shadowing, etc.). AF02.02.02 Identify training, education, and certification requirements for occupational choice. AF02.02.03 Utilize personal inventory tools to identify personal traits, learning styles, and skills. AF02.02.04 Develop effective job seeking materials including resume, cover letter, and recommendation letters to include in a career portfolio. AF02.02.05 Develop and manage an online brand to convey a professional online presence with job seeking resources and social media accounts.

Topic/Strand 3: Critical Thinking and Problem Solving

Performance Indicator/Standard	Measures/Benchmarks
AF03.01 Use critical thinking skills to develop potential solutions to business problems.	AF03.01.01 Identify desired project or business outcomes. AF03.01.02 Identify information needed to develop potential solutions to business problems. AF03.01.03 Apply creativity and innovation to create ideas, proposals, and solutions to problems. AF03.01.04 Adjust problem-solving strategies based on data or changing circumstances to achieve desired results.
AF03.02 Perform data analysis to make business decisions.	AF03.02.01 Formulate questions that can be solved or answered through data. AF03.02.02 Collect relevant data to solve business problems. AF03.02.03 Perform data analysis to evaluate data and recommend solutions.
AF03.03 Evaluate the effectiveness of implemented solutions/strategies.	AF03.03.01 Recommend a proposed solution based on project goals and data analysis. AF03.03.02 Evaluate an implemented solution based on project goals and data analysis.

Topic/Strand 4: Information Technology Applications

Performance Indicator/Standard	Measures/Benchmarks
AF04.01 Use industry-standard information technology tools to create and deliver business presentations.	AF04.01.01 Create and deliver business presentations to multiple audiences using a variety of media and formats. AF04.01.02 Prepare and share support materials that will enhance audience understanding of a verbal presentation. AF04.01.03 Adjust presentation messages and methods from interpretation of audience verbal and nonverbal cues.
AF04.02 Operate electronic mail and social media applications for workplace communications.	AF04.02.01 Identify various communication and organization functions utilized in email systems. AF04.02.02 Use email to share files and documents. AF04.02.03 Create email communication messages appropriate for internal and external audiences. AF04.02.04 Apply netiquette skills in email and social media for internal and external communications. AF04.02.05 Facilitate group work through management of shared calendars, files, and communication tools.
AF04.03 Use computer-based systems and applications to perform work tasks.	AF04.03.01 Utilize computer application software to create and store business documents. AF04.03.02 Operate computer-managed equipment, peripherals, and network devices to complete work task AF04.03.03 Apply productivity software tools (spreadsheets and databases) to perform accounting functions. AF04.03.04 Apply accounting software packages to perform financial recording, reporting, and analysis functions.
AF04.04 Use Internet-based applications to perform work tasks.	AF04.04.01 Efficiently navigate and access Internet resources with web browsers. AF04.04.02 Utilize Internet-based applications to perform workplace tasks to industry standards.

Topic/Strand 5: Intercultural Competence

Performance Indicator/Standard	Measures/Benchmarks
AF05.01 Explain the environmental, social, global, and economic impacts of decisions within an organization.	AF05.01.01 Explain the cultural, social, historical, and business changes that have influenced technology use in business. AF05.01.02 Analyze data privacy and information security issues from personal, business, and cultural perspectives. AF05.01.03.Analyze current global issues related to industries and careers in this career field.
AF05.02 Recognize value in diverse perspectives of team members.	AF05.02.01 Utilize active listening to convey empathy and respect for multiple perspectives. AF05.02.02 Create positive team dynamics and effectively complete tasks by adapting to cultural differences and commonalities of team members.
AF05.03 Utilize conflict resolution skills to address stakeholder problems.	AF05.03.01 Resolve conflicts with and for customers using conflict resolution skills. AF05.03.02 Resolve conflicts with and for team members using conflict resolution skills.

Topic/Strand 6: Safety, Health, and Environmental

Performance Indicator/Standard	Measures/Benchmarks
AF06.01 Maintain safe and healthy working environments by implementing personal and jobsite safety rules and industry-appropriate regulations.	AF06.01.01 Adhere to OSHA health and safety regulations to support a safe and healthy work environment. AF06.01.02 Apply ergonomic principles and technology use techniques to prevent technology-related injuries and fatigue. AF06.01.03 Demonstrate appropriate use of technology and equipment according to manufacturer rules and safety regulations. AF06.01.04 Explain and comply with sexual harassment policies to create a non-hostile work environment.

Topic/Strand 7: Leadership and Teamwork

Performance Indicator/Standard	Measures/Benchmarks
AF07.01 Demonstrate interpersonal skills to develop effective workplace relationships.	AF07.01.01 Build effective relationships with co-workers and supervisors appropriate to the workplace. AF07.01.02 Work cooperatively with co-workers representing different cultures, genders and backgrounds.
AF07.02 Demonstrate teamwork to effectively achieve individual and collective goals.	AF07.02.01 Identify traits of effective teams in relation to self, team, community, diversity, and environment. AF07.02.02 Promote the involvement and use of team members' individual talents and skills. AF07.02.03 Take responsibility for shared group and individual work tasks.
AF07.03 Demonstrate leadership to accomplish organizational goals and use team members' talents effectively.	AF07.03.01 Identify traits of effective leaders in relation to self, team, community, diversity, and environment. AF07.03.02 Distribute responsibility and work load fairly. AF07.03.03 Promote an environment of positive team relationships and goal attainment. AF07.03.04 Utilize conflict management skills to facilitate solutions.

Topic/Strand 8: Ethics and Legal Responsibilities

Performance Indicator/Standard	Measures/Benchmarks
AF08.01 Describe businesses' responsibility to know and comply with legal and ethical requirements of business operations.	AF08.01.01 Compare and contrast copyrights and trademarks. AF08.01.02 Explain appropriate copyright use including how to acquire formal permission to use proprietary information and intellectual property. AF08.01.03.Demonstrate adherence to copyright and intellectual property laws in using the work of others.
AF08.02 Describe the scope of social responsibility for local and international business operations and their potential impact on society.	AF08.02.01 Identify positive and negative social impacts of business on society. AF08.02.02 Compare and contrast legal versus social responsibility.
AF08.03 Demonstrate ethical behavior in the use of information technology.	AF08.03.01 Explain ethical and legal issues arising from the use of intellectual property. AF08.03.02 Demonstrate ethical behavior as it relates to creating and publishing information. AF08.03.03 Explain ethical considerations of reporting financial information. AF08.03.04 Demonstrate ethical behavior in gathering and using confidential data and information.
AF08.04 Apply ethical reasoning to a variety of workplace situations in order to make ethical decisions.	AF08.04.01 Evaluate alternative responses to workplace situations based on legal responsibilities and employer policies. AF08.04.02 Evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities. AF08.04.03 Explain personal and professional consequences of unethical or illegal behaviors.
AF08.05 Explain applicable tax laws and regulations to comply with government requirements.	AF08.04.01 Explain the purposes of government policies and regulations on business financial activities. AF08.04.02 Explain the scope of businesses' financial reporting requirements.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Personal Finance and Money Management **Course Code: 18**

Course Description: In this course, students develop financial literacy knowledge and skills to prepare them for life after high school. Topics will include establishing a budget, earning a living, saving and investment options (stocks, bonds, real estate, etc.), selecting and using credit options, financial problem solving and decision making, banking organization services options, and managing risk through insurance. Stock market simulations and financial management simulations may be used.

CTSO Competitive Events:

BPA: Personal Financial Management, Banking and Finance, Financial Math and Analysis Concepts

DECA: Principles of Finance, Personal Financial Literacy, Virtual Business Challenge–Personal Finance, Financial Literacy Project

Suggested Certifications or Industry-Recognized Credentials:

NOCTI Micro-Credential: Personal Finance

YouScience: General Financial Literacy

NOCTI Exams: Personal Finance Foundations

Instructional units in this course may include:

- Financial Responsibility and Decision Making
- Budgeting—Income and Expenses
- Income and Careers
- Spending and Credit
- Saving, Investing, and Banking Services
- Insurance and Risk Management
- Vehicles—Buying, Leasing, and Car Maintenance
- Housing Issues—Renting vs. Buying
- Consumer Problems—Deception, Fraud, Complaints, and Legal Actions

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF18.10.01 Analyze the implications of education, career choices, income, and taxes on personal financial planning.	AF18.10.01.01 Describe various sources of income and their effects on maintaining a standard of living during employment years and in retirement. AF18.10.01.02 Compare and contrast employee compensation packages that include health and retirement benefits and other incentives. AF18.10.01.03 Complete required tax documents to comply with tax requirements.	I will be able to discuss how employment choices impact a person's income levels and standard of living. I will be able to compare and contrast health and retirement benefit compensation packages. I will be able to analyze a W-4 tax form to understand how tax withholding is estimated and its impact on net income. I will be able to complete simple and complex personal tax documents.
AF18.10.02 Analyze the role of saving and investing on personal financial planning.	AF18.10.02.01 Compare and contrast the risk/return trade-offs for saving and investing. AF18.10.02.02 Analyze online and mobile banking and bill pay services offered by financial institutions. AF18.10.02.03 Collect information for purchase decision-making using reliable consumer resources. AF18.10.02.04 Develop and analyze long-term financial plans that incorporate home ownership, transportation, education, and retirement considerations.	I will be able to compare and contrast the risks and returns for various types of investment options. I will be able to describe options for financial services available at banks and credit unions. I will be able to examine desired consumer purchases and apply comparison shopping strategies to make financial decisions based on my goals. I will be able to develop financial plans to achieve long-term goals of home ownership, education, and retirement.
AF18.10.03 Develop a personal budget to prioritize and accomplish short-term and long-term financial goals.	AF18.10.03.01 Apply the decision-making process to various types of financial decisions people make at different stages of life. AF18.10.03.02 Evaluate the accuracy and objectivity of financial information from tax advisors, financial planners, and print resources. AF18.10.03.03 Identify and use credible sources of current information about consumer rights and responsibilities. AF18.10.03.04 Summarize the rights and responsibilities of each entity involved in various forms of contractual obligations. AF18.10.03.05 Construct a personal budget to guide achievement of short and long-term goals.	I will be able to explain how consumer decision-making processes change over the course of a lifetime. I will be able to identify and use credible sources of consumer information. I will be able to explain the rights and responsibilities associated with signing a consumer contract. I will be able to create a personal budget based on short- and long-term goals.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF18.10.04 Develop strategies for managing spending, debt, and use of consumer credit options.	AF18.10.04.01 Compare and contrast various forms of consumer credit and strategies for managing debt. AF18.10.04.02 Explain credit ratings and credit reports, and why they are important to consumers. AF18.10.04.03 Develop and analyze strategies for effective debt management. AF18.10.04.04 Explain rights and responsibilities of consumers according to credit legislation (i.e. truth-in-lending, fair credit reporting, equal credit opportunity, and fair debt collection).	I will be able to compare different sources of credit to determine the best credit choice. I will be able to interpret a credit report and understand how a score is generated. I will be able to discuss various strategies for managing consumer debt. I will be able to explain consumer rights and protections provided by several current consumer credit laws.
AF18.10.05 Analyze options for building wealth through investment opportunities.	AF18.10.05.01 Develop long-term financial goals based on lifestyle expectations and career choices. AF18.10.05.02 Explain rationale for various investment decisions (i.e. diversification, liquidity, income, growth). AF18.10.05.03 Analyze how economic conditions and business factors affect market value of a stock. AF18.10.05.04 Explain regulations on financial markets and the protections available to investors.	I will be able to apply criteria (i.e. liquidity, income, growth, diversification) to evaluate and select investment options that align with my financial goals. I will be able to explain how changing economic circumstances impact the price of stocks on a stock market.
AF18.10.06 Develop risk management strategies with insurance for achieving financial goals.	AF18.10.06.01 Analyze the role of insurance in financial planning as a wealth-building and wealth-preservation tool. AF18.10.06.02 Describe the types of insurance associated with different types of risk (e.g. auto, liability, home, health, life, long-term care, disability). AF18.10.06.03 Analyze the risk management strategy of acquiring health and life insurance at various stages in the life cycle.	I will be able to discuss the role of insurance in building and preserving wealth. I will be able to explain the various types of insurances available to protect against various types of risk. I will be able to analyze the costs and benefits of purchasing health and life insurance at different stages in my life.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Finance and Investing **Course Code: 19**

Course Description: In this course, students will learn about building wealth through investments and utilizing financial management decision making. Students will learn the time-value concept that drives investing and how to invest with short-term and long-term strategies. This course will provide the foundation for a lifetime of building wealth through informed savings and investing. Topics covered include financial analysis, investments and investment analysis of stock and mutual fund performance leading to financial goal-setting for individual (not institutional) investors. Experiential learning will include creating an investment portfolio, making investing decisions related to holdings, and monitoring progress of a stock portfolio. Students will also study careers in business finance and investments. Course may include participation in a Business Professionals of America (BPA) student organization.

CTSO Competitive Events:

BPA: Banking and Finance, Financial Analyst Team, Economic Research Individual, Personal Financial Management, Financial Math and Analysis Concepts.

DECA: Personal Financial Literacy, Virtual Business Challenge–Personal Finance, Financial Services Team Decision Making, Financial Consulting, Finance Operations Research.

Suggested Certifications or Industry-Recognized Credentials:

NOCTI Exams: Financial and Investment Planning

Instructional units in this course may include:

- Financial Planning for Building Wealth
- Short-Term and Long-Term Financial Goals
- Strategies for Managing Money and Building Wealth
- Consumer Credit and Consumer Loans
- Stock Market and Investment Options

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF19.10.01 Analyze the financial planning process and evaluate how personal choices affect money, income and wealth.	AF19.10.01.01 Describe the personal financial planning process, techniques and benefits. AF19.10.01.02 Describe the life cycle of financial plans and their role in achieving financial goals. AF19.10.01.03 Analyze economic influences on personal financial planning.	I will be able to identify the benefits of using personal financial planning techniques to manage finances. I will be able to define the benefits of using professional financial planners. I will be able to describe the financial planning process and define personal financial goals. I will be able to explore the impact of age, education, and geographic location on personal income. I will be able to explore the connection of career choice to personal financial planning.
AF19.10.02 Utilize financial decision-making and planning to achieve financial goals.	AF19.10.02.01 Explain the range of financial planning activities that can impact future decisions about work and retirement. AF19.10.02.02 Prepare personal financial statements (balance sheet, income statement, expense statement, cash flow statement, net-worth, etc.). AF19.10.02.03 Calculate financial ratios and time value of money to assess the effectiveness of personal financial decision making.	I will be able to identify the relationship between financial plans and statements. I will be able to describe needs and wants and explain how financial resources fulfill needs and wants. I will be able to prepare personal financial statements. I will be able to use financial ratios to evaluate financial decisions. I will be able to apply the time value of money to financial goals.
AF19.10.03 Develop strategies to manage money, wealth and income.	AF19.10.03.01 Compare and contrast various financial service products for meeting savings goals and building wealth. AF19.10.03.02 Analyze the importance of sources of earned income, benefits, income tax and other deductions towards building personal financial security and wealth.	I will be able to describe the modern financial services marketplace of both depository and non-depository financial institutions. I will be able to compare and evaluate a variety of financial products and services including checking, savings, electronic banking, and financial or tax planning that meet my needs. I will be able to calculate interest earned including compound interest and future value. I will be able to investigate and calculate exchange rates. I will be able to discuss the basic principles of income taxes and determine tax filing status. I will be able to identify the sources of gross income and adjustments to income and calculate taxable income.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF19.10.04 Analyze the types of and uses of credit and consumer loans and the impact of credit use on personal finances.	AF19.10.04.01 Compare and contrast various types of consumer credit options. AF19.10.04.02 Recommend strategies for building strong consumer credit scores. AF19.10.04.03 Describe the features of, and calculate the finance charges on, various types of personal loans.	I will be able to choose the best loans by comparing finance charges, maturity, collateral, and other loan terms. I will be able to describe how to obtain and manage the use of a credit card or consumer loan. I will be able to identify both benefit and risk of consumer credit or loans on personal finances. I will be able to identify the elements that go into a consumer credit score. I will be able to develop a plan to establish a strong credit history.
AF19.10.05 Analyze investment options and the financial securities market.	AF19.10.05.01 Explain the role that investing plays in implementing personal financial goals. AF19.10.05.02 Evaluate stocks and bonds as personal investment instruments. AF19.10.05.03 Analyze mutual funds as personal investment instruments. AF19.10.05.04 Compare and contrast a variety of investment alternatives including real estate, annuities, commodities, and currency as means of achieving financial goals. AF19.10.05.05 Demonstrate how to buy and sell investments in national and international markets. AF19.10.05.06 Compare and contrast participating in employer-sponsored investment programs to personal investment management. AF19.10.05.07 Describe how government and private agencies protect investors and regulate financial markets and products.	I will be able to explain how investing affects personal financial planning at various life stages. I will be able to analyze the risks and returns for various types of investments. I will be able to identify investment options meeting my risk, return, yield and investment goals. I will be able to compare and contrast the different types of stocks and examine stock performance measures. I will be able to utilize securities information to make informed financial decisions. I will be able to describe the basic features and operating characteristics of mutual funds and exchange traded funds including fund loads, managers and charges. I will be able to examine investor services offered by mutual funds and exchange traded funds and the use of a financial planner. I will be able to explain the process of buying and selling securities and recognize the different types of orders. I will be able to examine employee-sponsored investment and pension plans.
AF19.10.06 Explain the concept of financial risk and identify ways to reduce risk in financial planning.	AF19.10.06.01 Explain the concept of risk and the basics of insurance underwriting. AF19.10.06.02 Analyze personal decision-making relating to insurance for reducing financial risk and determining appropriate levels of coverage (life, disability, health, and property insurance).	I will be able to examine how insurance transfers risk and protects personal finances. I will be able to identify a variety of insurance options and discuss the primary purposes of insurance coverage. I will be able to make calculations for needed levels of insurance coverage.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710 or 040800**

Course Title: Accounting 1: Foundations **Course Code: 20 or 14**

Course Description: This course introduces the fundamental accounting principles and procedures used in businesses. Content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used.

CTSO Competitive Events:

BPA: Fundamental Accounting, Advanced Accounting

DECA: Accounting Applications Series, Virtual Business Challenge–Accounting

Suggested Certifications or Industry-Recognized Credentials:

YouScience: Accounting I

NOCTI Exams: Accounting Foundations

Instructional units in this course may include:

- Role of accounting in business
- Business records and recordkeeping for business decision-making
- Establishing electronic financial recordkeeping systems
- Classifying and recording financial transactions
- Creating, interpreting, and communicating financial reports
- Creating cash management systems and procedures
- Careers in accounting and finance pathway

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF20.10.01 Explain the nature and scope of accounting in business operations.	AF20.10.01.01 Analyze the role of accounting in business operations. AF20.10.01.02 Analyze basic business financial activities for their application of Generally Accepted Accounting Principles (GAAP). AF20.10.01.03 Describe the regulatory roles of the Financial Accounting Standards Board (FASB) and Securities and Exchange Commission (SEC).	I will be able to describe the role of accounting in successful businesses. I will be able to explain current regulations affecting accounting.
AF20.10.02 Recommend a form of business ownership based on resources and financial goals.	AF20.10.02.01 Compare and contrast key characteristics of various types of business ownership. AF20.10.02.02 Recommend a form of business ownership based on financial circumstances and financial goals.	I will be able to explain the advantages and disadvantages of each form of business ownership and be able to recommend a form based on the owner's situation.
AF20.10.03 Describe essential concepts for maintaining and protecting business records.	AF20.10.03.01 Describe how business records represent the financial activities of a business. AF20.10.03.02 Recommend practices for maintaining and protecting business records.	I will be able to explain the proper storage of accounting journals and ledger information.
AF20.10.04 Classify and record financial data in electronic recordkeeping systems.	AF20.10.04.01 Calculate transaction effects on the accounting equation. AF20.10.04.02 Prepare a chart of accounts. AF20.10.04.03 Journalize and post accounting transactions.	I will be able to explain how debit and credit entries effect the accounting equation. I will be able to prepare a chart of accounts. I will be able to record and post accounting transactions using the appropriate journals and ledger accounts.
AF20.10.05 Create financial reports to summarize and explain the financial status of a business.	AF20.10.05.01 Prepare income statements to communicate profitability. AF20.10.05.02 Prepare balance sheets to communicate the financial status of a business. AF20.10.05.03 Prepare a statement of equity and retained earnings. AF20.10.05.04 Present an analysis of financial statement results and make recommendations on future business activity.	I will be able to explain how the interaction of revenues and expenses produce net income or loss. I will be able to prepare business financial statements. I will be able to present an analysis of financial statement results and provide future business recommendations.
AF20.10.06 Maintain controls and systems for managing cash.	AF20.10.06.01 Describe daily business activities that create the necessity for effective cash management systems. AF20.10.06.02 Prove the accuracy of cash records. AF20.10.06.03 Journalize/post entries related to banking activities. AF20.10.06.04 Journalize and post entries related to petty cash funds.	I will be able to perform a cash proof. I will be able to journalize banking activity transactions. I will be able to establish and replenish a petty cash account and journalize each transaction.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Accounting 2: Partnerships and Corporations **Course Code: 21**

Course Description: This course expands upon the fundamental accounting principles and procedures introduced in Accounting 1 courses. Content includes the full accounting cycle for partnerships and corporations, and managerial uses of control systems and the accounting process. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Focus is made on developing the ability to communicate financial information and solve problems through financial decision-making. Calculators, electronic spreadsheets, or other automated tools are usually used.

CTSO Competitive Events:

BPA: Fundamental Accounting, Advanced Accounting

DECA: Accounting Applications Series, Virtual Business Challenge–Accounting

Suggested Certifications or Industry-Recognized Credentials:

YouScience: Accounting II

NOCTI Exams: Business Financial Management

NOCTI Exams: Accounting-Basic

Instructional units in this course may include:

- Using special journals to record and analyze financial transactions
- Recording and managing accounts payable transactions
- Recording and managing accounts receivable transactions
- Maintaining systems and recording transactions for inventory management
- Payroll accounting procedures and transactions
- Tax accounting procedures and transactions
- Careers in accounting and finance pathway

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF21.10.01 Record purchase and sales transactions utilizing special journals.	AF21.10.01.01 Explain the purpose of special journals for recording specific types of financial transactions. AF21.10.01.02 Analyze purchase requisitions and purchase orders to obtain information for recording accounting transactions. AF21.10.01.03 Journalize and post inventory purchase transactions. AF21.10.01.04 Analyze sales invoices and receipts to obtain information for recording accounting transactions. AF21.10.01.05 Journalize and post merchandise sales transactions.	I will be able to explain why businesses use special journals. I will be able to explain the use of source documents in special journals. I will be able to prepare a Purchases Journal. I will be able to obtain necessary information from source documents to journalize in proper journals. I will be able to analyze a sales invoice for cost and dating terms. I will be able to analyze a vendor invoice for cost and dating terms.
AF21.10.02 Perform accounts payable accounting functions.	AF21.10.02.01 Explain the business purposes of utilizing accounts payable and their impact on business resources. AF21.10.02.02 Record and post purchase transactions utilizing a purchases journal and accounts payable subsidiary ledger. AF21.10.02.03 Process invoices for payment and calculate purchase discounts available for timely payments. AF21.10.02.04 Complete accounts payable processing and prepare an accounts payable schedule.	I will be able to explain the purpose of purchasing merchandise or supplies using a payables system. I will be able to analyze and journalize a purchase transaction to a Purchases journal. I will be able to post payable transactions to the Accounts Payable subsidiary ledger. I will be able to analyze and journalize payment transactions to the Cash Payment journal. I will be able to calculate a discount on an accounts payable payment using the Cash Payments journal. I will be able to prepare checks for payments. I will be able to use the accounts payable subsidiary ledger to create an Accounts Payable Schedule.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF21.10.03 Perform accounts receivable accounting functions.	AF21.10.03.01 Explain the business purposes of utilizing accounts receivable and their impact on business resources. AF21.10.03.02 Record and post sales transactions utilizing a sales journal and accounts receivable subsidiary ledger. AF21.10.03.03 Process sales orders and invoices, sales returns or allowances, and calculate sales discounts to make available for early receipt of payments. AF21.10.03.04 Analyze the process for determining when accounts receivable have become uncollectible, and record financial transactions to represent this status. AF21.10.03.05 Process receipt of customer payments and prepare an accounts receivable schedule.	I will be able to explain the purpose of selling merchandise on account. I will be able to analyze and journalize a sales transaction to a Sales journal. I will be able to post receivable transactions to the Accounts Receivable subsidiary ledger. I will be able to calculate a discount on an accounts receivable transaction using the Cash Receipts journal. I will be able to analyze, prepare, and journalize a sales return. I will be able to journalize customer payments using the Cash Receipts journal. I will be able to prepare a customer statement. I will be able to analyze and journalize uncollectible expenses for total accounts receivable sales. I will be able to use the accounts receivable subsidiary ledger to create an Accounts Receivable Schedule.
AF21.10.04 Maintain inventory records to track the location, quantity, and value of current assets.	AF21.10.04.01 Describe perpetual and periodic methods for tracking inventory levels. AF21.10.04.02 Determine costs and record financial transactions related to purchases of inventory. AF21.10.04.03 Determine costs and record financial transactions related to inventory adjustments such as damage or theft.	I will be able to use various inventory methods: LIFO, FIFO, and weighted-average to track and calculate inventory. I will be able to record inventory purchase transactions. I will be able to record inventory adjustment transactions.
AF21.10.05 Complete payroll procedures to calculate, record, and distribute payroll earnings.	AF21.10.05.01 Process physical and electronic payroll earnings records to calculate employee earnings and withholdings. AF21.10.05.02 Prepare a payroll register. AF21.10.05.03 Record the payroll in the general journal. AF21.10.05.04 Prepare federal, state, and local payroll tax reports.	I will be able to calculate gross earnings and net pay for an employee. I will be able to calculate employee payroll withholdings: federal and state income tax. I will be able to prepare a payroll register. I will be able to use the payroll register to journalize payroll transactions. I will be able to prepare federal and state tax reports.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF21.10.06 Perform specialized accounting procedures to track tangible and intangible assets.	AF21.10.06.01 Determine the book value of a plant asset. AF21.10.06.02 Prepare depreciation schedules. AF21.10.06.03 Record the disposition of assets. AF21.10.06.04 Create source documentation and record financial transactions to account for intangible assets.	I will be able to journalize notes payable and receivable transactions. I will be able to calculate book value based on asset value minus depreciation. I will be able to prepare a depreciation schedule for a single asset. I will be able to analyze and record the disposition of assets. I will be able to analyze and record intangible assets.
AF21.10.07 Prepare budget reports to make business decisions.	AF21.10.07.01 Determine relevant cost and revenue data for decision-making purposes. AF21.10.07.02 Prepare budget reports using business, industry, and economic projections. AF21.10.07.03 Summarize budget estimates and make recommendations for business decisions.	I will be able to prepare a business budget to guide future business decision making. I will be able to summarize the relevant information in a budget forecast and make recommendations for business actions.
AF21.10.08 Perform accounting functions specific to a corporation.	AF21.10.08.01 Describe the various management, investor, and regulatory audiences to which corporate financial statements communicate information. AF21.10.09.02 Create source documentation and record financial transactions to represent the issuance of stock. AF21.10.09.03 Compute and record financial transactions for dividends payable on stock.	I will be able to prepare financial statements and record issuance of stock during a fiscal period. I will be able to explain the interests different audiences have in corporate financial statements. I will be able to compute and journalize dividends on outstanding common stock issued.
AF21.10.09 Perform tax accounting functions.	AF21.10.09.01 Explain record keeping procedures for tax accounting. AF21.10.09.02 Compare and contrast corporate tax accounting to accounting for other types of business entities.	I will be able to explain and perform tax accounting procedures. I will be able to compare corporate tax accounting to other types of accounting.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Accounting 3: Managerial **Course Code: 22**

Course Description: This course expands upon the accounting procedures and principles discussed in Accounting 2 and introduces students to managerial accounting practices. Students will continue developing their skills analyzing financial statements. Students will create business budgets and analyze performance reports. Students will become aware of the costing process and analyze how costs, price and volume affect a manufacturing business. Students will calculate and analyze profitability by calculating financial management ratios, present values and future values of current assets. Course may include participation in Business Professionals of America (BPA).

CTSO Competitive Events:

BPA: Advanced Accounting, Managerial Accounting, Payroll Accounting

DECA: Accounting Applications Series, Virtual Business Challenge–Accounting

Suggested Certifications or Industry-Recognized Credentials:

YouScience: Accounting III

NOCTI Exams: Business Financial Management

NOCTI Exams: Financial and Managerial Accounting

College Board College-Level Examination Program (CLEP): Financial Accounting

Instructional units in this course may include:

- Create and analyze financial statements for various types of business organizations
- Internal accounting controls
- Using data and business forecasts to prepare business budgets and projections
- Analyzing unit, fixed, and variable costs for product and business profitability
- Accounting for overhead and manufacturing production costs
- Calculate and interpret financial management ratios
- Managerial accounting career opportunities

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF22.10.01 Create and analyze accounting financial statements.	AF22.10.01.01 Create and analyze an income statement using component percentages. AF22.10.01.02 Prepare and analyze a comparative income statement. AF22.10.01.03 Create and analyze a balance sheet using vertical analysis. AF22.10.01.04 Prepare and analyze a statement of retained earnings. AF22.10.01.05 Prepare and analyze a statement of cash flows.	I will be able to prepare an income statement and utilize results to identify key trends and how they will impact the business. I will be able to prepare a balance sheet and utilize results to identify key trends and how they will impact the business. I will be able to calculate the percentage of sales each section of the balance sheet represents. I will be able to prepare a statement of retained earnings and utilize results to identify key trends and how they will impact the business. I will be able to prepare a statement of cash flows and utilize results to identify key trends and how they will impact the business.
AF22.10.02 Determine suitable internal accounting controls to ensure the proper recording of financial transactions.	AF22.10.02.01 Explain the purpose of internal accounting controls. AF22.10.02.02 Determine the components of internal accounting control procedures. AF22.10.02.03 Maintain internal accounting controls.	I will be able to explain generally accepted accounting principles (GAAP) as they relate to an individual business entity.
AF22.10.03 Utilize business performance data and projections to prepare business budgets and schedules.	AF22.10.03.01 Prepare sales and purchases budget schedules. AF22.10.03.02 Prepare expenses budget schedules. AF22.10.03.03 Prepare a budgeted income statement. AF22.10.03.04 Prepare a cash budget.	I will be able to create and justify budgets for various operational plans and goals. I will be able to prepare and analyze budget schedules. I will be able to prepare and analyze a budgeted income statement. I will be able to prepare and analyze a cash budget.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF22.10.04 Calculate and analyze how costs, price, and volume affect business decisions.	AF22.10.04.01 Explain the difference between total costs, unit costs, fixed costs, and variable costs. AF22.10.04.02 Calculate contribution margin and contribution margin per unit. AF22.10.04.03 Calculate the break-even point for a product. AF22.10.04.04 Describe the effect of sales volume changes on net income. AF22.10.04.05 Determine the sales required to earn a planned net income. AF22.10.04.06 Analyze the effect of adding a new product. AF22.10.04.07 Analyze the effect of changing the costs of a product. AF22.10.04.08 Analyze the effect of sales price, volume, and sales mix changes.	I will be able to identify, determine, and explain variable costs, fixed costs, and mixed costs. I will be able to calculate break-even point and use it to plan sales mix. I will be able to compare and contrast total costs and unit costs. I will be able to determine and describe variable and fixed cost characteristics. I will be able to calculate sales needed to earn planned net income. I will be able to calculate and describe the effect of volume changes on net income. I will be able to calculate and describe the effect of cost changes at average volume. I will be able to calculate and describe the effect of changes in costs on contribution margin rate.
AF22.10.05 Calculate and analyze how costs affect manufacturing business decisions.	AF22.10.05.01 Describe the elements of manufacturing costs. AF22.10.05.02 Explain the flow of goods through manufacturing inventory accounts. AF22.10.05.03 Describe what is recorded on a job-order cost sheet. AF22.10.05.04 Calculate the factory overhead rate. AF22.10.05.05 Explain the importance of calculating manufacturing costs. AF22.10.05.06 Calculate unit costs in a process costing system.	I will be able to describe the elements of manufacturing costs. I will be able to explain the flow of goods through manufacturing inventory accounts. I will be able to describe the use and proper completion of a job-order cost sheet. I will be able to calculate factory overhead rate. I will be able to explain the importance of calculating manufacturing costs. I will be able to calculate unit costs in a process costing system.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF22.10.06 Calculate and interpret financial management ratios.	AF22.10.06.01 Calculate and evaluate accounts receivable turnover ratio. AF22.10.06.02 Calculate and evaluate the merchandise inventory turnover ratio. AF22.10.06.03 Calculate and evaluate liquidity ratios. AF22.10.06.04 Calculate and evaluate debt ratios. AF22.10.06.05 Calculate and evaluate the accounts receivable turnover ratio. AF22.10.06.06 Calculate and evaluate the merchandise inventory turnover ratio.	I will be able to calculate and interpret the importance of accounts receivable turnover ratios. I will be able to calculate and interpret the importance of merchandise inventory turnover ratios. I will be able to calculate and interpret the importance of business working capital. I will be able to calculate and interpret the importance of current, quick, and cash ratios. I will be able to calculate and interpret the importance of inventory and accounts receivable turnover. I will be able to calculate and interpret the importance of the business operating cycle.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Accounting 4: Specialized **Course Code: 23**

Course Description: This course expands upon managerial accounting procedures in Accounting 3 and introduces students to additional accounting roles. Students will continue developing their skills analyzing financial statements with accounting software and information technology. Students will gain an understanding of accounting as it relates to plant assets, capital revenue expenditures, natural resources, intangible assets, and decentralized accounting systems. Accounting for business organizations including partnerships, government, not-for-profit businesses, and banks will be examined. Students will research various careers in accounting and educational requirements needed to pursue those careers**.** Course may include participation in a Business Professionals of America (BPA) student organization.

CTSO Competitive Events:

BPA: Advanced Accounting, Federal Income Tax Accounting, Financial Analyst Team

DECA: Accounting Applications Series, Virtual Business Challenge–Accounting

Suggested Certifications or Industry-Recognized Credentials:

NOCTI Exams: Business Financial Management

College Board College-Level Examination Program (CLEP): Financial Accounting

Instructional units in this course may include:

- Using spreadsheets and data tools to develop and communication business forecasts
- Time value of money and business decision-making
- Accounting for government and non-profit organizations
- Plant assets and depreciation
- Internal systems to identify errors and fraudulent financial activities
- Specialized accounting career pathways (including government and non-profit)

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF23.10.01 Assess and communicate the financial performance of the business.	AF23.10.01.01 Use spreadsheet software to create, organize, calculate, and analyze financial statements to review the financial condition of the business. AF23.10.01.02 Use spreadsheet software to create and prepare charts and graphs to use in communicating the financial condition of the business. AF23.10.01.03 Research industry averages and explain their use in assessing the financial condition, operating results, profitability, liquidity, and capital structure. AF23.10.01.04 Develop recommendations for future business activities based on data from spreadsheets, charts, and graphs which communicate the financial condition of the business.	I will be able to create, organize, calculate, and analyze spreadsheets to use in review of the financial condition of the business. I will be able to interpret data on spreadsheets by creating pivot tables and VLOOKUP’s in Excel to simplify the data. I will be able to create, prepare, and interpret data in charts and graphs to communicate the financial condition of the business. I will be able to make decisions based off data in charts, graphs, and spreadsheets, used in communicating business conditions.
AF23.10.02 Calculate financial statistics related to the time value of money to determine the success of business operations.	AF23.10.02.01 Evaluate decisions about single sums of money using future value and present value calculations. AF23.10.02.02 Evaluate decisions about annuities using future value and present value calculations. AF23.10.02.03 Calculate the present and future values of an annuity due. AF23.10.02.04 Calculate and interpret return on assets.	I will be able to calculate future value of money and use it to make business decisions. I will be able to calculate present value of money and use it to make business decisions. I will be able to calculate return on assets and use it to determine the success of business operations.
AF23.10.03 Explain and demonstrate accounting procedures for various types of businesses and organizations.	AF23.10.03.01 Prepare a budget for city and government planning purposes. AF23.10.03.02 Explain and demonstrate accounting practices related to accounting for a not-for-profit organization. AF23.10.03.03 Explain and demonstrate accounting practices related to accounting for multi-business organizations.	I will be able to perform accounting functions related to government operations. I will be able to differentiate between the types, purposes, and characteristics of not-for-profit organizations. I will be able to journalize transactions and prepare financial statements for multi-business organizations.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF23.10.04 Establish internal controls and procedures in compliance with applicable standards.	AF23.10.04.01 Define accounting concepts and explain practices related to plant assets and depreciation. AF23.10.04.02 Develop and implement internal control procedures that detect errors and/or fraud in transactions and accounts. AF23.10.04.03 Create and implement regular financial system checks to ensure internal control procedures are working. AF23.10.04.04 Assess and identify errors and/or fraud in transactions and accounts. AF23.10.04.05 Communicate identified errors and/or fraud in transactions and accounts and include suggestions for remedies.	I will be able to make and implement control procedures to detect errors and/or fraud in transactions and accounts. I will be able to inspect and maintain internal control procedures. I will be able to assess, identify, and communicate errors and/or fraud in transactions and accounts. I will be able to make suggestions for remedying identified errors and/or fraud in transactions and accounts.

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Microeconomics **Course Code: 24**

Course Description: In this course, students learn to make informed economic choices by analyzing opportunity cost alternatives and goals that consider short and long-term costs. Through study of economic systems students will learn how scarcity impacts individuals and organizations, and how decisions about allocation, production, and distribution impact the ability to achieve societal goals. Students will explore the inter-connectivity of supply and demand in the interactions between buyers and sellers as the exchange of goods and services drives pricing, production, and distribution. The impact of resource and financial markets in determining wages, interest rates, and returns on commodities will also be explored. Course may include participation in a DECA or Business Professionals of America (BPA) student organization.

CTSO Competitive Events:

BPA: Banking and Finance, Financial Analyst, Personal Financial Management, Financial Math and Analysis Concepts, Economic Research Individual (Team), Entrepreneurship

DECA: Business Finance Series, Finance Operations Research, Financial Consulting, Stock Market Game, Innovation Plan, Independent Business Plan, International Business Plan

Suggested Certifications or Industry-Recognized Credentials:

YouScience: Economics

Instructional units in this course may include:

- Markets and economic decision making for scarce resources
- Interaction of demand and supply to meet consumer wants and needs
- Opportunity costs related to economic choices for production and human resources
- Supply, Demand, Equilibrium Point, and Demand Elasticity
- Impact of fixed and variable costs on production and pricing
- Competition, trade, and the circular flow of resources
- Fiscal and monetary policies

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF24.10.01 Identify informed economic choices that support financial goals, and alternatives based on analysis of the market and available resources.	AF24.10.01.01 Analyze the basic mechanisms by which the economic system works, including approaches to the organization of production and the allocation of resources and market structures. AF24.10.01.02 Explain the different types of economic markets and how they function. AF24.10.01.03 Identify how individual economic agents make rational choices given scarce resources, and explain how to optimize the use of resources at hand.	I will be able to discuss how individuals and firms (economic agents) make rational choices based on self-interest (01). I will be able to determine why the notion of choice is necessary based on the idea that resources are scarce (01). I will be able to explain the characteristics of various market structures such as competition, monopoly, or oligopoly (01). I will be able to identify and discuss financial markets (capital resources), resource markets (natural resources), and labor market (human resources) and how they intersect one another in the marketplace to buy or produce goods and services (02). I will be able to analyze how resource and financial markets determine wages, interest rates and commodity prices (02). I will be able to describe correlations of economic variables within a market segment and they effect overall market conditions (03).
AF24.10.02 Identify how consumer spending and production of households, business, government and other entities determine rates of consumption to meet societal wants and needs.	AF24.10.02.01 Analyze consumer and producer behavior and how it relates to consumer demand and market service and product supply. AF24.10.02.02 Identify maximizing behavior of individuals in the market. AF24.10.02.03 Explain how indifference analysis can reflect economic utility perceived by consumers.	I will be able to correlate demand to consumer behavior and how scarcity creates an opportunity cost for each choice (01). I will be able to recognize how the consumer experiences utility with every purchase they make, and how economists measure this utility to determine a consumer's optimal rate of consumption (02). I will be able to discuss how individuals attempt to maximize utility by allocating and spending resources according to their preferences (02). I will be able to describe the difference between wants and needs in the economy (02). I will be able to analyze how utility measures individual preferences and where greater preference results in a higher level of utility (03). I will be able to discuss how individual consumption of goods and services are expanded through the market where goods and services are exchanged for mutual benefit (03).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF24.10.03 Explain the role of production and human resources related to the exchange of goods and services.	AF24.10.03.01 Explain the production function and its relationship to opportunity costs. AF24.10.03.02 Analyze the role of production and human resources related to the exchange of goods and services. AF24.10.03.03 Determine the costs of production in the short run to costs of production in the long run.	I will be able to analyze the behavior of a producer (a company or firm) that is subject to changing costs and diminishing returns (01). I will be able to explain how the production function illustrates potential production levels for different amounts of inputs for goods, capital and labor (01). I will be able to explain how business decisions regarding use of their resources (land, labor, capital, and entrepreneurial ability), determine what is produced, how much is produced, and at what price (02). I will be able to explain how individuals, businesses, and governments exchange goods and services and how these interactions determine price and quantity of goods, services, and resources (02). I will be able to identify the impact of various market structures on long-run profit, price, production, and market efficiency (03).
AF24.10.04 Demonstrate how changes in the demand and supply of a product or service result in change in price and quantity.	AF24.10.04.01 Describe the relationship between utility theory and the model of supply and demand. AF24.10.04.02 Analyze and apply the mechanics of demand and supply for individuals, firms, and the market. AF24.10.04.03 Determine equilibrium in the market under various situations that either cause movements or shifts in demand and supply. AF24.10.04.04 Apply the concept of elasticity as a measure of responsiveness to various variables. AF24.10.04.05 Correlate consumer demand to consumer behavior.	I will be able to describe supply and demand models and market equilibrium where the supply curve and demand curve intersect (01). I will be able to explain utility maximization as a ratio between goods' marginal utility and prices (01). I will be able to explain the factors that cause movements along supply and demand curves, affecting both price and quantity (02). I will be able to explain how market supply is based on product cost, the number of sellers in the market and industry demand (02). I will be able to explain market demand as a relationship between prices and quantities (02). I will be able to explain and graph how demand and supply curves change in response to shortages and surpluses (03). I will be able to describe how market demand is influenced by buyers' willingness and ability to pay and number of buyers in a market (03). I will be able to discuss the meaning and significance of elastic, inelastic and unit elastic demand (04). I will be able to correlate the theory of demand to the theory of consumer behavior (05).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF24.10.05 Determine how market pricing and costs are determined and allocated to produce profit.	AF24.10.05.01 Analyze pricing decisions and outcomes businesses face under differing market conditions. AF24.10.05.02 Compute the relationship between different cost functions. AF24.10.05.03 Analyze short-run fixed and variable costs of production and their impact on output and total cost. AF24.10.05.04 Identify the returns to scale and the application to long-run production, cost and quantity controls.	I will be able to calculate how prices are established in competitive and non-competitive economic systems (01). I will be able to calculate marginal costs and profits (02). I will be able to explain how sunk (fixed) costs and opportunity costs factor into decisions about production levels (02). I will be able to analyze how market conditions and production costs affect a company's decision to increase or decrease production to maximize profits (03). I will be able to analyze how the levels of output, employment, and prices in an economy fluctuate in the short-run as a result of spending and production decisions of households, businesses, governments, and others (03). I will be able to describe how supply and demand impact price considerations under conditions where fixed costs can change (04).
AF24.10.06 Apply economic concepts of competition to define how economic systems address the issues of allocation, production, and distribution to meet societal economic goals.	AF24.10.06.01 Apply basic economic models related to production, trade, and the circular flow of resources. AF24.10.06.02 Compare and contrast characteristics of perfect and imperfect competition economic system models. AF24.10.06.03 Compare and contrast impacts of perfect and imperfect competition economic system models on products, production levels, and prices.	I will be able to describe how the circular flow model reflects households sell resources to earn income to buy goods and service they sell for revenue and how the government imposes taxes and buys goods and services (01). I will be able to describe how business and consumer interactions in a market can increase competition and lower prices (01). I will be able to apply the concept of marginal analysis to make optimal choices, and identify whether choices are efficient or equitable (01). I will be able to compare and contrast the characteristics of perfect and imperfect competition economic system models (02). I will be able to differentiate between monopolistic competition and oligopoly as two models of imperfect competition (02). I will be able explain how various economic system models influence decisions on resource allocation and prices (03). I will be able to describe unregulated markets (which are central to perfect competition) and their inconsistency in producing desired outcomes in imperfect competition economic systems (03).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF24.10.07 Analyze how economic performance is influenced by governmental and monetary policies, as well as marketplace trends.	AF24.10.07.01 Analyze how governmental and monetary policies can be used to correct or adjust marketplace performance. AF24.10.07.02 Analyze how economic and social issues such as world food scarcity, poverty, distribution of income, the energy crisis, and environmental pollution impact ethical economic decision-making.	I will be able to identify potential government interventions to address market conditions and the relationship of government and economic systems to avoid or correct market failures (01). I will be able to analyze market failures due to inefficient resource allocation, resulting in corrections through government intervention (01). I will be able to describe how international trade, exchange rates, and international agencies can create an imbalance or fill a need (01). I will be able to analyze how poverty and income inequality can cause long-term harm to an economy's development (02). I will be able to analyze causes of income inequality (02). I will be able to explain economic advantages for products and services by understanding societal needs and goals (02).

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: Macroeconomics **Course Code: 25**

Course Description: In this course, students study how a country's economy works while trying to discern among choices for improving or maintaining a nation's s level of economic and societal well-being. Perspectives are examined on the roles and policies of government that establish conditions for economic gains and losses. Macroeconomics focuses on changes in price levels across all markets and around a number of goals including economic growth, price stability, and full employment. Overall economic performance is examined through measures of economic activity focusing on variables at the national level within a specific period of time. This will include an analysis of aggregate measures including national income and output, unemployment, inflation rates, and business cycle fluctuations. Students will think critically about national and global issues from a vast array of perspectives, tools, and alternatives. Course may include participation in a DECA or Business Professionals of America (BPA) student organization.

CTSO Competitive Events:

BPA: Banking and Finance, Financial Analyst

DECA: Finance Operations Research, Financial Consulting, Stock Market Game, Start Up Business Plan, Franchise Business Plan, Innovation Plan, Independent Business Plan, International Business Plan

Suggested Certifications or Industry-Recognized Credentials:

YouScience: Economics

Instructional units in this course may include:

- Measures of Economic Performance
- Job Growth and Unemployment
- Inflation, Money Supply, and Standard of Living
- Using Gross Domestic Product (GDP) to Measure Economic Output and Standard of Living
- Aggregate Demand, Aggregate Supply, and Equilibrium
- Impact of Government Spending, Taxation, and Fiscal Policies
- Monetary Policies and the Federal Reserve
- Absolute and Comparative Advantages in Global Trade

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF25.10.01 Analyze how economic performance of an economy is measured and affected by long-term factors.	AF25.10.01.01 Analyze key macroeconomic concerns including national income, saving, investment, and market forces. AF25.10.01.02 Evaluate consumer income as it relates to purchase decisions that result in various levels of spending, investment, and savings that effect the overall economy.	I will be able to discuss the phases of a business cycle (01). I will be able to evaluate how savings and investment are key elements within the circular flow model and are a function of interest rates (01). I will be able to explain the connections between income, consumption, and net investment, relating them to economic growth (01). I will be able to describe how savings and investment contribute to economic growth (02). I will be able to describe the consumption and savings functions and the terms attached to their slopes (02).
AF25.10.02 Analyze how the unemployment rate reflects people in the workforce through frictional or temporary unemployment, structural unemployment, and cyclical unemployment.	AF25.10.02.01 Evaluate and differentiate between full employment and unemployment with the three forms of unemployment. AF25.10.02.02 Analyze the factors that impact the long-run growth of jobs in the economy.	I will be able to explain the composition of the labor force and differentiate the three forms of unemployment (01). I will be able to define frictional, structural, and cyclical unemployment (01). I will be able to describe how governments focus on three key indicators of economic growth: an increase in real GDP over time, full employment, and price level stability (02). I will be able to discuss how immigration, demographics, and output growth affect the rate of unemployment (02). I will be able to identify different ways of computing the general movement in prices that affect overall job growth and decline (02).
AF25.10.03 Explain how inflation indicates an overall rise in the price level of most, but not all, goods and services.	AF25.10.03.01 Identify the effects of inflation on the economy and standard of living through nominal and real income. AF25.10.03.02 Measure inflation in terms of change in price and how money supply is related to long-run inflation and monetary policy.	I will be able to distinguish the differences between nominal income (dollar amount received) and real income (amount of goods and services the income can buy) (01). I will be able to discuss the effects of inflation on a nation's standard of living (01). I will be able to describe the interconnected relationship between inflation and unemployment (02). I will be able to discuss how inflation erodes the purchasing power of a nation's currency (02).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF25.10.04 Analyze the total output an economy generates through gross domestic product (GDP) representing the monetary value of all final goods and services.	AF25.10.04.01 Explain how Gross Domestic Product (GDP) is used as a measure of societal well-being, quality of life, and the standard of living. AF25.10.04.02 Describe the determinants of total output and the ways to measure nominal GDP and real GDP. AF25.10.04.03 Analyze the forces affecting growth, inflation, and unemployment at the aggregate level, such as output, income, and the set of components within GDP.	I will be able to analyze the problems associated with using GDP as a measure of well-being (01). I will be able to identify the components of expenditure and the income approaches to the measurement of GDP (01). I will be able to define and differentiate nominal gross domestic product and real gross domestic product (01). I will be able to define economic growth in terms of changes in a production possibilities curve (02). I will be able to identify the determinants of aggregate demand as the sum of consumption, investment, government expenses, and net exports (02). I will be able to discuss aggregate supply as the total output an economy produces at a given price level (03).
AF25.10.05 Compare and contrast how aggregate demand and supply affect the overall economy when both are in equilibrium and when they are not.	AF25.10.05.01 Describe the model of aggregate demand and aggregate supply. AF25.10.05.02 Explain how equilibrium is achieved relative to corresponding market conditions of price and quantity of goods and services. AF25.10.05.03 Compare and contrast how aggregate demand and supply affect the overall economy when both are in equilibrium and when they are not.	I will be able to explain, graphically represent and interpret aggregate demand curves and short-run aggregate supply curves (01). I will be able to define short-run equilibrium and long-run equilibrium and discuss how they differ (02). I will be able to describe how changes in demand and supply lead to changes in a market's equilibrium price and quantity in the short and long-term (02).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF25.10.06 Analyze how the overall performance of an economy can be influenced by government fiscal policies.	AF25.10.06.01 Evaluate how a government uses fiscal policy to influence key variables in order to achieve economic growth and stability. AF25.10.06.02 Explain the effect of government spending, taxation, and budget deficits or surpluses on GDP. AF25.10.06.03 Analyze the conflicts and complexities and tools of fiscal policy, which involves taxing and spending policies.	I will be able to discuss how the government uses various policies and tools to achieve the goals of full employment, price stability, and economic growth (01). I will be able to explain how the various kinds of lags influence the effectiveness of discretionary fiscal policy (01). I will be able to explain budget surplus, budget deficit, and balanced budget (02). I will be able to differentiate budget deficits and the national debt (02). I will be able to define automatic stabilizers, and explain changes in government spending and taxing during macroeconomic recessions and expansions (02). I will be able to discuss how the bond market works, and discuss the relationship between bond prices and interest rates (02). I will be able to describe the relationships between various fiscal policy indicators (03). I will be able to discuss domestic policies that contribute to economic growth (03).
AF25.10.07 Explain monetary policy as the methods government agencies, such as the U.S. Federal Reserve, engage in to encourage banks, businesses, and individuals to change their interest rates, the supply of money, and the demand for money.	AF25.10.07.01 Describe the mechanics of money supply and the monetary policy. AF25.10.07.02 Describe how various monetary policies of the Federal Reserve are implemented and impact overall output, employment, price, and demand.	I will be able to describe how money serves as a medium of exchange, a store of value, and a unit of account (01). I will be able to define the money multiplier, and explain the money creation process (01). I will be able to identify money supply, and interpret a money demand curve, describing how other variables may lead to a shifting money demand curve (01). I will be able to explain the primary functions of the Federal Reserve, and describe the three tools it can use as part of monetary policy (02). I will be able to explain how the overall performance of an economy can be influenced by the fiscal policies of government and the monetary policies of central banks (02). I will be able to define the roles of individual banks and the entire banking system in creating money (02).

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF25.10.08 Explain the effects of open global trade, exchange rates, and international institutions on economies, individuals, and governments throughout the world.	AF25.10.08.01 Identify how trade facilitates the movement and exchange of foreign currencies. AF25.10.08.02 Explain how the demand and supply of currencies determines exchange rates and affects trade. AF25.10.08.03 Apply the principles of absolute and comparative advantage to explain the increase in world production due to specialization and trade.	I will be able to describe the role of international trade in the exchange of currencies and improving the overall economy (01). I will be able to discuss ways countries can improve their overall economy through trade (01). I will be able to discuss how foreign exchange markets function by reflecting changes in the demand for or the supply of a country's currency with regards to net exports (02). I will be able to discuss how exchange rates can affect demand and pricing of products and services (02). I will be able to identify tariffs and quotas in international trade and how they relate to net exports (02). I will be able to discuss specialization and gains created in international trade (03). I will be able to compare and contrast absolute advantage and comparative advantage (03). I will be able to discuss the advantages and disadvantages of specialization and potential pricing and profit implications (03).

Career Field: Business, Management, and Administration

Cluster: Accounting and Finance **Program: 140710**

Course Title: AP Accounting (College Accounting) **Course Code: 26**

Course Description: College Accounting is a year-long course which covers the learning objectives of a college-level financial accounting course plus those from a managerial accounting course. Students will learn how businesses plan for and evaluate operating, financing and investing decisions and how accounting systems provide data to internal and external decisions makers. Topics include time value of money, accounting information systems, sales and receivables, fixed assets, debt and equity. Data analysis, problem solving, and decision making will be applied to analysis of financial statements, financial ratios, cost-volume profit analysis and variance analysis.

CTSO Competitive Events:

BPA: College Accounting, Advanced College Accounting, Financial Analyst Team

DECA: Accounting Applications Series, Virtual Business Challenge–Accounting

Suggested Certifications or Industry-Recognized Credentials:

NOCTI Exams: Accounting Advanced

College Board College-Level Examination Program (CLEP): Financial Accounting

Instructional units in this course may include:

- Developing and Communicating Business Financial Reports
- Analyzing Financial Data for Business Decision-Making
- Recording and Analyzing Transactions in the Accounting Cycle
- Recording and Analyzing Sales and Inventory Transactions
- Financial Data for Asset and Investment Decisions
- Capital Investments, Stock Transactions and Notes

Topic/Strand 10: Technical Skills

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF26.10.01 Develop, and explain the role of, financial reports for providing information for business decision making.	AF26.10.01.01 Explain how the conceptual framework of accounting and generally accepted accounting principles provide guidance and structure for preparing financial statements. AF26.10.01.02 Describe the parts of and information provided in each financial statement and their relationship with each other. AF 26.10.01.03 Explain the management cycle (planning, performing, evaluating) for managing a business and measuring performance. AF 26.10.01.04 Calculate the operating cycle (accounts receivable turnover and inventory turnover). AF 26.10.01.05 Explain how internal control procedures are used to safeguard assets.	I will be able to explain the elements of accounting (assets, liabilities, owners' equity, revenue, expense, and net income). I will be able to identify the differences of the basic types of businesses and business structures. I will be able to identify the purpose and relationship among financial statements. I will be able to calculate gross margin (gross profit), current ratio, return on sales ratio, and debt to equity ratio. I will be able to explain the management cycle and basic processes for operating and managing a business. I will be able to calculate the operating cycle (accounts receivable turnover and inventory turnover). I will be able to explain the significance of internal accounting controls.
AF26.10.02 Analyze accounting and business operation data for strategic planning and short-term decision-making.	AF26.10.02.01 Identify the activities in the three operating processes (revenue, expenditure, and conversion). AF26.10.02.02 Compare and contrast variable costs, fixed costs, and mixed costs. AF26.10.02.03 Use high-low analysis to determine variable costs, fixed costs, and mixed costs. AF26.10.02.04 Calculate break-even point and perform cost-volume-profit (CVP) analysis. AF26.10.02.05 Apply sensitivity analysis to CVP analysis. AF26.10.02.06 Determine selling price using sensitivity analysis and CVP analysis. AF26.10.02.07 Describe the process of determining selling price and demonstrate how various strategies are used to determine selling price. AF26.10.02.08 Identify and explain product costs: direct/indirect materials, direct/indirect labor, manufacturing overhead. AF26.10.02.09 Analyze accept-or-reject and make-or-buy decisions.	I will be able to identify the revenue process, expenditure process, conversion process. I will be able to describe and calculate fixed, variable, and mixed costs and revenue. I will be able to use the high/low analysis method to determine fixed costs, variable costs and revenue. I will be able to calculate break-even point and perform cost-volume-profit (CVP) analysis. I will be able to apply sensitivity analysis to CVP analysis. I will be able to describe the differences among product, non-product, unit-related, batch-related, product-sustaining, and facility-sustaining costs. I will be able to describe how selling price might be set and various strategies to determine selling price (penetration pricing, predatory pricing, skimming, price gouging, life-cycle pricing and target pricing). I will be able to identify and explain product costs including direct/indirect materials, direct/indirect labor, and manufacturing overhead.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF26.10.03 Use and analyze business accounting and inventory systems.	AF26.10.03.01 Explain the impact of accounting events including adjusting and closing entries on the accounting equation. AF26.10.03.02 Journalize and post entries in a double-entry accounting system. AF26.10.03.03 Analyze and describe how business transactions impact the accounting equation. AF26.10.03.04 Complete the steps of the accounting cycle and prepare financial statements for different types of business operations and ownership structures. AF26.10.03.05 Analyze inventory systems and record business transactions using the periodic and perpetual inventory systems. AF26.10.03.06 Perform calculations and record financial transactions for payroll and payroll taxes.	I will be able to describe the purpose of an accounting system. I will be able to describe the purpose of journals and ledgers. I will be able to analyze and describe how business transactions impact the accounting equation. I will be able to record and post journal entries in a double-entry accounting system. I will be able to record and describe the impact of adjusting and closing events on the accounting equation. I will be able to prepare financial statements for different types of business operations and ownership structures. I will be able to explain the differences between periodic and perpetual inventory systems. I will be able to record inventory activities in periodic and perpetual inventory systems. I will be able to calculate and record payroll and payroll taxes.
AF26.10.04 Use accounting procedures to record and analyze sales and inventory activities.	AF26.10.04.01 Calculate revenue and record revenue transactions. AF26.10.04.02 Record and analyze transactions for accounts receivable including uncollectible accounts, write-offs, and recoveries. AF26.10.04.03 Describe the cost flow assumptions for inventory and their impact on the balance sheet and the income statement. AF26.10.04.04 Calculate and analyze cost of goods sold and ending inventory using LIFO and FIFO inventory costing methods. AF26.10.04.05 Explain and analyze the elements (direct materials, direct labor, overhead, administrative) and the flow of costs through the manufacturing accounts used in product costing.	I will be able to determine revenue and record related transactions. I will be able to explain and perform the accounting methods to determine the value of accounts receivable. I will be able to record transactions for accounts receivable, including uncollectible accounts, write-offs, and recoveries. I will be able to describe cost flow assumptions for inventory and explain their impact on the balance sheet and income statement. I will be able to calculate cost of goods sold and ending inventory using LIFO and FIFO inventory costing methods. I will be able to determine if manufacturing overhead is over or under-applied. I will be able to prepare journal entries to record direct material, direct labor, and manufacturing overhead costs. I will be able to prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement.
AF26.10.05 Analyze the time-value of money and the risk/return relationship.	AF26.10.05.01 Explain the relationship between risk and return and provide examples. AF26.10.05.02 Determine the present value and future value of cash flows.	I will be able to compare expected rate of returns to determine the best investment. I will be able to calculate the present and future value of money in a variety of investments, including annuities.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF26.10.06 Use accounting procedures to explain, record, and report assets.	AF26.10.06.01 Explain the concept of cost of capital and calculate it for a company. AF26.10.06.02 Use net present value concepts to make investment decisions. AF26.10.06.03 Explain, calculate, and record depreciation using a variety of methods. AF26.10.06.04 Classify, record and report investment transactions.	I will be able to describe the way capital is acquired in a business and calculate a business cost of capital. I will be able to define and use a net present value analysis to make investment decisions. I will be able to calculate and record depreciation (straight-line, units-of-production, and double declining balance), depletion, and amortization and explain the impact on the financial statements. I will be able to define the ways to classify (trading securities, available-for-sale securities, held-to-maturity securities, equity method securities, consolidated financial statements), account for and report (historic cost, mark-to-market, market value to fair value) investments.
AF26.10.07 Record, report and analyze capital investments, stock transactions, and long-term notes.	AF26.10.07.01 Compare and contrast debt and equity financing. AF26.10.07.02 Identify and describe different classes of stock and explain the rights afforded to each class of stock. AF26.10.07.03 Describe the difference between cash dividends, stock dividends and stock splits and the impact on the financial statements. AF26.10.07.04 Record stock transactions, contributions by owners, corporate distributions (dividends), and the reacquisition of company stock. AF26.10.07.05 Compare and contrast a periodic payment note payable, a lump-sum note payable, and a periodic and lump-sum note payable. AF26.10.07.06 Calculate the carrying value, interest expense and cash payment for a note payable (periodic payment, lump-sum, and periodic and lump-sum) transactions. AF26.10.07.07 Record transactions for note payable issuance and interest expense. AF26.10.07.08 Record transactions for bonds issued at face value, a premium and a discount.	I will be able to compare and contrast debt and equity financing. I will be able to calculate and evaluate the risks and rewards of debt financing using appropriate tools. I will be able to identify the types of stocks and the rights afforded to each class of stock. I will be able to describe the difference between cash dividends, stock dividends and stock splits and the impact on the financial statements. I will be able to record stock transactions, contributions by owners, corporate distributions (dividends), and the reacquisition of company stock. I will be able to compare and contrast a periodic payment note payable, a lump-sum note payable, and a periodic and lump-sum note payable. I will be able to calculate the carrying value, interest expense and cash payment for a note payable (periodic payment, lump-sum, and periodic and lump-sum) transactions.

Performance Indicator/Standard	Measures/Benchmarks	Sample Learning Targets
AF26.10.08 Prepare and analyze financial statements and calculate item analysis on financial statements.	AF26.10.08.01 Describe the purpose of various business financial statements and the information required for their preparation. AF26.10.08.02 Prepare and analyze business financial statements including statement of comprehensive income, statement of equity, statement of cash flows, and balance sheet.	I will be able to describe the purpose of various business financial statements and the information required for their preparation. I will be able to calculate the difference in net income and income from continuing operations (discontinued operations). I will be able to define and calculate earnings per share. I will be able to prepare statement of comprehensive income, statement of equity, balance, sheet, and statement of cash flows. I will be able to analyze and make recommendations from the information in the statement of comprehensive income, statement of equity, statement of cash flows, and balance sheet.