Texas CTE

Finance (2015)

Adopted 2015

Financial Mathematics

1. **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:** FM.1
   - A. demonstrate an understanding of appropriate communication with customers, employers, and coworkers through verbal, nonverbal, or digital means; FM.1.A
   - B. demonstrate an understanding of the use of business etiquette; FM.1.B
   - C. demonstrate an understanding of appropriate customer service such as building customer relationships and resolving customer complaints; and FM.1.C
   - D. demonstrate an understanding of ethical and legal issues in business. FM.1.D

2. **The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:** FM.2
   - A. apply mathematics to problems arising in everyday life, society, and the workplace; FM.2.A
   - B. use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; FM.2.B
   - C. select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; FM.2.C
   - D. communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; FM.2.D
   - E. create and use representations to organize, record, and communicate mathematical ideas; FM.2.E
   - F. analyze mathematical relationships to connect and communicate mathematical ideas; and FM.2.F
   - G. display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. FM.2.G

3. **The student applies mathematical process standards to demonstrate an understanding of employment earnings. The student is expected to:** FM.3
   - A. identify sources of income, including wages and salaries, interest, rent, dividends, and capital gains; FM.3.A

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B. compare common employee benefits such as health insurance, sick leave, and retirement plans; FM.3.B

C. differentiate among and calculate gross, net, and taxable income; FM.3.C

D. analyze and interpret payroll deductions, including federal taxes, state taxes, and city taxes, using current tax rates; FM.3.D

E. examine and evaluate the reasons for federal income taxation, Social Security taxation, and Medicare taxation, including earnings limitations as applicable; FM.3.E

F. calculate net pay; FM.3.F

G. compare and contrast between independent contractor earnings and employee earnings, including tax requirements, tax forms (W-2, W-4, 1099, and Form 941), and benefit requirements; FM.3.G

H. calculate the various earnings as affected by the laws related to minimum wage, overtime, income from tips, exempt and non-exempt status, and contract and employee status; FM.3.H

I. calculate the impact of paying with after-tax dollars versus pre-tax dollars for items such as medicine, services, and investments; FM.3.I

J. analyze and interpret total compensation, including payroll, Federal Insurance Contribution Act (FICA) tax, employer cost of benefits, employers' matching costs for FICA and Medicare, and employer match in savings plans, to explain how compensation is more than what is reflected in a paycheck; FM.3.J

K. compare total compensation as a self-employed or independent contractor with total compensation as an employee; and FM.3.K

L. analyze how economic and other conditions can affect income and career opportunities and the need for lifelong training and education. FM.3.L

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4. The student applies mathematical process standards to demonstrate an understanding of the various federal taxes. The student is expected to: FM.4

A. calculate federal income taxes owed or refunded, including the completion of a 1040EZ and 1040, using current rates; FM.4.A

B. calculate capital gains tax using current rates; FM.4.B

C. calculate self-employment or independent contractor taxes using current rates; FM.4.C

D. define and locate sources for current rates for estate and inheritance taxes; FM.4.D

E. analyze gift and estate taxes using current rates; FM.4.E

F. calculate tax on interest income and use regression methods available through technology to analyze data and interpret the results by tax bracket; FM.4.F

G. calculate personal exemptions; FM.4.G

H. calculate itemized deductions and compare to standard deductions; FM.4.H

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I. calculate deductible charitable contributions; FM.4.I

J. understand filing status as it applies to X, Y, and Z tax schedules; FM.4.J

K. compare marginal tax rates to effective income tax rates and the misuse of these terms in advertising; FM.4.K

L. describe the relationships among education tax credit, student loan interest, dependency and filing status, and income tax liability; and FM.4.L

M. research and locate options for tax return preparation such as software programs and tax preparation providers. FM.4.M

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5. The student applies mathematical process standards to demonstrate an understanding of the various financial institutions and accounts. The student is expected to: FM.5

A. demonstrate an understanding of various forms of financial exchange, including cash, checks, credit cards, debit cards, and electronic funds transfers; FM.5.A

B. identify and explain the advantages and disadvantages of interest-bearing accounts such as savings accounts, checking accounts, certificates of deposits, and money market accounts; FM.5.B

C. calculate the time value of money, with or without technology, using exponential and rational functions that include graphs, tables, and algebraic methods related to simple and compound interest; FM.5.C

D. analyze various representations of exponential functions with respect to compound interest situations and use the rule of 72 to determine the number of years it will take for savings to double in value; FM.5.D

E. analyze a bank statement for accuracy; FM.5.E

F. compare financial services offered in the community; and FM.5.F

G. identify the sources of funds such as savings, earnings, or debt to be used to purchase consumable and nonconsumable goods. FM.5.G

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6. The student applies mathematical process standards to demonstrate an understanding of the various types of credit. The student is expected to: FM.6

A. determine the advantages and disadvantages of credit cards such as cashback rewards, balance transfer, foreign currency, interest rates charged, late payment fees, credit score, and bonus incentives; FM.6.A

B. calculate the cost of using credit cards, including various financial fees; FM.6.B

C. analyze and compare graphically, with or without technology, the differences in the cost of borrowing such as using a bank loan, a credit union loan, a student loan, and an easy-access loan such as a pay-day loan and an auto title loan; FM.6.C

D. analyze the risks for each type of loan; FM.6.D

E. evaluate the process for a bank loan or a credit union loan; FM.6.E

F. collect and organize data, make and interpret scatterplots, interpret the results, and make critical judgments about loan balances when equal monthly payments are made; FM.6.F

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G. analyze credit scores and explain the meanings of the scores; FM.6.G

H. explain ways a negative credit report can affect a consumer's financial options; and FM.6.H

I. analyze a personal credit report. FM.6.I

7. **The student applies mathematical process standards to demonstrate an understanding of the cost of housing by comparing home purchases and renting. The student is expected to:** FM.7

A. analyze data of mortgage payments with various additional principal payments involving exponential functions using tables, graphs, or algebraic methods; FM.7.A

B. create an amortization table using technology to collect and organize data to make decisions and critical judgments about varying the down payment, period of loan, special principal payment, and interest rate for a home loan; FM.7.B

C. compare options for saving for a down payment on a home; FM.7.C

D. determine costs associated with home ownership, including property taxes; mortgage insurance; homeowner's insurance, including property damage, liability, and flood and earthquake insurances; and closing costs; FM.7.D

E. analyze and interpret mortgage tax deductions; FM.7.E

F. determine other costs associated with home ownership, including cost of maintenance, repairs, utilities, and association fees; FM.7.F

G. determine the appropriate savings needed to maintain home payments in the event of a financial emergency; FM.7.G

H. demonstrate an understanding of the consequences to individuals in times of recession and falling home prices such as during the mortgage crisis of 2007-2008 and identify how the financial and personal impact could have been reduced; FM.7.H

I. compare the cost of homeownership versus renting, identifying benefits and drawbacks to both homeownership and renting such as the mortgage-related income tax deductions; FM.7.I

J. use the multiple listing service to identify and compare housing properties; FM.7.J

K. analyze and explain a typical apartment lease such as terms, deposit, occupancy, parking, and cancellation contract policy; and FM.7.K

L. compare options for coverage for renter's insurance. FM.7.L

8. **The student applies mathematical process standards to demonstrate an understanding of the difference between a vehicle purchase and a vehicle lease and costs associated with each. The student is expected to:** FM.8

A. create an amortization table using technology to collect and organize data to make decisions and critical judgments about varying the down payment, period of loan, special principal payment, and interest rates for a vehicle loan; FM.8.A

B. determine the costs associated with owning and leasing a vehicle, including insurance, maintenance, repairs, and fuel; FM.8.B

C. compare the total cost of buying and owning a vehicle to leasing a vehicle; FM.8.C

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D. compare the total cost of purchase and maintenance of several possible vehicles; FM.8.D

E. identify and understand the costs and benefits of maintenance contracts and vehicle warranties; FM.8.E

F. calculate the funding needed to maintain vehicle payments in the event of a financial emergency; and FM.8.F

G. research various options for a driver's education course and the benefits of the course and the impact of a moving violation on insurance rates. FM.8.G

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9. The student applies mathematical process standards to demonstrate an understanding of investment options. The student is expected to: FM.9

A. identify the factors involved in the various methods of buying and selling stocks and mutual funds, including load and no-load funds, by evaluating the stock dividend yield, price-earnings ratio, return on investment, earnings per share, and net asset value; FM.9.A

B. calculate the cost of buying and selling bonds and analyze the investment return from bond yield and bond interest payment; FM.9.B

C. compare differences among investments, including stocks, bonds, mutual funds, Exchange Traded Funds, and real estate; and FM.9.C

D. compare the risk and return for a diversified and non-diversified investment portfolio in a student-created portfolio. FM.9.D

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10. The student applies mathematical process standards to demonstrate an understanding of various types of insurance, including life, health, disability, and income insurances, and special protection. The student is expected to: FM.10

A. analyze the costs and benefits of term and permanent (whole) life insurance such as the cost of premiums, dividends, accumulation of cash value, tax treatment of death benefits, and protection from creditors of death benefits and cash values; FM.10.A

B. estimate the amount of life insurance needed using a needs approach or an earnings multiple approach; FM.10.B

C. estimate the cost of healthcare coverage, including the cost of health insurance premiums, co-payments, deductibles, and out-of-pocket expenses; FM.10.C

D. explain the need for disability income insurance and research the cost; FM.10.D

E. compare the benefits to the costs of special protection coverages such as cancer, pet, vacation, burial, international travel, and purchase protection; FM.10.E

F. demonstrate an understanding of the actuarial process used to set premiums; and FM.10.F

G. demonstrate an understanding of insurance company and agent selection and professional designations within the insurance profession. FM.10.G

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11. **The student applies mathematical process standards to demonstrate an understanding of retirement plans. The student is expected to:** FM.11

    A. compare tax advantage retirement plans, including Individual Retirement Accounts (IRAs), Roth IRAs, 401(k) plans, and 403(b) plans, and determine an appropriate investment for retirement; FM.11.A

    B. calculate and graph the exponential function showing the benefits of starting early to invest with continuous contributions; FM.11.B

    C. calculate tax treatment penalty for early withdrawal; and FM.11.C

    D. calculate, using technology, the amount that must be saved annually to achieve financial independence by a desired age. FM.11.D

12. **The student applies mathematical process standards to demonstrate an understanding of a fixed pension, a variable pension, social security, and an annuity. The student is expected to identify an annuity and calculate and display graphically the future value of an annuity.** FM.12

13. **The student applies mathematical process standards to demonstrate an understanding of wills and trusts for the distribution of assets at death. The student is expected to identify how wills and trusts support the distribution of assets after death.** FM.13

14. **The student applies mathematical process standards to demonstrate an understanding of charitable giving. The student is expected to demonstrate an understanding of the value and benefits of charitable giving.** FM.14

15. **The student applies mathematical process standards to demonstrate an understanding of the budgeting process. The student is expected to:** FM.15

    A. create a comprehensive balanced personal budget, including fixed and variable expenses, college savings, emergency savings, and retirement savings; FM.15.A

    B. identify free resources to assist with maintaining a budget; and FM.15.B

    C. compare different standards of living in the United States, including poverty, minimum wage, living wage, and desired standards of living. FM.15.C

16. **The student applies mathematical process standards to demonstrate an understanding of identity theft. The student is expected to:** FM.16

    A. define and explain types of identity theft; FM.16.A

    B. create a plan for prevention of identity theft; and FM.16.B

    C. identify suitable methods for reporting identity theft. FM.16.C

17. **The student applies mathematical process standards to demonstrate an understanding for a post-secondary plan. The student is expected to:** FM.17

    A. understand educational, military, and current job opportunities; FM.17.A

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B. research and align interests and skills with potential careers and post-secondary education to assure a life strategy that will produce employment the student enjoys with a desired standard of living; FM.17.B

C. calculate the total funding required to complete a desired post-secondary education program; FM.17.C

D. identify different resources for acquiring funding for education after high school such as personal savings, employment, Free Application for Federal Student Aid (FAFSA), Texas Application for Federal Student Aid, Expected Family Contribution, Pell Grants, work-study programs, student loans, Individual Development Accounts, scholarships such as the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT®), and internships to reduce the projected cost of education; FM.17.D

E. identify benefits and potential savings for students investing in themselves such as taking Advanced Placement and dual credit classes; FM.17.E

F. graph and compare compensation earnings of potential careers and the cost of post-secondary education; and FM.17.F

G. calculate the Return on Investment from completing a desired post-secondary education program, taking into consideration anticipated earnings for a selected degree and the cost of attending a specific post-secondary program. FM.17.G

Money Matters

1. **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:** MM.1

   A. demonstrate an understanding of appropriate communication with customers, employers, and coworkers through verbal, nonverbal, and digital means; MM.1.A

   B. demonstrate an understanding of the use of business etiquette; MM.1.B

   C. demonstrate an understanding of appropriate customer service such as building customer relationships and resolving customer complaints; and MM.1.C

   D. demonstrate an understanding of ethical and legal issues in business. MM.1.D

2. **The student uses career planning concepts, tools, and strategies to explore, obtain, and develop a financial plan. The student is expected to:** MM.2

   A. discuss the nature and benefits of financial planning; and MM.2.A

   B. discuss the role of ethics and personal responsibility in financial planning. MM.2.B

3. **The student demonstrates an understanding of a post-secondary plan. The student is expected to:** MM.3

   A. understand educational, military, and current job opportunities; and MM.3.A

   B. create a post-secondary plan that includes topics such as application requirements; testing requirements; certification requirements; associated deadlines; associated costs, including living expenses; job prospects and opportunities; beginning earnings; expected future earnings; and resumes and cover letters. MM.3.B

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4. **The student demonstrates an understanding of the fundamental principles of money. The student is expected to:** MM.4
   - A. explain forms of financial exchange, including cash, credit cards, debit cards, and electronic funds transfer; MM.4.A
   - B. compare and contrast various types of currency, including paper money, coins, banknotes, government bonds, and treasury notes; MM.4.B
   - C. identify functions of money, including medium of exchange, unit of measure, and store of value; MM.4.C
   - D. describe sources of income, including wages and salaries, interest, rent, dividends, capital gains, and transfer payments; MM.4.D
   - E. explain the time value of money; and MM.4.E
   - F. discuss the purposes and importance of credit. MM.4.F

5. **The student examines economic systems. The student is expected to:** MM.5
   - A. explain sole proprietorships, partnerships, and corporations; MM.5.A
   - B. identify factors affecting profit, revenue, and expenses; and MM.5.B
   - C. understand the rights and responsibilities of consumers within various economic systems. MM.5.C

6. **The student examines personal financial activities and the role of government. The student is expected to:** MM.6
   - A. analyze the importance and purpose of taxes; MM.6.A
   - B. analyze monetary policy and fiscal policy; MM.6.B
   - C. analyze the supply and demand for money; and MM.6.C
   - D. analyze the role of the Federal Reserve System. MM.6.D

7. **The student discusses economic indicators impacting personal financial decision making. The student is expected to:** MM.7
   - A. analyze the measure of consumer spending as an economic indicator; MM.7.A
   - B. analyze the impact of a nation's unemployment rates; MM.7.B
   - C. analyze the concept of Gross Domestic Product; MM.7.C
   - D. analyze the economic impact of inflation on personal financial decision making; MM.7.D
   - E. analyze unemployment and inflation tradeoffs; MM.7.E
   - F. analyze the economic impact of interest rate fluctuations; and MM.7.F
   - G. analyze the impact of business cycles on personal financial decision making. MM.7.G

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The student analyzes the impact of international activities on personal financial decision making. The student is expected to: MM.8

A. examine international current events as related to personal financial decision making; MM.8.A

B. examine currency exchange rates; and MM.8.B

C. examine domestic and international labor issues as related to personal financial decision making. MM.8.C

9. **The student examines how personal financial decisions are used to achieve financial goals. The student is expected to:** MM.9

A. develop a budget based on personal financial goals; MM.9.A

B. explain the benefits of saving and investing; MM.9.B

C. examine tax liabilities, including as they relate to the completion of a W-4; MM.9.C

D. analyze a pay stub; MM.9.D

E. interpret and reconcile bank statements; MM.9.E

F. maintain financial records; MM.9.F

G. evaluate credit scores; MM.9.G

H. use identify theft protection measures; and MM.9.H

I. prepare personal income tax forms by completing a 1040EZ with a W-2 form and using current tax tables. MM.9.I

10. **The student understands the purposes of financial service providers. The student is expected to:** MM.10

A. describe types of financial service providers, including banks and credit unions; MM.10.A

B. evaluate financial service providers based on selection criteria such as location, interest rates, and benefits; MM.10.B

C. analyze financing needed for long-term personal assets, including home purchases and payments and auto purchases, leases, and payments; MM.10.C

D. explain loan evaluation criteria used by lending institutions; MM.10.D

E. summarize the components of a loan application package; MM.10.E

F. calculate a home loan payment schedule; MM.10.F

G. calculate an automobile loan payment schedule; and MM.10.G

H. understand the risks of using a payday loan and title loan. MM.10.H

11. **The student identifies various investment strategies. The student is expected to:** MM.11

A. evaluate different types of investments such as stocks, bonds, and property; MM.11.A

B. evaluate investment goals and objectives as they relate to risk tolerance; MM.11.B

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C. investigate the opportunities and costs of post-secondary education; MM.11.C

D. investigate long-term needs and financial goals, including retirement; and MM.11.D

E. investigate the factors that affect the value of investments. MM.11.E

12. The student identifies methods to manage personal risk. The student is expected to: MM.12

A. understand the concept of insurance; MM.12.A

B. explore the reasons for obtaining personal insurance, including health, disability, life, cancer, and long-term care insurance; MM.12.B

C. explore the reasons for obtaining property insurance coverage, including homeowner's, personal liability, renter's, flood, earthquake, and auto insurance; and MM.12.C

D. understand the insurance claim settlement process. MM.12.D

Securities and Investments

1. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

A. demonstrate an understanding of appropriate communication with customers, employers, and coworkers through verbal, nonverbal, and digital means; 1.A

B. demonstrate an understanding of the use of business etiquette; 1.B

C. demonstrate an understanding of appropriate customer service such as building customer relationships and resolving customer complaints; and 1.C

D. demonstrate an understanding of ethical and legal issues in business. 1.D

2. The student describes laws and regulations in order to manage personal and business operations and transactions in the securities and investments industry. The student is expected to:

A. explain regulation of the securities and investments industry, including the role of the Securities and Exchange Commission; 2.A

B. understand the legal and ethical considerations in buying and selling securities; and 2.B

C. understand the state regulation of the securities and investments industry. 2.C

3. The student describes investment analysis and selection processes. The student is expected to:

A. describe types of investment objectives; 3.A

B. consider the nature of investment risk; 3.B

C. analyze diversification strategies; 3.C

D. understand factors to consider when selecting investments; 3.D

E. analyze information that can be obtained from financial statements and annual reports; 3.E

F. examine a mutual fund prospectus; 3.F

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G. interpret analysis used in making investment decisions; 3.G

H. discuss strategies for selecting investments; 3.H

I. identify performance measurements for venture capital; and 3.I

J. describe investment analysis and selection theory such as the Modern Portfolio Theory, the Capital Asset Pricing Model, and the Arbitrage Pricing Theory. 3.J

4. The student identifies investments. The student is expected to:

A. interpret financial ratios significant to investors, including price earnings ratio; 4.A

B. calculate stock-related values such as the value of a constant growth stock, the expected value of future dividends, and the expected rate of return; 4.B

C. calculate bond-related values such as the price of a bond given its yield to maturity, the coupon interest payment for a bond, and the effects of interest rates on the price of a bond; 4.C

D. calculate bond present value and future value; and 4.D

E. select investments based on financial analysis such as financial ratios. 4.E

5. The student understands security and investment operations. The student is expected to:

A. examine security and investment operational activities; 5.A

B. discuss the operations of a securities and investment office; 5.B

C. examine the buy and sell functions of a brokerage firm; and 5.C

D. discuss and calculate commissions. 5.D

6. The student explores security and investment licensing and certification programs. The student is expected to:

A. explore educational requirements; 6.A

B. compare and contrast the Series 6 and Series 7 licensing exams required to sell securities and other financial products; and 6.B

C. explain professional designations in the securities and investments industry such as Certified Fund Specialist, Charted Financial Analyst, Board Certified in Asset Allocation, Board Certified in Securities, Certified Senior Consultant, and Certified Financial Planner. 6.C

7. The student understands investments and their relationships to the economy. The student is expected to:

A. evaluate the environments in which security and investment services are offered, including securities sales agents, securities and investments firms, and securities markets; 7.A

B. evaluate causes of stock price fluctuations; 7.B

C. evaluate the relationship between bond prices and yields; 7.C

D. evaluate the role of investment banking in the primary marketplace; and 7.D

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E. evaluate margin accounts, short sales, market timing, and international strategies. 7.E

8. **The student demonstrates an understanding of securities and investments products. The student is expected to evaluate securities and investments products such as stocks, dividends, stock splits, options strategies, hedge funds, futures, bonds, mutual funds, venture capital, real estate, retirement investment plans, and education savings and the advantages and disadvantages from an issuer and investor perspective.**

9. **The student demonstrates an understanding of a post-secondary plan. The student is expected to:**

   A. understand educational, military, and current job opportunities; and 9.A

   B. create a post-secondary plan that includes topics such as application requirements; testing requirements; certification requirements; associated deadlines; associated costs, including living expenses; job prospects and opportunities; beginning earnings; expected future earnings; and resumes and cover letters. 9.B

Insurance Operations

1. **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:**

   A. demonstrate an understanding of appropriate communication with customers, employers, and coworkers through verbal, nonverbal, or digital means; 1.A

   B. demonstrate an understanding of the use of business etiquette; 1.B

   C. demonstrate an understanding of appropriate customer service such as building customer relationships and resolving customer complaints; and 1.C

   D. demonstrate an understanding of ethical and legal issues. 1.D

2. **The student has an understanding of the insurance industry. The student is expected to:**

   A. examine the insurance industry; 2.A

   B. evaluate components of automobile insurance coverage; 2.B

   C. evaluate components of homeowner's insurance and renter's insurance, including a personal umbrella liability policy; 2.C

   D. evaluate the purpose of flood insurance and earthquake insurance; 2.D

   E. evaluate the purpose of commercial property insurance; 2.E

   F. evaluate the purpose of commercial liability insurance; 2.F

   G. evaluate the purpose of title insurance; 2.G

   H. evaluate the purpose of health insurance, long-term care insurance, and cancer insurance; 2.H

   I. compare and contrast Medicare and Medicaid; 2.I

   J. investigate the purpose of unemployment insurance; 2.J

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K. evaluate the purpose of workers' compensation insurance; 2.K

L. evaluate the purpose of disability insurance; 2.L

M. compare and contrast the purpose of life insurance, including term, whole, and group; 2.M

N. summarize the role of life insurance in investment and estate planning; 2.N

O. compare and contrast the methods that insurance companies use to generate income, including collection of premiums and investing activities; 2.O

P. evaluate the use of state risk pool programs; and 2.P

Q. summarize trends in the insurance industry such as hacker insurance, pet insurance, travel insurance, and identity theft insurance. 2.Q

3. The student explores careers in insurance. The student is expected to:

A. explore education, licensing, and certification requirements; and 3.A

B. understand the role and responsibilities of insurance professionals such as agents, underwriters, actuaries, claims personnel, and investigators. 3.B

4. The student examines regulations that ensure compliance adherence to insurance industry regulations. The student is expected to:

A. evaluate the ethical and social responsibilities in the field of insurance; 4.A

B. summarize federal and state regulations governing the insurance industry; 4.B

C. assess the significance of the Consolidated Omnibus Budget Reconciliation Act (COBRA); 4.C

D. assess the Health Insurance Portability and Accountability Act (HIPAA), including Title I and Title II; and 4.D

E. assess the Patient Protection and Affordable Care Act (PPACA). 4.E

5. The student explains legal concepts pertinent to the insurance industry. The student is expected to:

A. examine legal principles that pertain to insurance such as indemnity, insurable interest, subrogation, and utmost good faith; and 5.A

B. evaluate insurance contracts. 5.B

6. The student identifies the components used in the insurance industry for approval and denial decisions. The student is expected to:

A. explain the importance of actuarial science in the insurance industry; 6.A

B. examine the nature of credit-based insurance scores; and 6.B

C. examine the underwriting process. 6.C

7. The student has an understanding of insurance fraud. The student is expected to:

A. examine various types of insurance fraud; 7.A

B. investigate various methods for detecting insurance fraud; and 7.B

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C. investigate and research a current event about insurance fraud to create a grammatically correct, written report with citations for presentation. 7.C

8. **The student demonstrates an understanding of the claims process. The student is expected to examine the claims process, including the role of the agent and the adjustor.**

9. **The student identifies different insurance providers and rates. The student is expected to:**

   A. compare and contrast insurance company ratings; and 9.A

   B. compare and contrast insurance premiums according to gender, geographic area, and age. 9.B

. **The student demonstrates an understanding of identity theft. The student is expected to create a plan for prevention of identity theft and for the reporting of identify theft.** 10.

. **The student demonstrates an understanding of a post-secondary plan. The student is expected to:** 11.

   A. understand educational, military, and current job opportunities; and 11.A

   B. create a post-secondary plan that includes topics such as application requirements; testing requirements; certification requirements; associated deadlines; associated costs, including living expenses; job prospects and opportunities; beginning earnings; expected future earnings; and resumes and cover letters. 11.B

Banking and Financial Services

1. **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:**

   A. demonstrate effective oral and written communication skills; 1.A

   B. perform numerical and arithmetic applications; 1.B

   C. demonstrate an understanding of integrity and strong work ethic; 1.C

   D. demonstrate attention to detail in completed assignments; and 1.D

   E. demonstrate effective problem solving. 1.E

2. **The student evaluates the role of banking in the modern economy. The student is expected to:**

   A. outline the evolution of money and banking in the U.S. economy; 2.A

   B. explain the operation of the Federal Reserve Bank and its role in the economy; 2.B

   C. outline and analyze the history and the impact of the use of the gold or silver standard in monetary policy; 2.C

   D. compare and contrast the types of financial institutions such as commercial banks, savings and loan associations, credit unions, investment banks, financial services companies, and mortgage companies; 2.D

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E. discuss the role of the World Bank Group in international financial assistance; and 2.E

F. explain the nature of government agencies that provide financing to businesses such as the Export-Import Bank of the United States and the Small Business Administration. 2.F

3. The student acquires knowledge of banking processes and services. The student is expected to:

A. describe the nature of banking processes; 3.A

B. describe the types of banking services; 3.B

C. discuss retail bank products and services; 3.C

D. explain business bank products and services; 3.D

E. describe basic teller performance standards; 3.E

F. discuss the nature of loan products; and 3.F

G. discuss trust services available to customers. 3.G

4. The student describes the roles and responsibilities in banking services, including educational requirements. The student is expected to:

A. explain the role and responsibilities of administrative careers in banking services; and 4.A

B. describe the role and responsibilities of executive and managerial careers in banking services. 4.B

5. The student determines client needs and wants and responds through planned, personalized communication to influence purchase decisions and enhance future business opportunities in banking services. The student is expected to:

A. describe the importance of selling in the banking industry, including cross-selling and relationship selling; 5.A

B. explain the process of opening a new account; and 5.B

C. describe loan terms for a client. 5.C

6. The student simulates the day-to-day activities within a banking organization in order to ensure secure operations. The student is expected to:

A. describe bank loss prevention measures such as procedures for the secure handling of cash and checks; detecting and reporting counterfeit currency; developing business continuity plans; and preventing crimes to which a bank could fall victim such as fraud, robbery, and phishing; 6.A

B. discuss the role of the Federal Reserve System in banking operations and cash-handling procedures; 6.B

C. simulate daily cash processing activities such as processing damaged and mutilated currency and coin, ordering and depositing currency, depositing checks, handling differences in cash received and deposited, and transporting cash; 6.C

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D. analyze the underwriting of loan applications to determine credit worthiness of customers, including credit analysis, and factors affecting loan pricing and structuring; and 6.D

E. discuss the nature of problem loan management. 6.E

7. The student describes laws and regulations used to manage business operations and transactions in the banking services industry. The student is expected to:

A. explain the elements of a compliance program; 7.A

B. discuss functional areas of a compliance audit; 7.B

C. analyze a compliance plan; 7.C

D. discuss federal regulations of lending and operations functions in banking services, including the ethical and social aspects of those regulations; 7.D

E. discuss e-compliance issues in banking services; and 7.E

F. discuss the responsibilities of regulatory agencies that oversee the banking industry. 7.F

8. The student investigates ways to create and maintain positive, ongoing relationships with banking customers in order to enhance the organization's image. The student is expected to:

A. explain ways to cultivate positive relationships with customers to enhance company image; 8.A

B. discuss the importance of meeting and exceeding customer expectations; and 8.B

C. describe the relationships that institutions providing banking services have with their communities. 8.C

9. The student maintains, monitors, controls, and plans the use of financial resources to enhance banking performance. The student is expected to:

A. describe the manner in which banks generate profit and explain measures they take to ensure profitability; and 9.A

B. use financial formulas commonly used in banking to aid in the growth and stability of banking services, including key ratios and banking calculations such as interest and annual percentage rate, capital adequacy, asset quality, management administration, earnings, liquidity, and sensitivity to market risk. 9.B

Accounting I

1. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to: AI.1

A. demonstrate effective oral and written communication skills; AI.1.A

B. perform numerical and arithmetic applications; AI.1.B

C. demonstrate an understanding of integrity and strong work ethic; AI.1.C

D. demonstrate attention to detail in completed assignments; and AI.1.D

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E. demonstrate effective problem solving. AI.1.E

2. **The student communicates an understanding of the accounting industry. The student is expected to:** AI.2
   - A. describe the purpose of accounting and financial reporting; AI.2.A
   - B. discuss its impact on industry; and AI.2.B
   - C. describe Generally Accepted Accounting Principles (GAAP). AI.2.C
3. **The student uses career planning concepts, tools, and strategies to explore accounting careers. The student is expected to:** AI.3
   - A. discuss the significance of responsibility in accounting such as ethical and social responsibility; AI.3.A
   - B. explore careers in accounting, including education requirements, roles, and responsibilities of certified public accountants, general ledger accountants, management accountants, auditors, government accountants, international accountants, forensic accountants, and senior management in accounting; and AI.3.B
   - C. identify accounting licensing and certification programs, including professional designations for accountants such as certified public accountant and certified management accountant. AI.3.C
4. **The student uses equations, graphical representations, accounting tools, strategies, and automated systems in real-world situations to maintain, monitor, control, and plan the use of financial resources. The student will complete an accounting cycle for a service business. The student is expected to:** AI.4
   - A. illustrate the accounting cycle; AI.4.A
   - B. analyze the effects of transactions on the accounting equation and use T accounts to analyze transactions; AI.4.B
   - C. prepare a chart of accounts; AI.4.C
   - D. journalize transactions in a general journal; AI.4.D
   - E. post journal entries to general ledger accounts; AI.4.E
   - F. prepare work sheets; AI.4.F
   - G. prepare a trial balance; AI.4.G
   - H. journalize and post adjusting and closing entries; AI.4.H
   - I. prepare a post-closing trial balance; and AI.4.I
   - J. prepare financial statements, including income statements, balance sheets, statements of stockholders' equity, and changes in owners' equity. AI.4.J
5. **The student analyzes cash controls. The student is expected to:** AI.5
   - A. explain cash control procedures such as bank account access, dual control, timely account reconciliations, and security of check stock; AI.5.A
   - B. prove cash and reconcile bank statements; AI.5.B
   - C. journalize and post entries to establish and replenish petty cash; AI.5.C

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D. journalize and post entries related to banking activities; and AI.5.D

E. explain the benefits of electronic funds transfer. AI.5.E

6. **The student performs accounting functions for a merchandising business. The student is expected to explain the nature of special journals and recording transactions in special journals.** AI.6

7. **The student performs accounts payable functions. The student is expected to:** AI.7

   A. maintain a vendor file; AI.7.A

   B. analyze purchase transactions; AI.7.B

   C. post to an accounts payable subsidiary ledger; AI.7.C

   D. process invoices for payment; AI.7.D

   E. prepare a schedule of accounts payable; and AI.7.E

   F. analyze the impact of accounts payable on the balance sheet and cash flow statements. AI.7.F

8. **The student performs accounts receivable functions. The student is expected to:** AI.8

   A. explain the nature of accounts receivable; AI.8.A

   B. maintain a customer file for accounts receivable; AI.8.B

   C. analyze sales transactions; AI.8.C

   D. post to an accounts receivable subsidiary ledger; AI.8.D

   E. process sales orders, returns, and allowances; AI.8.E

   F. process customer payments; AI.8.F

   G. process uncollectible accounts; AI.8.G

   H. prepare a schedule of accounts receivable; AI.8.H

   I. determine uncollectible accounts receivable; and AI.8.I

   J. analyze the impact of accounts receivable on the balance sheet and cash flow statements. AI.8.J

9. **The student investigates merchandise inventory to determine the impact on a company's financial position. The student is expected to:** AI.9

   A. discuss the importance of merchandise inventory to a corporation, including the benefits of determining the most efficient inventory levels; AI.9.A

   B. explain the difference between periodic and perpetual methods of calculating inventory quantities, including the use of inventory records, stock records, and point-of-sale terminals; AI.9.B

   C. calculate the cost of inventory, including the First In, First Out (FIFO) method, Last In, First Out (LIFO) method, weighted average method, and the Gross Profit method of estimating inventory; and AI.9.C

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D. analyze the results of valuing inventory under the FIFO method, LIFO method, weighted average method, and the Gross Profit method of estimating inventory to determine the effect on Net Income and Gross Profit. AI.9.D

10. **The student completes payroll procedures to calculate, record, and distribute payroll earnings and analyzes the impact of these expenses on a company's financial position. The student is expected to:** AI.10

    A. interpret time cards to calculate hours worked; AI.10.A

    B. maintain employee earnings records and registers; AI.10.B

    C. calculate employee earnings, including gross earnings, withholdings, and net pay; AI.10.C

    D. journalize salary expenses; AI.10.D

    E. calculate employer payroll taxes; AI.10.E

    F. journalize payroll tax expenses; AI.10.F

    G. discuss payroll tax expense forms and reports; and AI.10.G

    H. analyze the impact of salary expenses and payroll tax expense on total expenses and net income. AI.10.H

11. **The student performs specialized accounting functions for a corporation and completes an accounting cycle. The student is expected to:** AI.11

    A. analyze the articles of incorporation needed to start a corporation; AI.11.A

    B. journalize the issuance of stock; AI.11.B

    C. compute dividends payable on stock; AI.11.C

    D. complete a work sheet for a corporation, including calculating adjustments for depreciation, merchandise inventory, and federal taxes; AI.11.D

    E. prepare financial statements for a corporation, including a balance sheet, an income statement, a statement of stockholders' equity, and a statement of changes in retained earnings; AI.11.E

    F. understand that internal accounting controls exist to ensure the proper recording of financial transactions; and AI.11.F

    G. identify and perform tax accounting functions such as recordkeeping procedures and the nature of corporate tax accounting. AI.11.G

12. **The student describes laws and regulations in order to manage business operations and transactions in accounting. The student is expected to:** AI.12

    A. describe regulation of accounting; AI.12.A

    B. identify and analyze historical events that led to the regulation of accounting such as the fall of Enron; WorldCom; Tyco International, Ltd.; Adelphia Communications; and Arthur Andersen; AI.12.B

    C. describe the impact of the Sarbanes-Oxley Act of 2002 on internal controls and financial reporting; AI.12.C

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D. describe the role of the Securities and Exchange Commission in regulating the accounting industry; AI.12.D

E. discuss state regulation of the accounting industry; and AI.12.E

F. identify and research a case study involving a historically significant compliance or regulatory issue that led to the formation of regulatory agencies or laws, including: AI.12.F

i. formulating questions to analyze the issue; AI.12.F.I

ii. gathering relevant sources; AI.12.F.II

iii. evaluating the validity and reliability of those sources; and AI.12.F.III

iv. determining which laws and regulations apply. AI.12.F.IV

13. The student accesses, processes, maintains, evaluates, and disseminates financial information to assist business decision making. The student is expected to: AI.13

A. use accounting technology, including discussing the use of data mining and integrating technology into accounting; AI.13.A

B. engage in an accounting simulation covering an accounting cycle; and AI.13.B

C. create a clear and coherent oral presentation that analyzes the results of an accounting simulation covering an accounting cycle and includes the use of correct grammar, spelling, punctuation, and citation of resource materials. AI.13.C

Accounting II

1. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to: AII.1

A. demonstrate effective oral and written communication skills; AII.1.A

B. perform numerical and arithmetic applications; AII.1.B

C. demonstrate an understanding of integrity and strong work ethic; AII.1.C

D. demonstrate attention to detail in completed assignments; and AII.1.D

E. demonstrate effective problem solving. AII.1.E

2. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: AII.2

A. apply mathematics to problems arising in everyday life, society, and the workplace; AII.2.A

B. use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; AII.2.B

C. select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; AII.2.C

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D. communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; AII.2.D

E. create and use representations to organize, record, and communicate mathematical ideas; AII.2.E

F. analyze mathematical relationships to connect and communicate mathematical ideas; and AII.2.F

G. display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. AII.2.G

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3. The student performs accounting functions specific to a corporation. The student is expected to: AII.3

A. analyze articles of incorporation; AII.3.A

B. communicate methods used to account for the issuance of stock; AII.3.B

C. compute the number of shares of common stock to be issued on the conversion of convertible preferred stock; AII.3.C

D. compute dividends payable on stock; AII.3.D

E. describe internal accounting controls that exist to ensure the proper recording of financial transactions; AII.3.E

F. produce financial statements, including work sheets, income statements, statements of stockholders' equity, balance sheets, cash flow statements, and statements of changes in retained earnings; AII.3.F

G. discuss the nature of consolidated financial statements; AII.3.G

H. discuss the nature of corporate tax accounting; and AII.3.H

I. perform accounting functions specific to corporate tax accounting, including calculating corporate taxes and target profits and preparing corporate tax returns. AII.3.I

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4. The student discusses and performs accounting functions in a financial statement analysis. The student is expected to: AII.4

A. explain the nature of annual reports; AII.4.A

B. discuss the use of financial ratios in accounting and explain how this data impacts business decisions; AII.4.B

C. determine business liquidity, including current ratio, quick ratio, and cash ratio; AII.4.C

D. calculate business profitability, including gross profit margin, operating profit margin, net profit margin, cash flow margin, return on assets, return on investment, and return on equity, and analyze the relationships between these ratios; AII.4.D

E. compute business efficiency ratios, including inventory turnover ratio, accounts receivable turnover ratio, accounts payable turnover ratio, average payment period, and average collection period; AII.4.E

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F. determine business operating ratio; AII.4.F

G. calculate business capital structure ratios, including debt-to-equity ratio and debt service coverage; AII.4.G

H. compare financial ratios to industry benchmarks and past performance to identify key areas that need to be evaluated and improved; and AII.4.H

I. formulate and present recommendations based on financial ratio comparisons using spreadsheet software, graphs, and charts that identify business strategies and solutions needed to improve financial performance. AII.4.I

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5. The student describes and employs managerial accounting concepts. The student is expected to: AII.5

A. explain the nature of managerial cost accounting, including costs and cost drivers; AII.5.A

B. conduct cost-volume-profit analysis, including the use of linear regression data to determine the relationship between production and costs; AII.5.B

C. identify cost accounting systems such as job order costing, process costing, activity-based costing, and project costing; AII.5.C

D. calculate the cost of goods sold; AII.5.D

E. compute overhead rates; AII.5.E

F. apply overhead to jobs; AII.5.F

G. describe the nature of cost accounting decision making; AII.5.G

H. discuss the nature of cost accounting budgets; AII.5.H

I. explain and create a variance analysis; AII.5.I

J. discuss the nature of cost allocation; AII.5.J

K. compute variable costs and contribution margins for a product; AII.5.K

L. determine relevant costs in make-or-buy and accept-or-reject decisions; AII.5.L

M. evaluate make-or-buy and accept-or-reject decisions to identify the best solutions for a business; AII.5.M

N. prepare written recommendations that identify make-or-buy and accept-or-reject solutions using empirical data to support and justify conclusions; AII.5.N

O. perform cost allocation functions; and AII.5.O

P. prepare cost of production reports. AII.5.P

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6. The student maintains, monitors, controls, and plans the use of financial resources to ensure business stability. The student is expected to: AII.6

A. describe fundamental financial concepts involved in the management of corporate finances, including the nature of depreciation and cash flows; AII.6.A

B. analyze the need for efficient capital markets in corporate finance; AII.6.B

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C. explore the capital budgeting process; AII.6.C

D. perform calculations necessary for capital budget decision making, including: AII.6.D

   i. calculating the initial investment associated with a proposed capital expenditure; AII.6.D.I

   ii. determining operating cash inflows; and AII.6.D.II

   iii. determining terminal cash flow; AII.6.D.III

E. conduct cash-flow analysis to select an acceptable capital expenditure, including: AII.6.E

   i. interpreting the nature of relevant cash flow-analysis; AII.6.E.I

   ii. explaining the nature of the payback period; AII.6.E.II

   iii. calculating the payback period; AII.6.E.III

   iv. explaining the relationship between the internal rate of return and net present value; AII.6.E.IV

   v. calculating the net present value and future value; and AII.6.E.V

   vi. calculating the internal rate of return; AII.6.E.VI

F. explain the role of financial planning in corporate finance, including the financial planning process, short-term operating, and long-term strategic planning; AII.6.F

G. conduct cash planning, including: AII.6.G

   i. explaining the use of cash budgets; AII.6.G.I

   ii. coping with uncertainty in cash budgets; AII.6.G.II

   iii. preparing a cash budget; and AII.6.G.III

   iv. evaluating a cash budget; AII.6.G.IV

H. conduct profit planning, including pro forma income statements and balance sheets; AII.6.H

I. define and describe the nature of short-term financial management; AII.6.I

J. explain the role of valuation in making appropriate financial decisions for a company, including: AII.6.J

   i. discussing the role of project valuation in capital allocation decisions; AII.6.J.I

   ii. comparing methods for valuing flexibility; and AII.6.J.II

   iii. discussing the valuation implications in business finance; AII.6.J.III

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K. use capital market securities to secure financing for a company, including: AII.6.K

i. analyzing models and methods to determine the best financing option for a company; AII.6.K.I

ii. analyzing the nature of corporate bonds; AII.6.K.II

iii. analyzing and determining the cost of long-term debt; AII.6.K.III

iv. describing the issuance of stock from a corporation; AII.6.K.IV

v. comparing and contrasting preferred stock and common stock; AII.6.K.V

vi. calculating the cost of preferred stock and common stock; and AII.6.K.VI

vii. computing leverage and debt to equity ratios; AII.6.K.VII

L. explain the role of dividends in corporate finance, including forms of dividends and reinvestment plans; AII.6.L

M. describe the effect of a firm's dividend decisions on its external financing requirements; AII.6.M

N. illustrate the residual theory of dividends; AII.6.N

O. describe the impact of dividends on the value of the firm; AII.6.O

P. explain the nature of a dividend policy; AII.6.P

Q. explain factors to consider when deciding on the form of dividend distribution; and AII.6.Q

R. analyze ownership change transactions, including: AII.6.R

i. comparing mergers and acquisitions; AII.6.R.I

ii. explaining the nature of hostile takeovers; AII.6.R.II

iii. discussing issues that arise from mergers and acquisitions; AII.6.R.III

iv. explaining methods for evaluating potential merger/acquisition targets; AII.6.R.IV

v. evaluating potential merger and acquisition targets; and AII.6.R.V

vi. analyzing the nature of restructurings. AII.6.R.VI

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7. **The student describes laws and regulations in order to manage business operations and transactions in accounting. The student is expected to:** AII.7

A. describe and discuss regulation of accounting, including: AII.7.A

i. the impact of the Sarbanes-Oxley Act of 2002 on accounting; AII.7.A.I

ii. the role of the Securities and Exchange Commission in regulating the accounting industry; AII.7.A.II

iii. the state regulation of the accounting industry; and AII.7.A.III

iv. the impact of International Financial Reporting Standards (IFRS) versus Generally Accepted Accounting Principles (GAAP); and AII.7.A.IV

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B. identify and research a case study involving a fraud, compliance, or regulatory issue or possible scenario, including: AII.7.B

i. formulating questions to analyze the issue; AII.7.B.I

ii. gathering relevant sources; AII.7.B.II

iii. evaluating the validity and reliability of those sources; AII.7.B.III

iv. identifying and communicating which laws and regulations apply; AII.7.B.IV

v. gat. AII.7.B.V

8. **The student accesses, processes, maintains, evaluates, and disseminates financial information to assist business decision making. The student is expected to:** AII.8

A. use technology to acquire information such as the use of data mining and automated financial programs into accounting; and AII.8.A

B. create a clear and coherent oral and written presentation that includes the use of correct grammar, spelling, punctuation, and citation of resource materials on a current topic in accounting using concepts learned in this course. AII.8.B

Financial Analysis

1. **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:**

A. demonstrate effective oral and written communication skills; 1.A

B. perform numerical and arithmetic applications; 1.B

C. demonstrate an understanding of integrity and strong work ethic; 1.C

D. demonstrate attention to detail in completed assignments; and 1.D

E. demonstrate effective problem solving. 1.E

2. **The student analyzes accounting systems to examine their contribution to the fiscal stability of businesses. The student is expected to:**

A. describe the nature and scope of accounting; and 2.A

B. examine accounting procedures for tracking money flow and determining financial status through the preparation of financial statements. 2.B

3. **The student explores the use of financial resources. The student is expected to describe tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.**

4. **The student demonstrates mathematics knowledge and skills required when interpreting business operation documents. The student is expected to apply data to solve a problem; construct charts, tables, and graphs; and analyze data.**

5. **The student analyzes financial resources to ensure business solvency. The student is expected to:**

Skip to main content

A. describe the nature of budgets; 5.A

B. determine relationships among total revenue, marginal revenue, output, and profit; 5.B

C. calculate financial ratios; 5.C

D. interpret financial statements; 5.D

E. describe types of financial statement analyses such as ratio analysis and trend analysis; and 5.E

F. identify problems and issues with financial statements. 5.F

6. **The student calculates business ratios to evaluate company performance. The student is expected to:**

A. discuss the use of financial ratios in business finance; 6.A

B. use multiple ratios to evaluate company performance, including income, profitability, operating performance, liquidity, working capital, bankruptcy prediction, long-term analysis, coverage, debt, cash flow indicator, and investment valuation; and 6.B

C. discuss the use of benchmarks in analyzing ratios. 6.C

7. **The student analyzes a financial statement. The student is expected to:**

A. discuss the analysis of a company's financial situation using its financial statements; 7.A

B. describe external forces affecting a company's value; 7.B

C. explain how value is created for a company; 7.C

D. understand and interpret financial statement notes; and 7.D

E. evaluate results from the aspect of management, creditors, and investors. 7.E

8. **The student examines the nature and scope of risk management in finance. The student is expected to:**

A. discuss the nature of risk control such as internal and external controls; 8.A

B. explain ways to assess risk; 8.B

C. describe the importance of auditing risk control; 8.C

D. discuss risk-control systems; 8.D

E. describe the use of technology in risk management; 8.E

F. discuss legal considerations affecting risk management; 8.F

G. discuss the relationship between risk and business objectives; and 8.G

H. evaluate a risk-management program. 8.H

9. **The student develops an understanding and working knowledge of annual reports. The student is expected to:**

A. discuss the objective of an annual report; 9.A

B. identify the components of an annual report; 9.B

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C. identify laws and regulations that are applied to annual reports; and 9.C

D. create an annual report. 9.D

10. The student explores the role of ethics in finance. The student is expected to:

A. explain the nature of business ethics; 10.A

B. discuss the role of ethics in finance; and 10.B

C. analyze the activities of Enron Corporation that led to the company's downfall. 10.C

11. The student employs critical-thinking skills independently and in teams to solve problems and make decisions. The student is expected to:

A. identify common tasks that require employees to use problem-solving skills; 11.A

B. analyze elements of a financial problem to develop creative solutions; 11.B

C. create and evaluate ideas, proposals, and solutions to financial problems; 11.C

D. analyze financial information to determine its value to the problem-solving task; and 11.D

E. identify and evaluate alternative financial solutions using a variety of problem-solving and critical-thinking skills. 11.E

12. The student performs a case study analysis of a specific company to apply the concepts learned in the course and present the findings. The student is expected to:

A. summarize the company's background; 12.A

B. analyze the company's history, development, and growth; 12.B

C. identify the company's strengths and weaknesses, internally; 12.C

D. describe the external environment; 12.D

E. evaluate the strengths, weaknesses, opportunities, and threats (SWOT) analysis; 12.E

F. examine the corporate and business level strategy; 12.F

G. investigate the structure and control systems; and 12.G

H. formulate recommendations. 12.H

Statistics and Business Decision Making

1. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

A. demonstrate an understanding of appropriate communication with customers, employers, and coworkers through verbal, nonverbal, or digital means; 1.A

B. demonstrate an understanding of the use of business etiquette; 1.B

C. demonstrate an understanding of appropriate customer service such as building customer relationships and resolving customer complaints; and 1.C

D. demonstrate an understanding of ethical and legal issues in business. 1.D

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2. **The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:**

   A. apply mathematics to problems arising in everyday life, society, and the workplace; 2.A

   B. use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 2.B

   C. select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 2.C

   D. communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 2.D

   E. create and use representations to organize, record, and communicate mathematical ideas; 2.E

   F. analyze mathematical relationships to connect and communicate mathematical ideas; and 2.F

   G. display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. 2.G

3. **The student uses career planning concepts, tools, and strategies to explore a career in the area of risk management. The student is expected to:**

   A. compare and contrast the fundamentals of risk management, including the reasons for and benefits of risk management; 3.A

   B. discuss the role of ethics and responsibility in risk management; and 3.B

   C. compare and contrast roles, responsibilities, licensing, and certification programs of careers related to managing and analyzing personal and corporate financial portfolios such as financial planners, financial managers, financial analysts, controllers, risk managers, cash managers, treasurers, and chief financial officers. 3.C

4. **The student understands and demonstrates the use of statistics in business areas, including accounting, economics, finance, management, and marketing. The student is expected to:**

   A. evaluate the use of statistics in accounting such as forecasting consumption, earnings, cash flows, book value, and allowance for doubtful accounts; 4.A

   B. evaluate how statistics are used in economics such as reports for labor market, trade balance, Gross Domestic Product, unemployment, and consumer spending; 4.B

   C. evaluate how statistics are used in finance such as the use by financial intermediaries or in the evaluation of investments, securities, derivatives, futures, or options; 4.C

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D. evaluate how statistics are used in management such as in the evaluation of production efficiency, production quantity, quality control, workforce trends, staffing issues, and employee satisfaction; and 4.D

E. evaluate how statistics are used in marketing such as reports for projected market share, advertising effectiveness, sales effectiveness, brand loyalty, spending habits, and customer satisfaction. 4.E

5. **The student understands and demonstrates the ethical and responsible use of statistics in business. The student is expected to evaluate how statistics are used in accounting, economics, finance, management, and marketing.**

6. **The student evaluates risk-management strategies and techniques in corporate finance to maximize profit and minimize loss. The student is expected to:**

   A. manage risk to protect business stability; 6.A

   B. analyze the relationship between risk management and operations; and 6.B

   C. evaluate various risk-management strategies and techniques, including the use of insurance, stock, derivatives, and options. 6.C

7. **The student evaluates financial information using statistical analysis to assist business decision making using appropriate software. The student is expected to:**

   A. communicate the value of statistical information in a variety of business disciplines and environments; 7.A

   B. assess statistical information portrayed in areas such as advertising, investments and securities, human resource management, and economics; 7.B

   C. generate a spreadsheet to collect, collate, organize, and analyze quantitative data; and 7.C

   D. use spreadsheets and graphical techniques to present data in a manner that is understood by and meaningful to colleagues and clients. 7.D

8. **The student understands and demonstrates the defining and collecting of data. The student is expected to:**

   A. define the types of variables and the measurement scales of variables; 8.A

   B. understand the collecting of data and its source; 8.B

   C. understand populations and samples; 8.C

   D. understand sampling methods; and 8.D

   E. understand and define survey error types. 8.E

9. **The student will understand and demonstrate the organization and visualization of data. The student is expected to organize and visualize categorical data and numerical data.**

10. **The student understands and demonstrates the use of descriptive measures. The student is expected to:**

Skip to main content

A. understand and calculate the central tendency of the data set using mean, median, and mode; 10.A

B. understand and determine the variation of the data set using range, sample variance, sample standard deviation, population variance, population standard deviation, coefficient of the variation, and Z score; and 10.B

C. understand and demonstrate the measure of shape of the data set using skewness, symmetry, and kurtosis. 10.C

11. **The student understands and demonstrates the use of probability. The student is expected to:**

A. define event, compound event, complement of an event, sample space, marginal probability, conditional probability, independence, multiplication rule, multiplication rule for independent events, probability of an event, impendence, and Bayes' Theorem; and 11.A

B. define and calculate simple probability, compound probability, marginal probability, general addition rule, marginal probability using the multiplication rule, and probability with Bayes' Theorem. 11.B

12. **The student understands and demonstrates the use of probability distribution for discrete variables. The student is expected to understand and demonstrate the use of the uniform distribution, the binomial distribution, and the Poisson distribution.**

13. **The student understands and demonstrates the use of probability distribution for continuous variables. The student is expected to understand and demonstrate the use of the normal distribution, uniform distribution, and exponential distribution.**

14. **The student understands and demonstrates the use of sampling distribution, sampling distribution of the mean, and the central limit theorem. The student is expected to:**

A. calculate the population mean and population standard deviation; 14.A

B. calculate standard error of the mean; and 14.B

C. calculate the Z- and X-bar for the sampling distribution of the mean. 14.C

15. **The student understands and demonstrates the use and construction of confidence intervals. The student is expected to:**

A. construct a confidence interval for the mean for a known and unknown population standard deviation; and 15.A

B. evaluate ethical issues associated with confidence intervals. 15.B

16. **The student understands and demonstrates hypothesis testing for one sample tests and two sample tests. The student is expected to:**

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A. understand and demonstrate the use of hypothesis testing, null hypothesis, and alternative hypothesis; 16.A

B. create a null hypothesis and alternative hypothesis; 16.B

C. understand and demonstrate the use of Type I error and Type II error; 16.C

D. calculate the level of significance and calculate beta risk; 16.D

E. understand and demonstrate the use of the complements of Type I error and Type II error by calculating the confidence coefficient and the power of a statistical test; 16.E

F. understand and calculate Z test for the mean; 16.F

G. understand and demonstrate a one-tail test hypothesis and its associated critical values and p-value; and 16.G

H. understand and demonstrate a two-tail test hypothesis and its associated critical values and p-value. 16.H

17. The student understands analysis of variance. The student is expected to understand and demonstrate the analysis of more than two populations.

18. The student understands and demonstrates the use of chi-square test. The student is expected to use a chi-square test.

19. The student understands and demonstrates the use of nonparametric test. The student is expected to use nonparametric tests such as the Wilcoxon Sum test.

20. The student understands simple linear regression. The student is expected to:

A. understand and demonstrate the use of various types of regression models; 20.A

B. create the regression equation; and 20.B

C. make predictions based on regression models. 20.C

21. The student understands an introduction to multivariable regression: The student is expected to use a multivariable regression model.

22. The student understands time series analysis and forecasting. The student is expected to:

A. understand times series models; 22.A

B. understand trend component; 22.B

C. understand seasonal component; and 22.C

D. understand cyclical component. 22.D

23. The student demonstrates an understanding of a post-secondary plan. The student is expected to:

A. understand educational, military, and current job opportunities; and 23.A

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B. create a post-secondary plan that includes topics such as application requirements; testing requirements; certification requirements; associated deadlines; associated costs, including living expenses; job prospects and opportunities; beginning earnings; expected future earnings; and resumes and cover letters. 23.B