Assessments: All Assessments
Standard Sets: Academic, Employability
Filters:
- All Standards
- Accumulating results

Number tested: 32431

Academic

1) AA SPEAKING AND LISTENING	83.55%
1) AA 1 Utilize effective verbal and non-verbal communication skills	88.2%
2) AA 2 Participate in conversation, discussion, and group presentations	66.78%
3) AA 3 Communicate and follow directions/procedures	89.62%
2) AB READING AND WRITING	72.77%
2) AB 2 Read and interpret workplace documents	83.35%
4) AB 4 Record information accurately and completely	71.95%
6) AB 6 Demonstrate the ability to write clearly and concisely using industry specific terminology	63%
3) AC CRITICAL THINKING AND PROBLEM SOLVING	51.59%
1) AC 1 Utilize critical-thinking skills to determine best options/outcomes (e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning)	60.66%
2) AC 2 Utilize innovation and problem-solving skills to arrive at the best solution for current situation	42.51%
4) AD MATHEMATICS	76.05%
1) AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)	72.22%
2) AD 2 Solve problems using measurement skills (e.g., distance, weight, area, volume)	73.71%
4) AD 4 Use tables, graphs, diagrams, and charts to obtain or convey information	76.9%
5) AD 5 Use deductive reasoning and problem-solving in mathematics	83.3%
5) AE FINANCIAL LITERACY	71.73%
1) AE 1 Locate, evaluate, and apply personal financial information	70.66%
4) AE 4 Use financial services effectively	72.79%
6) AF INTERNET USE AND SECURITY	88.87%
3) AF 3 Practice safe, legal, and responsible use of technology in the workplace	88.87%

7) AG INFORMATION TECHNOLOGY — 92.67%

2) AG 2 Demonstrate effective and appropriate use of social media — 92.67%

8) AH TELECOMMUNICATIONS — 65.11%

1) AH 1 Select and use appropriate devices, services, and applications to complete workplace tasks — 73.52%

2) AH 2 Demonstrate appropriate etiquette when using e-communications (e.g., cell phone, e-mail, personal digital assistants, online meetings, conference calls) — 56.71%

Employability

1) EA POSITIVE WORK ETHIC	77.04%
1) EA 1 Demonstrate enthusiasm and confidence about work and learning new tasks	78.57%
2) EA 2 Demonstrate consistent and punctual attendance	82.17%
3) EA 3 Demonstrate initiative in assuming tasks	69.16%
4) EA 4 Exhibit dependability in the workplace	78.26%
2) EB INTEGRITY	83.57%
2) EB 2 Demonstrate honesty and reliability	93.01%
4) EB 4 Maintain confidentiality and integrity of sensitive company information	74.13%
3) EC SELF-REPRESENTATION	95.01%
5) EC 5 Demonstrate pride in work	95.01%
4) ED TIME, TASK, AND RESOURCE MANAGEMENT	64.02%
1) ED 1 Plan and follow a work schedule	76.34%
2) ED 2 Work with minimal supervision	57.77%
4) ED 4 Demonstrate ability to stay on task to produce high quality deliverables on time	57.95%
5) EE DIVERSITY AWARENESS	86.37%
1) EE 1 Recognize diversity, discrimination, harassment, and equity	80.31%
2) EE 2 Work well with all customers and co-workers	92.42%
6) EF TEAMWORK	84.01%
2) EF 2 Contribute to the success of the team	84.01%
7) EG CREATIVITY AND RESOURCEFULNESS	61.86%
1) EG 1 Contribute new ideas	73.76%
4) EG 4 Locate and verify information	49.95%
8) EH CONFLICT RESOLUTION	55.96%
2) EH 2 Implement conflict resolution strategies and problem-solving skills	55.96%
9) EI CUSTOMER/CLIENT SERVICE	62.27%
1) EI 1 Recognize the importance of and demonstrate how to properly acknowledge customers/clients	62.27%
10) EJ ORGANIZATIONS, SYSTEMS, AND CLIMATES	79.56%
1) EJ 1 Define profit and evaluate the cost of conducting business	79.56%
11) EK JOB ACQUISITION AND ADVANCEMENT	62.13%

4) EK 4 Prepare a resume, letter of application, and job application	42.46%
6) EK 6 Participate in a job interview	71.96%
12) EL LIFELONG LEARNING	66.74%
6) EL 6 Recognize the importance of job performance evaluation and coaching as it relates to career advancement	66.74%
13) EM JOB SPECIFIC TECHNOLOGIES	45.94%
2) EM 2 Research and identify emerging technologies for specific careers	45.94%
14) EN HEALTH AND SAFETY	79.09%
1) EN 1 Assume responsibility for safety of self and others	83.7%
2) EN 2 Follow safety guidelines in the workplace	74.48%

Assessment: Accounting
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Accounting
- Accumulating results

Number tested: 852

KOSSA Program Areas

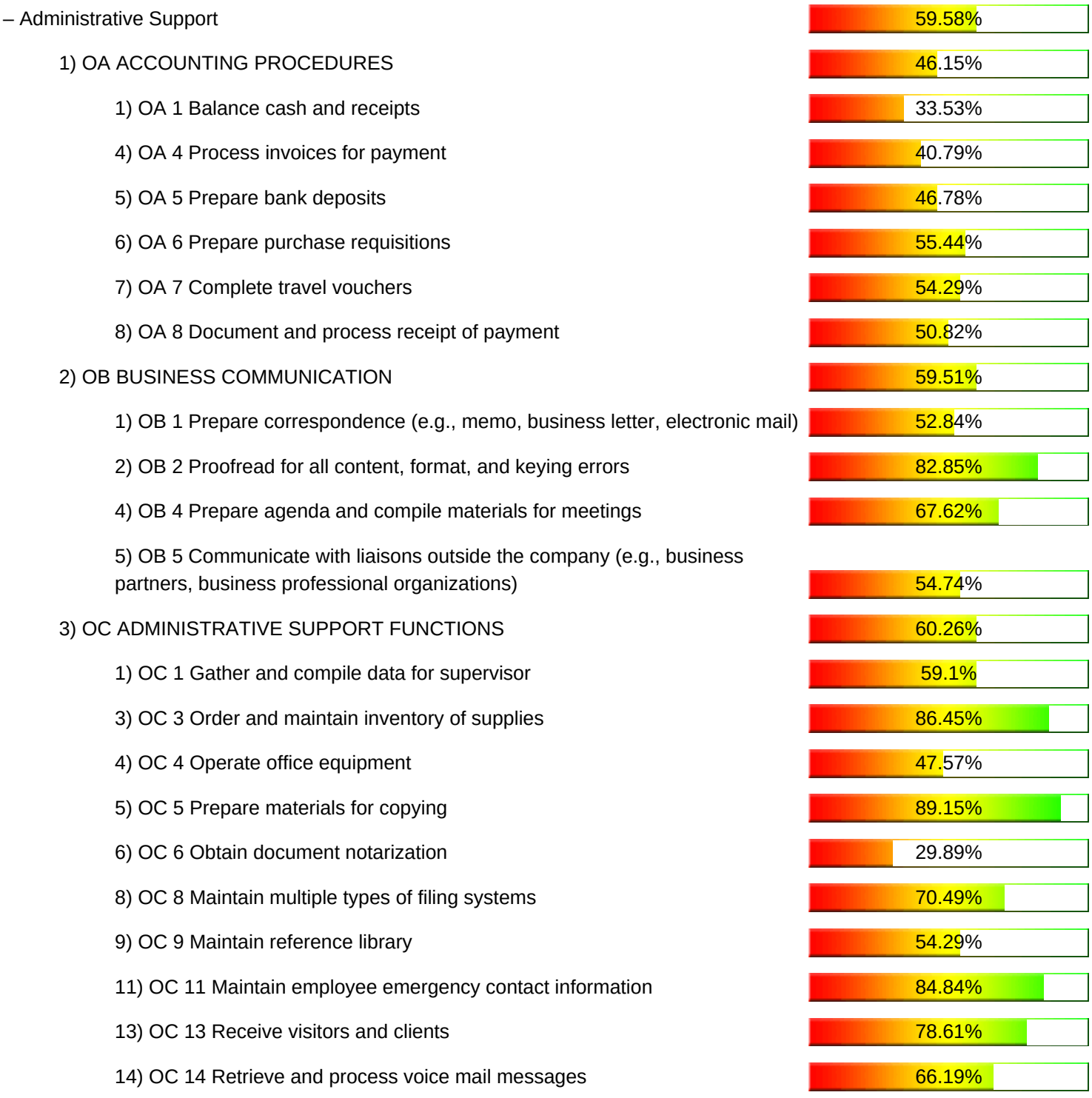
– Accounting	52.71%
1) OA FINANCIAL DECISION MAKING	42.53%
3) OA 3 Calculate net sales, cost of goods sold, gross profit, operating expenses, and net profit before taxes for the income statement	34.27%
4) OA 4 Calculate the gross, operating, and net profit or loss	22.89%
5) OA 5 Calculate the break-even point	38.62%
6) OA 6 Explain the governments role in the economy	61.62%
8) OA 8 Analyze credit transactions and laws governing these functions	57.75%
9) OA 9 Calculate the time value of money (i.e., present and future)	35.21%
12) OA 12 Reconcile the bank statement with the check register	55.63%
2) OB ACCOUNTING PRINCIPLES	53.03%
1) OB 1 Identify and describe the purpose of generally accepted accounting principles (GAAP)	40.26%
2) OB 2 Describe and explain accounting concepts/models (e.g., debit, credit, double-entry accounting)	57.69%
3) OB 3 Utilize the accounting equation in several mathematical forms	41.55%
4) OB 4 Distinguish between and explain the different accounting methods (e.g., inventory methods, depreciation, cash or accrual)	56.26%
6) OB 6 Explain and apply the accounting process including the accounting cycle, journalizing, accounting records, posting, and adjustments	58.61%
3) OC ACCOUNTING PROFESSION	55.56%
1) OC 1 Describe how current events impact the accounting profession	72.18%
2) OC 2 Identify the major policy setting bodies in the accounting profession and explain their role	55.52%
3) OC 3 Explain the need for the code of ethics in accounting and the ethical responsibilities required of accountants	41.31%
5) OC 5 Identify and describe the educational requirements for various careers, professional designations, and certifications in the accounting profession	67.49%

4) OD BUSINESS KNOWLEDGE	60.89%
1) OD 1 Identify student and professional business organizations	71.36%
3) OD 3 Describe how business relates to accounting	85.92%
4) OD 4 Compare and contrast the different types of ownership and business structures	37.91%
5) OE FINANCIAL AND MANAGERIAL REPORTING	48.12%
2) OE 2 Identify sources for obtaining financial reports	23.12%
5) OE 5 Identify the sections of an annual report and their purposes	59.62%
6) OE 6 Describe the relationship among assets, liabilities, and owners equity	51.41%
7) OE 7 Explain the classifications within assets, liabilities, and owners equity (e.g., current versus long term, fixed assets, tangible/ intangibles)	74.71%
8) OE 8 Identify the sections (e.g., revenue, cost of goods sold, expense) in an income statement and explain their relationships	36.5%
9) OE 9 Discuss information that can be obtained from analyzing financial statements	52.46%
10) OE 10 Understand the correlation among financial statements including balance sheet, profit/loss, net worth, statement of cash flow	38.85%
12) OE 12 Calculate the cost per unit	28.87%
13) OE 13 Use financial statements to analyze business financial conditions	24.3%
14) OE 14 Calculate break-even analysis and ratios and calculate measures of productivity; cost benefit	72.07%
15) OE 15 Recognize the primary areas of analysis (e.g., trend analysis, profitability, liquidity) and explain the information obtained from each analysis	63.62%
16) OE 16 Perform a horizontal and vertical analysis of the income statement and balance sheet	36.97%
6) OF PAYROLL AND TAXES	64.32%
1) OF 1 Explain and analyze local, state, and federal tax structures	81.92%
2) OF 2 Calculate gross and net pay	69.09%
3) OF 3 Explain the steps to journalize and calculate payroll	39.79%
5) OF 5 Complete federal tax forms (e.g., W2, W4, 1040EZ)	56.92%
7) OG TECHNOLOGY AND INFORMATION MANAGEMENT	69.84%
4) OG 4 Apply information technology to conduct financial analysis	69.84%

Assessment: Administrative Support
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Administrative Support
- Accumulating results

Number tested: 2858

KOSSA Program Areas



15) OC 15 Process fax documents	27.16%
17) OC 17 Create and maintain electronic distribution lists	24.64%
4) OD MAIL PROCEDURES	53.25%
1) OD 1 Process mail and packages	63.34%
2) OD 2 Utilize mail services (e.g., courier, standard, express mail)	33.08%
5) OE OFFICE SYSTEMS TECHNOLOGY AND EQUIPMENT	66.09%
1) OE 1 Photocopy a document using multiple features (e.g., collating, stapling, simplexing, duplexing) of a copier	58.17%
2) OE 2 Decide on the best process for reproducing printed materials	53.1%
3) OE 3 Prepare and print documents in appropriate software	56.35%
4) OE 4 Insert a graphic	59.12%
5) OE 5 Design a table	40.53%
6) OE 6 Complete preprinted and electronic forms	79.59%
7) OE 7 Scan data or graphics for document use	62.23%
8) OE 8 Revise existing documents	92.96%
9) OE 9 Access the Help function	64.75%
11) OE 11 Develop, revise, and create queries and reports using database software	74.73%
13) OE 13 Create and organize electronic files using folders and subfolders	87.68%
14) OE 14 Create high-quality visual aids	81.45%
17) OE 17 Design and create desktop-publishing documents	87.68%
18) OE 18 Create charts and graphs	86.1%
19) OE 19 Maintain operating system integrity (e.g., virus scan, defragmentation, updates)	58.07%
20) OE 20 Print spreadsheets and/or formulas using appropriate page setup (e.g., orientation, scaling, margins, headers/footers, print area, gridlines)	45.38%

Assessment: Ag Power Structured Tech Systems
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Ag Power, Sturctural, and Tech Systems
- Accumulating results

Number tested: 1505

KOSSA Program Areas

– Ag Power, Sturctural, and Tech Systems	60%
1) OA APPLY PHYSICAL SCIENCE PRINCIPLES AND ENGINEERING APPLICATIONS TO SOLVE PROBLEMS AND IMPROVE PERFORMANCE IN AFNR POWER, STRUCTURAL, AND TECHNICAL SYSTEMS	63.73%
1) OA1 Discuss types of renewable and non-renewable energy (e.g., solar, wind, hydro, fossil fuels)	35.57%
3) OA3 Compare the energy efficiency of various fuel sources (e.g., gas, diesel, natural gas, biofuels)	73.01%
4) OA4 Differentiate between the operation of gasoline and diesel engines	60.77%
5) OA5 Identify principles of hydraulic and pneumatic system operation	71.14%
6) OA6 Apply the meaning of electrical measurements (e.g., amperage, voltage, wattage, resistance)	45.48%
7) OA7 Differentiate between alternating and direct current	80.98%
8) OA8 Calculate measurements of electricity (e.g., watts, amps, volts, Ohms Law)	71.44%
2) OB OPERATE AND MAINTAIN AFNR MECHANICAL EQUIPMENT AND TECHNICAL SYSTEMS	62.09%
2) OB2 Demonstrate safe practices in the operation of power units and equipment	89.3%
4) OB4 Outline power unit and equipment controls, startup and shut down procedures, and pre operation inspections using owners/service manuals	61.6%
5) OB5 Identify components and systems of internal combustion engines	69.85%
6) OB6 Select lubricants based on viscosity, source, and equipment compatibility	52.53%
8) OB8 Establish a preventative maintenance schedule for power units and equipment (e.g., lubricants, fluids, filters)	29.92%
3) OC SERVICE AND REPAIR AFNR MECHANICAL EQUIPMENT AND POWER SYSTEMS	61.24%
3) OC3 Interpret basic electrical components, symbols, and diagrams (e.g., wiring, switches, receptacles, duplexes)	56.76%

5) OC5 Evaluate the importance of adjusting equipment including belts, drives, chains, and sprockets and maintenance of fluid conveyance components (e.g., hoses, lines, nozzles)	59.97%
6) OC6 Identify hydraulic and pneumatic system fittings and ports	59.64%
8) OC8 Assess an internal combustion engines to determine service and repair of basic ignition, fuel, and compression	52.66%
9) OC9 Assess malfunctioning electrical system components such as battery and lighting	87.37%
4) OD PLAN, BUILD, AND MAINTAIN AFNR STRUCTURE	57.84%
1) OD1 Demonstrate proper use of measurement and layout tools	77.73%
3) OD3 Develop plans using scale and legends	77.59%
5) OD5 Create sketches and plans of agricultural structures	61.57%
6) OD6 Develop criteria for selecting materials based on cost, quantities, and characteristics for a specific project plan	46.37%
7) OD7 Prepare bills of materials to accompany plans and sketches	49.4%
8) OD8 Apply basic principles of design, fabrication, and installation of agricultural structures	57.71%
9) OD9 Select, maintain, and use hand/power tools in service, construction, and fabrication	41.89%
10) OD10 Describe the steps in basic repair of a metal object (e.g., welding, brazing, riveting)	40.09%
11) OD11 Identify kinds and characteristics of metal materials	79.06%
12) OD12 Distinguish welding processes, positions, materials preparation, and equipment work piece setup (e.g., beveling/grinding)	58.24%
13) OD13 Construct and/or repair metal structures and equipment using welding procedures, including those associated with SMAW, GMAW, GTAW, fuel-oxygen, and plasma arc torch methods	56.52%
15) OD15 Calculate areas and volumes for coatings (e.g., paints, stains, varnishes)	57.71%
16) OD16 Determine proper paint/coating material and method for various tasks.	60.37%
17) OD17 Determine proper insulation material and use for a given task.	65.23%
18) OD18 Calculate materials for concrete, brick, stone, or masonry units in agricultural construction	32.11%
19) OD19 Calculate fencing materials	51.46%
21) OD21 Identify hazards and safety practices in planning, installing, and using components to complete and electrical circuit	86.04%

22) OD22 Identify materials and tools used in electrical installation (e.g., wiring, fixtures, breakers, fuses, conduit) 65.87%

5) OE USE CONTROL, MONITORING, GEOSPATIAL AND OTHER TECHNOLOGIES IN AFNR POWER, STRUCTURAL AND TECHNICAL SYSTEMS 59.87%

4) OE4 Describe equipment and processes used in geospatial technologies 50.53%

5) OE5 Apply the principles of precision agriculture for map and sensor based systems 69.22%

Assessment: Agribiotechnology
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Agribiotechnology
- Accumulating results

Number tested: 22

KOSSA Program Areas

– Agribiotechnology	49.18%
1) OA DEVELOPMENT OF BIOTECHNOLOGY IN AGRICULTURE	37.88%
1) OA 1 Define biotechnology and explore the historical impact it has had on agriculture	27.27%
4) OA 4 Investigate current applications of biotechnology in agriculture	59.09%
2) OB REGULATION	45.45%
1) OB 1 Describe the role of agencies that regulate biotechnology	45.45%
3) OC ETHICS OF BIOTECHNOLOGY	51.3%
1) OC 1 Explore ethical, legal, and social biotechnology issues	31.82%
2) OC 2 Evaluate the benefits and risks associated with biotechnology.	54.55%
4) OC 4 Explore the emergence, evolution, and implications of bioethics	59.09%
7) OC 7 Explain the meaning of intellectual properties as related to biotechnology	47.73%
10) OC 10 Describe how agribiotechnology impacts the global economy	54.55%
11) OC 11 Compare conventional fossil fuel production to biotechnological alternative fuel production (e.g., ethonol, biodiesel)	63.64%
4) OD LABORATORY RECORDS	47.73%
1) OD 1 Maintain a biotechnology laboratory notebook	59.09%
2) OD 2 Analyze strengths of the research based on data, procedures, and propose future investigation	43.94%
5) OE LABORATORY EQUIPMENT	57.95%
1) OE 1 Operate basic laboratory equipment and measurement devices (e.g., microscope, microipet, autoclave, centrifuge)	56.06%
2) OE 2 Operate advanced laboratory equipment and measurement devices (e.g., thermalcycler, electrophoresis equipment, microarray, spectrometer)	63.64%
6) OF LABORATORY PROCEDURES	48.86%
1) OF 1 Demonstrate basic aseptic techniques in the biotechnology laboratory	54.55%

2) OF 2 Demonstrate advanced aseptic techniques in the biotechnology laboratory — 18.18%

4) OF 4 Perform procedures with biological materials according to directions — 68.18%

7) OG MATERIAL MANAGEMENT — 56.82%

1) OG 1 Prepare simple chemical solutions using standard operating procedures — 45.45%

4) OG 4 Identify and describe hazards associated with biological and chemical materials — 59.09%

7) OG 7 Maintain a safe environment by properly identifying and disposing of laboratory waste — 61.36%

8) OH MICROBIOLOGY/MOLECULAR/ENZYMOLOGY/IMMUNOLOGY — 52.27%

3) OH 3 Characterize the physical, chemical, and biological properties of microbes — 50%

4) OH 4 Explain the structures of DNA and RNA and how genotype influences phenotype — 40.91%

5) OH 5 Explain the molecular basis for heredity and the tools and techniques used in DNA and RNA manipulations — 77.27%

7) OH 7 Extract and purify DNA and RNA — 31.82%

9) OH 9 Perform DNA and RNA recombinations such as basic cloning/subcloning, blotting, sequencing, and amplification — 59.09%

13) OH 13 Describe how antibodies are formed and how they can be used in biotechnology applications — 59.09%

9) OI GENETIC ENGINEERING — 40.91%

2) OI 2 Diagram the processes and describe the techniques used to produce transgenic eukaryote — 54.55%

4) OI 4 Describe enzymes, the changes they cause in foods and the physical/chemical parameters that affect enzymatic reactions — 27.27%

10) OJ BIOTECHNOLOGY PROCESSES IN AGRICULTURE — 43.18%

1) OJ 1 Explain the functions of hormones in animals — 4.55%

4) OJ 4 Identify foods produced through fermentation — 90.91%

7) OJ 7 Explain the process of fermentation — 56.82%

8) OJ 8 Describe the process used in producing alcohol from biomass — 36.36%

10) OJ 10 Explain the process of transesterification — 34.09%

13) OJ 13 Explain the process of methanogenesis — 31.82%

11) OK BIOTECHNOLOGY TO MONITOR PROCEDURES IN AGRICULTURE — 50%

7) OK 7 Give examples of instances in which bioremediation can be applied to clean up environmental contaminant	36.36%
8) OK 8 Describe the use of biotechnology in bioremediation	40.91%
16) OK 16 Explain the global importance of biodiversity	54.55%
22) OK 22 Explain biomass and sources of biomass	63.64%

Assessment: Agribusiness
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard AGRIBUSINESS SYSTEMS
- Accumulating results

Number tested: 483

KOSSA Program Areas

– AGRIBUSINESS SYSTEMS	62.03%
1) OA APPLY MANAGEMENT PLANNING PRINCIPLES IN AFNR BUSINESS ENTERPRISES	68.83%
1) OA 1 Evaluate how mission statements guide business goals, objectives, and resource allocation	59.29%
2) OA 2 Formulate individual/business goals and objectives	70.46%
3) OA 3 Describe how state and federal governments form/implement agriculture/farm policy	66.39%
4) OA 4 Evaluate state/federal governmental and industry regulations (e.g., EPA, OSHA, USDA) in planning/operating an AFNR business	81%
5) OA 5 Analyze state and federal programs that assist agriculturalists in reducing risk	55.22%
6) OA 6 Describe how special interest groups influence U.S. agricultural policy (e.g., animal rights, labor, environment)	54.7%
7) OA 7 Describe how proactive farm groups influence agricultural policy	78.5%
8) OA 8 Analyze how communication technology (e.g., social media, print news, television) impacts public perception of the agriculture industry	84.76%
9) OA 9 Discuss how immigration policy impacts the agriculture industry	67.01%
2) OB USE RECORD KEEPING AND ACCOUNTING PROCESSES TO ACCOMPLISH AFNR BUSINESS OBJECTIVES, MANAGE BUDGETS, AND COMPLY WITH LAWS AND REGULATIONS	56.12%
1) OB 1 Maintain accurate production/agribusiness records	47.7%
2) OB 2 Analyze records to improve efficiency and profitability of an AFNR business	79.54%
3) OB 3 Compare sources and terms of credit	46.56%
4) OB 4 Evaluate financing options for an agribusiness	55.64%
5) OB 5 Budget resources, as applied to the AFNR business, including capital, human, financial and time	56.16%
6) OB 6 Analyze tax reporting requirements for income, property, and	

employment associated with small AFNR businesses — 71.82%

3) OC DEVELOP A BUSINESS PLAN FOR AN AFNR ENTERPRISE OR BUSINESS UNIT — 61.94%

1) OC 1 Differentiate types of ownership/business structures in a capitalistic economic system (e.g., corporations, cooperatives, partnerships, sole proprietorships) — 67.71%

2) OC 2 Analyze businesses to determine strengths, weaknesses, opportunities, and threats (i.e., SWOT Analysis) — 82.15%

3) OC 3 Determine how personal strengths in marketing can alleviate some risk — 57.2%

5) OC 5 Describe how enterprise diversification can address production risks — 51.88%

6) OC 6 Analyze marketing techniques (i.e., contracts, futures, options) that reduce risk — 20.88%

7) OC 7 Explain how insurance strategies minimize risk (e.g., property liability, production/income loss, personnel life and health) — 79.96%

9) OC 9 Analyze the effect of foreign policy on agricultural economics — 48.02%

4) OD UTILIZE SALES AND MARKETING PRINCIPLES COMMON TO AGRIBUSINESS SYSTEMS TO ACCOMPLISH AFNR BUSINESS OBJECTIVES — 62.17%

1) OD 1 Interpret the laws of supply and demand — 74.74%

2) OD 2 Compare and contrast macroeconomic and microeconomic concepts — 45.09%

3) OD 3 Discuss factors that influence buyer motivation — 74.43%

4) OD 4 Explain effective techniques that develop effective customer relationships — 64.93%

6) OD 6 Describe the meaning and use of the four Ps (i.e., product, place, price, and promotion) in marketing — 79.54%

8) OD 8 Compare the effectiveness of various marketing strategies for an AFNR business — 26.72%

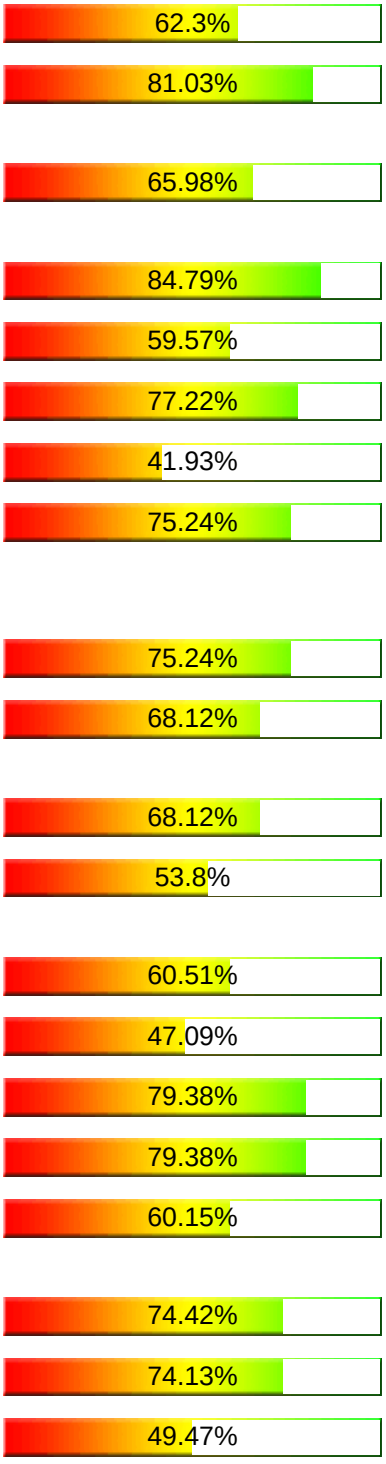
9) OD 9 Develop a marketing plan for an agricultural product, service, or agribusiness — 46.56%

12) OD 12 Assess the presence of marketing infrastructure for agricultural commodities — 73.07%

Assessment: Allied Health
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Allied Health
- Accumulating results

Number tested: 4209

KOSSA Program Areas



wellness, disease, disorders, therapies and care/rehabilitation	43.6%
17) OQ DISEASES AND DISORDERS	56.14%
1) OQ 1 Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies, and care/rehabilitation to include biotechnological applications	51.79%
2) OQ 2 Analyze methods to control the spread of pathogenic microorganisms	65.92%
3) OQ 3 Contrast various types of immunities	51.81%
4) OQ 4 Analyze body system changes in light of diseases, disorders, and wellness	73.92%
5) OQ 5 Compare the aging process among the body systems	35.73%
18) OR SYSTEMS THEORY	47.74%
1) OR 1 Describe systems theory and its components	47.74%
19) OS HEALTH CARE DELIVERY SYSTEMS	68.96%
2) OS 2 Predict where and how factors such as: cost, managed care, technology, an aging population, access to care, alternative therapies, and lifestyle/behavior changes may affect various health care delivery system models	75.49%
4) OS 4 Calculate the cost effectiveness of two separate health care delivery systems	65.69%
20) OT HEALTH CARE DELIVERY SYSTEM RESULTS	77.49%
1) OT 1 Diagram the interdependence of health care professions within a given health care delivery system, pertaining to the delivery of quality health care	69.99%
3) OT 3 Evaluate the impact of enhanced technology on the health care delivery system	84.98%
22) OV HEALTH MAINTENANCE PRACTICES	44.86%
2) OV 2 Use practices that promote the prevention of disease and injury	63.55%
4) OV 4 Evaluate the validity of alternative health practices	35.52%
23) OW TECHNICAL SKILLS	62.18%
2) OW 2 Apply safety procedures to protect clients, co-workers and self	62.18%

Assessment: Animal Science
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Animal Science
- Accumulating results

Number tested: 2608

KOSSA Program Areas

– Animal Science 63.5%

1) OA ANALYZE HISTORIC AND CURRENT TRENDS IMPACTING THE ANIMAL SYSTEMS INDUSTRY 66.86%

1) OA1 Discuss the interrelationships between agriculture commodities based on economic, geographic, and production factors 58.32%

2) OA2 Analyze changes in food consumption throughout history 86.16%

3) OA3 Describe the relationship between consumer demands and animal production 75.04%

4) OA4 Evaluate current trends in animal science through industry associations, trade journals, and reliable electronic resources 38.8%

5) OA5 Describe agricultural practices that ensure a safe and reliable food supply 77.76%

6) OA6 Discuss the benefits of utilizing best practice production systems in animal science 76.84%

7) OA7 Evaluate the impact of world trade issues (e.g., diseases, imports/exports, drought, trade agreements) on animal science 60.51%

8) OA8 Summarize agricultural laws impacting animal science (e.g., property, incorporation, liability issues, animal husbandry, labor, farming in populated areas) 68.48%

9) OA9 Identify related government agencies, their functions and programs, as they relate to animal science 65.76%

11) OA11 Compare and contrast marketing opportunities for animal commodities (e.g., terminal, direct, niche, local) 67.35%

2) OB UTILIZE BEST-PRACTICE PROTOCOLS BASED ON ANIMAL BEHAVIORS FOR ANIMAL HUSBANDRY AND WELFARE 55.93%

1) OB1 Describe characteristics of effective animal care facilities 64.07%

2) OB2 Recommend safe handling techniques and equipment when working with animals 46.32%

3) OB3 Differentiate between animal welfare and animal rights 57.4%

3) OC DESIGN AND PROVIDE PROPER ANIMAL NUTRITION TO ACHIEVE

DESIRED OUTCOMES FOR PERFORMANCE DEVELOPMENT, REPRODUCTION, AND/OR ECONOMIC PRODUCTION

1) OC1 Describe the anatomy and physiology of digestive systems (monogastric, ruminant, hind gut fermenters, avian)

2) OC2 Discuss the function of the six classes of nutrients in regards to animal nutrition

3) OC3 Compare common types of feedstuffs and the role they play in the diets of animals

4) OC4 Explain the purpose of feed additives and growth promotants in animal production

5) OC5 Formulate animal feeds based on nutritional requirements using feed ingredients for maximum nutrition and optimal economic production

4) OD APPLY PRINCIPLES OF ANIMAL REPRODUCTION TO ACHIEVE DESIRED OUTCOMES FOR PERFORMANCE, DEVELOPMENT, AND ECONOMIC PRODUCTION

1) OD1 Describe the functions of major reproductive organs and hormones in the male and female reproductive systems

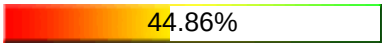
2) OD2 Contrast the processes of natural and artificial breeding methods

3) OD3 Infer how age, size, life cycle, maturity level, gestation, and health status affect the reproductive efficiency of male and female animals

4) OD4 Evaluate the use of quantitative breeding values in the selection of genetically superior breeding stock (e.g., EPD's)

5) OD5 Discuss the importance of efficient and economic reproduction in animals

6) OD6 Differentiate principles of animal genetics and heredity (e.g., homozygous, heterozygous, phenotype, genotype, dominance, recessive)



5) OE EVALUATE ENVIRONMENTAL FACTORS AFFECTING ANIMAL PERFORMANCE AND IMPLEMENT PROCEDURES FOR ENHANCING PERFORMANCE AND ANIMAL HEALTH

1) OE1 Select best practices to enhance soil and water quality

2) OE2 Describe the impact of water quality on animal health

4) OE4 Evaluate measures to maintain the quality of the environment in areas used to raise and house animals

6) OF CLASSIFY, EVALUATE AND SELECT ANIMALS BASED ON ANATOMICAL AND PHYSIOLOGICAL CHARACTERISTICS

1) OF1 Classify animals according to the taxonomical classification system and species-specific terminology related to age and gender

2) OF2 Differentiate major animal breeds within the industry and their

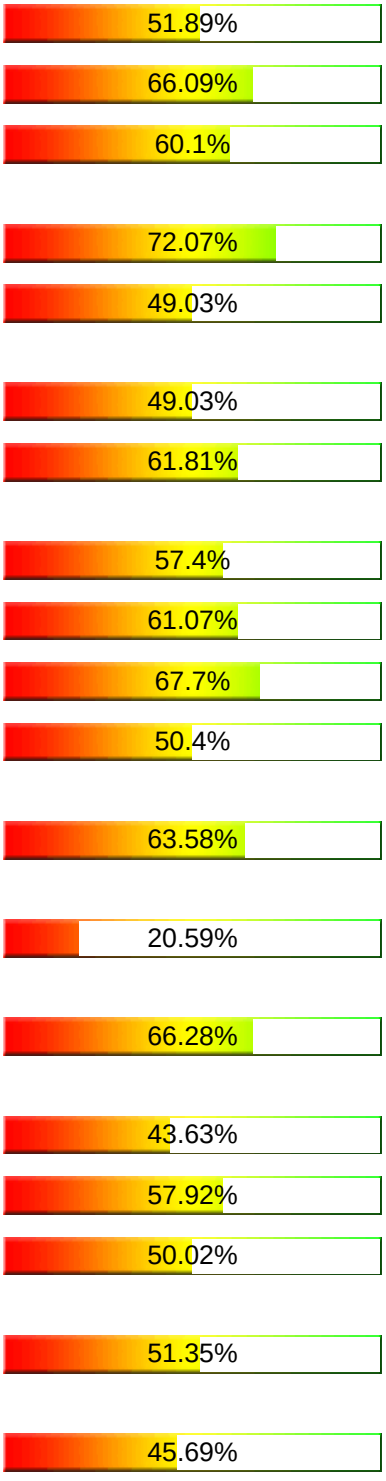
production strengths	64.42%
3) OF3 Identify the major skeletal and external parts of production and companion species	54.26%
4) OF4 Identify wholesale and retail cuts of production species	64.57%
7) OG APPLY PRINCIPLES OF EFFECTIVE ANIMAL HEALTH CARE	57.75%
1) OG1 Characterize common disorders, parasites, and vaccinated diseases of both production and companion animal species	58.53%
2) OG2 Discuss the health risks of zoonotic diseases to humans and their historical significance	60.62%
3) OG3 Select proper medical dosages and delivery methods	57.32%
4) OG4 Evaluate preventative measures for controlling and limiting the spread of diseases, parasites, and disorders among animals	54.56%
8) OH PRACTICE SOUND AGRICULTURAL FINANCE IN ANIMAL SCIENCE	70.3%
1) OH1 Identify requirements for and sources of credit	90.38%
2) OH2 Compare the benefits related to buying, leasing, renting land and/or equipment	56.94%
4) OH4 Calculate break-even prices in an animal science business to maximize profit	63.57%

Assessment: Automotive Technology
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Automotive Technician
- Accumulating results

Number tested: 778

KOSSA Program Areas



13) OE13 Install wheel and torque lug nuts. 62.55%

15) OE15 Clean and inspect caliper mounting and slides/pins for proper operation, wear, and damage; determine necessary action. 42.34%

18) OE18 Clean and inspect rotor, measure rotor thickness, thickness variation, and lateral runout; determine necessary action. 41.31%

19) OE19 Remove and reinstall rotor. 50.32%

22) OE22 Describe importance of operating vehicle to burnish/break-in replacement brake pads according to manufacturers recommendations. 29.6%

23) OE23 Check vacuum supply (manifold or auxiliary pump) to vacuum-type power booster. 45.43%

24) OE24 Remove, clean, inspect, repack, and install wheel bearings; replace seals; install hub and adjust bearings. 61.9%

25) OE25 Check parking brake operation and parking brake indicator light system operation; determine necessary action. 59.85%

6) OF ELECTRICAL/ELECTRONIC SYSTEMS 49.59%

1) OF1 Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins. 37.58%

2) OF2 Demonstrate knowledge of electrical/electronic series, parallel, and series-parallel circuits using principles of electricity (Ohms Law). 53.28%

4) OF4 Demonstrate proper use of a digital multimeter (DMM) when measuring source voltage, voltage drop (including grounds), current flow, and resistance. 32.82%

5) OF5 Measure key-off battery drain (parasitic draw). 45.95%

7) OF7 Perform solder repair of electrical wiring. 50.06%

9) OF9 Perform battery state-of-charge test; determine necessary action. 36.04%

14) OF14 Jump-start vehicle using jumper cables and a booster battery or an auxiliary power supply. 20.46%

16) OF16 Perform starter current draw test; determine necessary action. 47.49%

20) OF20 Inspect, adjust, or replace generator (alternator) drive belts; check pulleys and tensioners for wear; check pulley and belt alignment. 81.47%

22) OF22 Inspect interior and exterior lamps and sockets including headlights and auxiliary lights (fog lights/driving lights); replace as needed. 57.14%

23) OF23 Disable and enable airbag system for vehicle service; verify indicator lamp operation. 69.76%

24) OF24 Remove and reinstall door panel. 63.06%

7) OG HEATING AND AIR CONDITIONING 53.99%

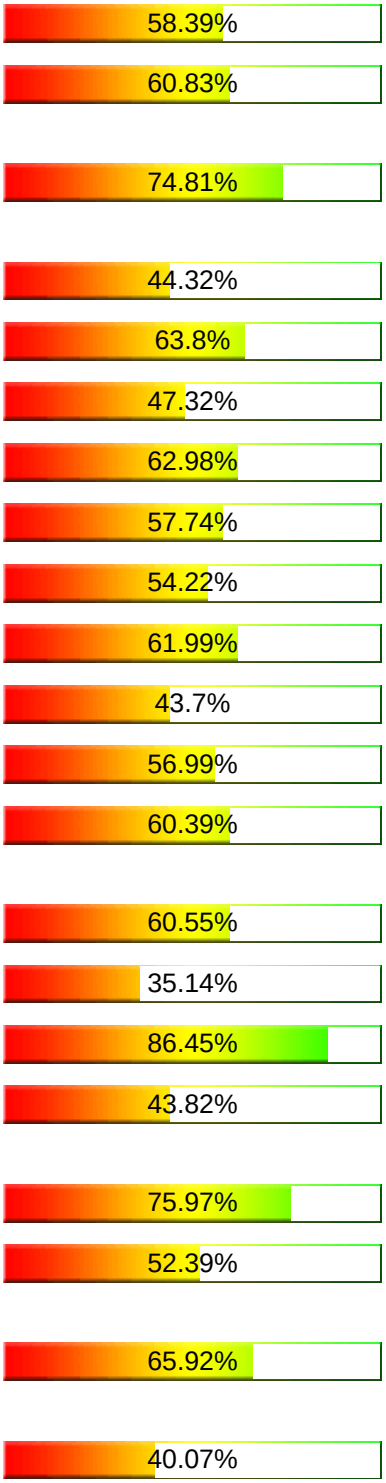
4) OG4 Inspect engine cooling and heater systems hoses; perform necessary

action.	49.81%
5) OG5 Inspect A/C-heater ducts, doors, hoses, cabin filters, and outlets; perform necessary action.	58.17%
8) OH ENGINE PERFORMANCE	50.85%
1) OH1 Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.	38.4%
2) OH2 Perform engine absolute (vacuum/boost) manifold pressure tests; determine necessary action	51.87%
4) OH4 Perform cylinder leakage test; determine necessary action.	54.05%
5) OH5 Verify engine operating temperature.	51.87%
6) OH6 Remove and replace spark plugs; inspect secondary ignition components for wear and damage.	54.31%
7) OH7 Retrieve and record diagnostic trouble codes, OBD monitor status, and freeze frame data; clear codes when applicable.	49.42%
9) OH9 Replace fuel filter(s).	67.44%
10) OH10 Inspect, service, or replace air filters, filter housings, and intake duct work.	57.92%
11) OH11 Inspect integrity of the exhaust manifold, exhaust pipes, muffler(s), catalytic converter(s), resonator(s), tail pipe(s), and heat shields; determine necessary action.	55.47%

Assessment: Business Management
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Business Management
- Accumulating results

Number tested: 1603

KOSSA Program Areas



7) OD 7 Describe why different managerial styles can be equally successful	51.19%
5) OE HUMAN RESOURCE MANAGEMENT	58.48%
1) OE 1 Analyze how the impact of human resource activities help organizations to achieve their goals	59.74%
2) OE 2 Analyze the impact of outsourcing on businesses	40.82%
3) OE 3 Explain why orientation and training are necessary for successful employee performance	83.27%
4) OE 4 Identify selection tools and determine why they are used (e.g., interviews, tests, reference checks)	72.22%
5) OE 5 Identify legislation (e.g., civil rights, right to privacy, ADA) affecting personnel practices (e.g., compensation, promotion, recruitment, selection, termination, training / development)	23.91%
6) OE 6 Describe criteria of an employee evaluation	20.04%
8) OE 8 Compare compensation plans, benefit packages, and incentive programs available to employees	90.01%
10) OE 10 Develop awareness of employee assistance programs (e.g., substance abuse, wellness, financial assistance, legal, referrals, counseling)	68.35%
12) OE 12 Develop an understanding of a business's responsibility to know, abide by, and enforce laws and regulations that affect business operations and transactions (anti-trust laws, organized labor, regulatory agencies)	67.98%
6) OF INDUSTRY ANALYSIS	62.56%
1) OF 1 Analyze a business organizations competitive position within the industry	76.72%
2) OF 2 Describe ways to increase market share	88.7%
4) OF 4 Discuss the importance of benchmarking in the workplace (i.e., use a desirable business comparison in the industry as a growth objective)	57.87%
5) OF 5 Utilize SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis with case studies/business plan	68.91%
6) OF 6 Identify internal and external data sources and explain how businesses use them	40.64%
7) OF 7 Recognize the impact of economics	44.32%
8) OF 8 Understand the economic principles and concepts fundamental to business operations (e.g., entrepreneurship, scarcity, cost of inputs, opportunity costs)	58.43%
9) OF 9 Discuss and compare various types of economies (i.e., traditional, command, market, mixed)	64.92%
7) OG OPERATIONS MANAGEMENT	56.52%

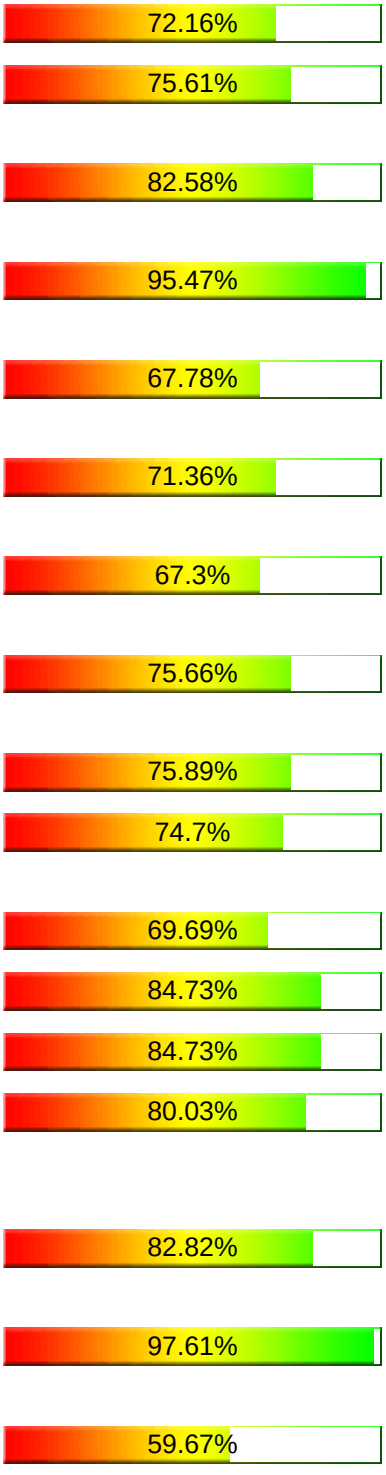
1) OG 1 Explain the coordination/allocation of the factors of production	50.06%
3) OG 3 Evaluate a product design (i.e., product development)	62.73%
4) OG 4 Identify factors (e.g., purchasing, routing, scheduling, inventory control, staffing) used in production scheduling	76.65%
5) OG 5 Recognize factors considered when selecting suppliers (e.g., quality, price, reliable delivery)	36.64%
8) OH GLOBAL PERSPECTIVES	56.87%
2) OH 2 Describe global economic factors	62.3%
3) OH 3 Examine issues of corporate culture and managing in the global environment	76.53%
4) OH 4 Define examples of global involvement (e.g., licensing, joint ventures, exporting, importing, franchising, direct investment, global outsourcing)	38.51%
5) OH 5 Understand government/legal activities that affect global trade to make business decisions	50.12%
9) OI PUBLIC POLICY	53.65%
1) OI 1 Explain the relationship between ethics and governmental regulations	46.82%
2) OI 2 Recognize types of taxation assessed to businesses	60.49%
10) OJ MARKETING TECHNIQUES	53.29%
1) OJ 1 Perform a market research experiment	49.31%
2) OJ 2 Develop a marketing mix plan (i.e., product, price, place, promotion) for a business	44.51%
3) OJ 3 Analyze a target market for business/case studies	57.12%
4) OJ 4 Describe the nine functions of marketing (i.e., purchasing, selling, pricing, product planning, marketing information management, promotion, financing, distribution, risk management)	62.23%
11) OK BUSINESS PLANNING	71.22%
2) OK 2 Create a business plan (e.g., executive summary, industry analysis, company description, products and services description, market description, marketing strategy, operations description, staffing description, financial projection, capital needs, milestones)	71.22%

Assessment: Cinematography/Video Production
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Cinematography and Video Production
- Accumulating results

Number tested: 419

KOSSA Program Areas



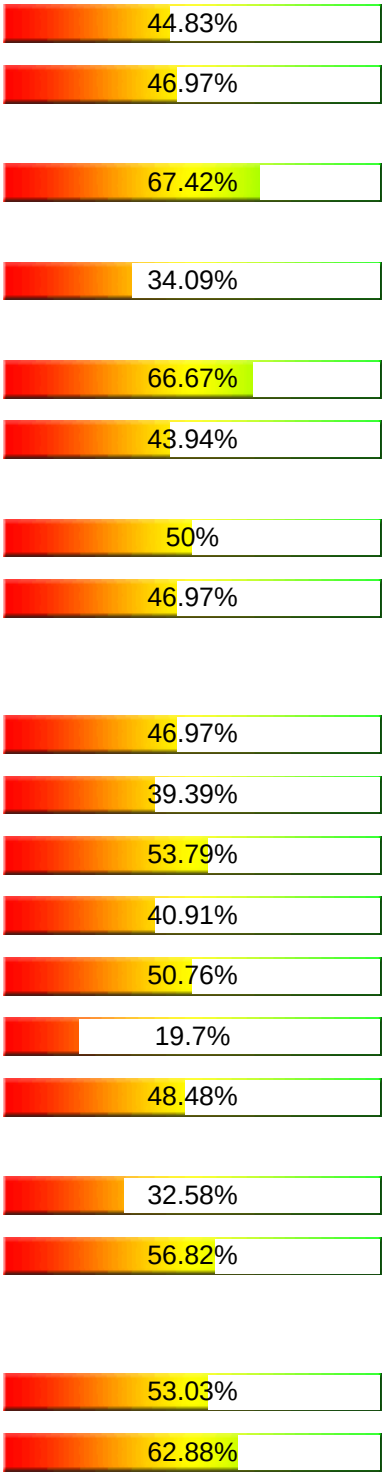
4) OD AUDIENCE & MEDIA PURPOSE	90.21%
1) OD 1 Identify the purpose, audience, and audience needs for preparing images	90.21%
5) OE VIDEO PRODUCTION	80.63%
1) OE 1 List the components of the pre-production phase (e.g., purpose, script writing, target audience, budget, schedule, script writing, output medium)	72.55%
3) OE 3 List the components of the production phase (e.g., selecting equipment, operating equipment, interviewing, directing, lighting, audio)	84.96%
4) OE 4 List the components of the post-production phase (e.g., video and audio editing, graphics, output medium, etc.)	97.85%
6) OE 6 Summarize the roles of various personnel for video production projects (e.g., producer, director, editor, camera operator)	74.94%
7) OE 7 Develop appropriate communication skills when working with clients, crew, and talent	80.91%
6) OF VIDEO PRODUCTION EQUIPMENT	67.17%
3) OF 3 Demonstrate types of camera angles and movements	76.49%
4) OF 4 Demonstrate the rule of thirds	67.3%
5) OF 5 Demonstrate different shot compositions (e.g., medium shot, close up, long shot)	81.86%
6) OF 6 Demonstrate shot flow including sequencing and continuity	66.23%
7) OF 7 Demonstrate effective use of white balance settings	47.26%
8) OF 8 Connect various pieces of video equipment using the proper cables and/or adapters	85.44%
11) OF 11 Demonstrate proper placement of microphones for effective audio	64.32%
12) OF 12 Connect microphone(s) to various audio equipment using the proper cables and/or adapters	63.96%
14) OF 14 Identify and correct sources of interference and poor sound quality	63.72%
16) OF 16 Identify and explain the use of basic lighting equipment	42.96%
18) OF 18 Utilize various light sources (e.g., natural light, reflectors, portable lights)	73.75%
7) OG WRITING FOR VIDEO PRODUCTION	67.64%
1) OG 1 Identify potential biases when selecting interviewees	81.86%
4) OG 4 Apply active research methods (e.g., critical reading, personal interviews, credible sources, use of surveys)	93.56%
6) OG 6 Attribute all sources correctly	49.16%

13) OG 13 Develop open-ended questions to elicit in-depth responses	66.83%
17) OG 17 Recognize the differences between biased and unbiased questions and answers	66.11%
18) OG 18 Ask questions coherently and concisely, using proper grammar	49.16%
8) OH INDUSTRY STANDARD PRODUCTION PRACTICES	64.6%
11) OH 11 Awareness of how to demonstrate appropriate speaking skills for an on-camera performance (e.g., pitch, tone, emphasis, inflection, enunciation, timing)	58%
12) OH 12 Awareness of how to practice appropriate on-camera performance skills (e.g., appearance, gestures, posture, etc.)	77.8%
9) OI EDITING PROCESS	69.12%
5) OI 5 Capture/import source materials	88.31%
12) OI 12 Explain the impact of editing on continuity, performance, and emphasis	52.98%
15) OI 15 Evaluate content for message effectiveness and bias (i.e., does it tell the complete story)	70.64%
16) OI 16 Revise work based on critiques	66.83%

Assessment: Collision Repair
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Collision Repair
- Accumulating results

Number tested: 132

KOSSA Program Areas



31) OA 31 Determine work clamp (ground) location and attach	73.48%
33) OA 33 Protect adjacent panels, glass, vehicle interior, etc. from welding and cutting operations	33.33%
35) OA 35 Clean and prepare the metal to be welded, assure good metal fit-up, apply weld-through primer if necessary, clamp or tack as required	40.15%
39) OA 39 Perform visual and destructive tests on each weld type	45.45%
42) OA 42 Identify cutting process for different substrates and locations; perform cutting operation	27.27%
44) OA 44 Clean and prepare the surface of plastic parts; identify the types of plastic repair procedures	56.82%
45) OA 45 Repair rigid, semi-rigid, or flexible plastic panels	36.36%
2) OB PAINTING AND REFINISHING	42.86%
2) OB 2 Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants	65.15%
4) OB 4 Dry or wet sand areas to be refinished	28.03%
6) OB 6 Apply suitable metal treatment or primer in accordance with total product systems	75.76%
9) OB 9 Apply primer onto surface of repaired area	26.52%
10) OB 10 Apply two-component finishing filler to minor surface imperfections	50%
11) OB 11 Block sand area to which primer-surfacer has been applied	44.7%
12) OB 12 Dry sand area to which finishing filler has been applied	24.24%
14) OB 14 Clean area to be refinished using a final cleaning solution	63.64%
15) OB 15 Remove, with a tack rag, any dust or lint particles from the area to be refinished	54.55%
16) OB 16 Apply suitable sealer to the area being refinished	43.18%
18) OB 18 Prepare adjacent panels for blending	16.67%
20) OB 20 Identify metal parts to be refinished; determine the materials needed, preparation, and refinishing procedures	32.58%
22) OB 22 Select spray gun setup (fluid needle, nozzle, and cap) for product being applied	71.21%
23) OB 23 Test and adjust spray gun using fluid, air and pattern control valves	28.79%
24) OB 24 Identify color code by manufacturer	36.36%
27) OB 27 Apply selected product on test or let-down panel; check for color match	35.61%
28) OB 28 Apply basecoat/clearcoat for panel blending and panel refinishing	29.55%

30) OB 30 Refinish flexible plastic parts	60.61%
32) OB 32 Tint color using formula to achieve a blendable match	18.18%
34) OB 34 Identify a dry spray appearance in the paint surface; determine the cause(s) and correct the condition	48.48%
36) OB 36 Identify clouding (mottling and streaking in metallic finishes); determine the cause(s) and correct the condition	18.94%
37) OB 37 Identify orange peel; determine the cause(s) and correct the condition	24.24%
39) OB 39 Identify sags and runs in paint surface; determine the cause(s) and correct the condition	80.3%
42) OB 42 Identify buffing-related imperfections (swirl marks, wheel burns); correct the condition	33.33%
43) OB 43 Sand, buff and polish fresh or existing finish to remove defects as required	62.12%
46) OB 46 Remove overspray	41.67%

Assessment: Computer Programming
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard COMPUTER PROGRAMMING
- Accumulating results

Number tested: 464

KOSSA Program Areas

– COMPUTER PROGRAMMING	64.02%
1) OA COMPUTER LITERACY	76.88%
9) OA 9 Navigate a World Wide Web browser	79.31%
12) OA 12 Identify what an operating system is, how it works, and be able to solve common problems	85.13%
14) OA 14 Discriminate between ethical and unethical uses of computers and information	72.63%
18) OA 18 Identify types of computers, platforms, and devices explaining how they process information and how individual computers interact with other computing systems and devices	89.66%
19) OA 19 Identify the function of computer hardware components	81.03%
21) OA 21 Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded	40.73%
2) OB INFORMATION TECHNOLOGY PROJECT MANAGEMENT	52.73%
2) OB 2 Determine the purpose and goals of the project	39.01%
4) OB 4 Identify stakeholders and decision makers	52.16%
7) OB 7 Estimate time requirements	67.03%
3) OC PROGRAMMING CONCEPTS	70.23%
1) OC 1 Trace the development of computers and the current industry trends in the programming field	54.96%
4) OC 4 Describe the functions of computer hardware, software, and computer theory including bits, bytes, binary logic, and storage	70.01%
5) OC 5 Compare and contrast operating systems (e.g., full version, mobile)	86.85%
4) OD ALGORITHMIC/LOGIC PROCEDURES	57.54%
1) OD 1 Define a program specification	57.54%
5) OE PROGRAMMING PROCEDURES	57.65%
1) OE 1 Demonstrate an understanding of steps for developing a program	54.42%
2) OE 2 Design a program	63.15%

3) OE 3 Code the program from an algorithm (e.g., pseudocode, flowchart)	54.74%
4) OE 4 Run the program with sample data to test its validity	64.44%
6) OF PROGRAMMING APPLICATIONS	62.59%
2) OF 2 Create an application user interface	80.39%
4) OF 4 Code an application that uses arithmetic operations and built-in functions	57.97%
5) OF 5 Identify and write a program that uses variables and constants	58.76%
6) OF 6 Identify and write a program that use Boolean operators	67.03%
7) OF 7 Identify and write a modular program that uses functions or methods	77.8%
8) OF 8 Identify and write a program that uses conditional structures	28.02%
9) OF 9 Identify and write a program that uses looping structures	61.85%
11) OF 11 Identify and write a program that uses arrays	65.52%
15) OF 15 Code an application program to display graphics	70.04%
7) OG DATABASE MANAGEMENT FUNCTIONS	47.63%
4) OG 4 Access a database located on a local area network that uses program code	47.63%
8) OH ADVANCED PROGRAMMING PROCEDURES	79.42%
1) OH 1 Code a complex program from an algorithm (e.g., pseudocode, flowchart)	79.96%
2) OH 2 Run the program with sample data to determine the validity of an application and error handling procedures	78.88%
9) OI WEB PAGE APPLICATIONS	56.9%
1) OI 1 Access a database that uses program code	66.81%
4) OI 4 Configure communication protocols for wide area networks	49.14%
6) OI 6 Use and document electronic resources and references in the development of a program application	76.72%
7) OI 7 Evaluate the validity of sample code obtained from the Internet and other sources	57.11%
8) OI 8 Develop a Web page to publish a programming application	34.7%
10) OJ INDUSTRY CERTIFICATION	66.16%
2) OJ 2 Demonstrate the ability to successfully complete selected practice examinations and practice questions similar to those on certification exams	66.16%
11) OK CAREER PATHWAYS IN PROGRAMMING	43.32%
1) OK 1 Identify careers in the programming field	43.32%

Assessment: Computerized Manufacturing and Machining
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standards COMPUTER PROGRAMMING, Computerized Manufacturing and Machining
- Accumulating results

Number tested: 312

KOSSA Program Areas

– Computerized Manufacturing and Machining	57.44%
1) OA JOB PLANNING AND MANAGEMENT	45.96%
1) OA 1 Develop a process plan for a part requiring milling, drilling, turning, or grinding	45.96%
2) OB JOB EXECUTION	52.27%
1) OB 1 Use hand drills, hand taps, tap wrench, files, scrapers, and coated abrasives to deburr parts	68.91%
2) OB 2 Use arbor presses to perform press fits	46.47%
3) OB 3 Use bench vises and hand tools appropriately	54.81%
5) OB 5 Setup and carry out between centers turning operations for straight turning	46.79%
6) OB 6 Setup and carry out chucking operations for turning	54.81%
8) OB 8 Setup and operate vertical milling machines	70.19%
9) OB 9 Perform routine milling, and location of hole centers with accuracy to within given tolerances	63.14%
10) OB 10 Ring test grinding wheels, perform visual safety inspection, mount and dress a grinding wheel in preparation for surface grinding and bench grinding	34.29%
11) OB 11 Setup and operate manual surface grinders	35.9%
12) OB 12 Perform routine surface grinding and bench grinding, location of surfaces, and squaring of surfaces	29.49%
5) OE GENERAL MAINTENANCE	66.54%
2) OE 2 Demonstrate how to keep the tools, workbenches, and manual equipment clean, maintained, and safe for work	48.08%
3) OE 3 Make routine inspection and adjustments as necessary and as authorized and report problems to supervision which are beyond the scope of authority	85.58%
4) OE 4 Inspect and assess the condition of machine tools and refurbish or adjust tooling where appropriate	75.48%

6) OF INDUSTRIAL SAFETY AND ENVIRONMENTAL PROTECTION 74.68%

1) OF 1 Carry out assigned responsibilities while adhering to safe practices in accordance with OSHA requirements and guidelines; documenting safety activities as required 73.82%

2) OF 2 Handle and store hazardous materials as assigned while adhering to safe practices in accordance with OSHA and EPA requirements; and documenting safety activities as required 75.96%

7) OG ENGINEERING DRAWINGS AND SKETCHES 70.19%

1) OG 1 Interpret orthographic blueprints 72.52%

2) OG 2 Interpret GD&T orthographic prints 60.9%

8) OH MEASUREMENT 46.9%

1) OH 1 Recognize and apply basic measuring instruments such as rulers, protractors, and basic transfer tools (e.g., simple inside, outside calipers) 54.17%

2) OH 2 Recognize and apply precision measuring instruments such as micrometers, vernier, dial, and electronic calipers, dial indicators and precision transfer tools (e.g., telescoping gages) 48.56%

3) OH 3 Recognize and apply appropriately precision tools and instruments for surface plate work (e.g., precision angle plates and tool blocks, precision transfer gages, precision height gages) 43.38%

9) OI METALWORKING THEORY 53.89%

1) OI 1 Understand the concepts of heat, shock, friction, zone of distortion, cutting interface, machinability, cutter presentation, cutter geometry, and chip-holding capacity in machining applications 51.44%

2) OI 2 Recognize and understand the application of a wide variety of cutting tools, tool holding devices, and work holding devices 46.9%

3) OI 3 Recognize differences between ferrous and non-ferrous, magnetic, and ductile materials, and understand the changes which heat-treat impart to materials 75%

4) OI 4 Recognize the common classes of machine tools, understand the function of the major subsystems of the machine tools and select and apply a given machine tool appropriately 56.25%

10) OJ APPLICATIONS OF MATHEMATICS FOR THE TRADE 59.55%

1) OJ 1 Demonstrate use of basic geometric concepts and terminology (e.g., planes perpendicularity, Cartesian coordinates, concentricity, parallelism, straightness, flatness, circularity, symmetry, etc.) 57.05%

2) OJ 2 Demonstrate use of standard formulas and arithmetic operations to make required calculations with or without a calculator, solving for an unknown in a trade formula 63.3%

Assessment: Construction
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard CONSTRUCTION
- Accumulating results

Number tested: 1153

KOSSA Program Areas

– CONSTRUCTION	63.24%
1) OA BLUEPRINT READING	55.4%
1) OA 1 Interpret a list of architectural terms associated with plan reading	48.6%
2) OA 2 Identify different architectural line types	57.46%
3) OA 3 Interpret specifications	57.03%
4) OA 4 Determine overall dimensions	49.49%
5) OA 5 Interpret various symbols	58.67%
6) OA 6 Display an understanding of door and window schedules	41.33%
7) OA 7 Identify mechanical, concrete, framing, and building procedures techniques as related to drawings	53.86%
8) OA 8 Identify the various specific hardware for a construction project	81.05%
2) OB WORKFORCE ISSUES	79.93%
2) OB 2 Demonstrate knowledge of safety practices that relate to the construction industry	77.56%
3) OB 3 Identify the various types of training available in the construction industry	89.42%
3) OC MATH & MEASUREMENT	45.79%
1) OC 1 Demonstrate proper measurement techniques	52.3%
2) OC 2 Describe the appropriate application and use of measurement devices in construction	32.78%
4) OD WORKPLACE SAFETY & HEALTH	70.45%
1) OD 1 Demonstrate knowledge of first aid and CPR	26.24%
2) OD 2 Demonstrate knowledge and understanding of bloodborne pathogens	57.24%
3) OD 3 Apply appropriate first aid techniques	55.51%
4) OD 4 Identify different types of chemical, biological, and physical hazards	71.55%
5) OD 5 Identify the characteristics of a safe work site	86.38%

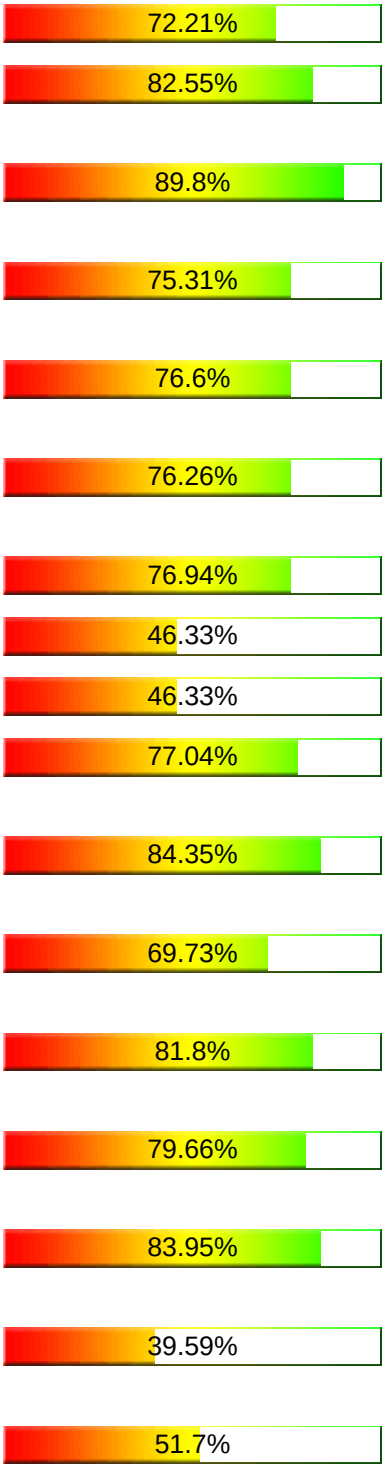
6) OD 6 Identify OSHAs 1926.10 Construction Standards and who enforces OSHA Rules and Regulations in Kentucky	77.45%
7) OD 7 Interpret MSDS sheets	60.19%
8) OD 8 Identify the safe and proper use of the tools of the trade	88.33%
9) OD 9 Demonstrate knowledge and understanding of OSHA 10-hour General Safety Course	82.51%
10) OD 10 Identify laws and regulations that relate to the construction industry	42.93%
5) OE COMPUTER USE	37.47%
1) OE 1 List possible computer applications in the construction industry	37.47%

Assessment: Consumer and Family Management
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Consumer and Family Management
- Accumulating results

Number tested: 1470

KOSSA Program Areas



2) OF 2 Obtain personal and legal documents related to managing individual and family finances	27.48%
7) OG FACTORS THAT IMPACT CONSUMER ADVOCACY	77.69%
5) OG 5 Determine strategies to reduce the risk of consumer fraud	77.69%
8) OH FACTORS IN DEVELOPING A LONG-TERM FINANCIAL MANAGEMENT PLAN	60.48%
1) OH 1 Explain the impact of the economic system on personal income, individual/family security, and consumer decisions	70.75%
5) OH 5 Determine the effects of risk management strategies on long-term financial planning	50.2%
9) OI RESOURCE CONSUMPTION FOR CONSERVATION AND WASTE MANAGEMENT PRACTICES	91.97%
5) OI 5 Examine roles of government, industry, and family in energy consumption	91.97%
10) OJ SKILLS NEEDED FOR PRODUCT DEVELOPMENT, TESTING, AND PRESENTATION	63.22%
2) OJ 2 Design or analyze a consumer product	47.76%
3) OJ 3 Examine features, prices, product information, styles, and performance of consumer goods for potential trade-offs among the components	94.15%
11) OK STRATEGIES TO MANAGE MULTIPLE, INDIVIDUAL, FAMILY, CAREER, COMMUNITY AND WORKPLACE SETTINGS	91.36%
3) OK 3 Analyze the potential impact of career path decisions on balancing work and family	91.36%
12) OL IMPACT OF INDIVIDUAL AND FAMILY PARTICIPATION IN COMMUNITY ACTIVITIES	73.71%
4) OL 4 Examine community resources and systems of formal/informal support available to individuals and families	83.2%
5) OL 5 Examine the impact of public policies, agencies, and institutions on the family	64.22%
13) OM IMPACT OF FAMILY AS A SYSTEM ON INDIVIDUALS AND SOCIETY	69.35%
1) OM 1 Examine family as the basic unit of society	81.02%
2) OM 2 Determine the role of family in transmitting societal expectations	79.46%
3) OM 3 Examine global influences on todays families	66.26%
4) OM 4 Examine the role of family in teaching culture and traditions across the life span	72.79%
5) OM 5 Examine the role of family in developing independence, interdependence, and commitment of family members	33.27%

6) OM 6 Determine the impact of change and transitions over the life course	72.65%
7) OM 7 Explore the ways family and consumer sciences careers assist the works of the family	76.67%
14) ON APPRECIATION FOR DIVERSE PERSPECTIVES, NEEDS, AND CHARACTERISTICS OF INDIVIDUALS AND FAMILIES	48.84%
3) ON 3 Examine the impact of empathy for diversity on individuals in family and community settings	48.84%
15) OO FACTORS RELATED TO PROVIDING FAMILY AND COMMUNITY SERVICES	70.85%
1) OO 1 Examine local, state, and national agencies and informal support resources providing human services	63.13%
2) OO 2 Examine licensing laws and regulations that affect service providers and their participants	78.57%
16) OP CONDITIONS AFFECTING INDIVIDUALS AND FAMILIES WITH A VARIETY OF DISADVANTAGING CONDITIONS	94.22%
6) OP 6 Determine the appropriate support needed to address selected human service issues	94.22%
17) OQ SERVICES FOR INDIVIDUALS AND FAMILIES WITH A VARIETY OF DISADVANTAGING CONDITIONS	67.55%
3) OQ 3 Cite coping, adjustment strategies, and stress management practices for the participant, caregiver, and family member	67.55%
18) OR FUNCTIONS AND EXPECTATIONS OF VARIOUS TYPES OF RELATIONSHIPS	72.08%
1) OR 1 Examine processes for building and maintaining interpersonal relationships	72.31%
2) OR 2 Examine the impact of various stages of the family life cycle on the interpersonal relationships	71.5%
4) OR 4 Determine factors that contribute to healthy and unhealthy relationships	72.55%
19) OS PERSONAL NEEDS AND CHARACTERISTICS AND THEIR IMPACT ON INTERPERSONAL RELATIONSHIPS	78.38%
1) OS 1 Examine the impact of personal characteristics on relationships	84.35%
3) OS 3 Examine the effect of self-esteem and self-image on relationships	63.74%
4) OS 4 Determine the impact of life span events and conditions on relationships	87.14%
5) OS 5 Explain the impact of personal standards and codes of conduct on interpersonal relationships	85.65%

20) OT COMMUNICATION SKILLS THAT CONTRIBUTE TO POSITIVE RELATIONSHIPS — 77.86%

1) OT 1 Examine communication styles and their effects on relationships — 84.35%

2) OT 2 Examine barriers to communication in family and community settings — 75.85%

5) OT 5 Examine the roles and functions of communication in family and community settings — 66.87%

21) OU CONFLICT PREVENTION AND MANAGEMENT TECHNIQUES — 80.88%

3) OU 3 Assess community resources that support conflict prevention and management — 80.88%

Assessment: Culinary and Food Services
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Culinary and Food Service
- Accumulating results

Number tested: 1826

KOSSA Program Areas

– Culinary and Food Service	65.86%
1) OA CAREER PATHS WITHIN FOOD PRODUCTION, FOOD SERVICES, AND NUTRITION/DIETETICS INDUSTRIES	87.71%
1) OA 1 Determine the roles and functions of individuals engaged in food production, food services, and nutrition/dietetics careers	90.03%
4) OA 4 Examine the impact of food production and services occupations on local, state, national, and global economies	85.38%
2) OB FOOD SAFETY AND SANITATION PROCEDURES	68.09%
2) OB 2 Employ food service management safety/sanitation program procedures	88.99%
3) OB 3 Use knowledge of systems for documenting, investigating, and reporting food-borne illness	23.06%
4) OB 4 Use Hazard Analysis Critical Control Point (HACCP) principles and procedures to minimize the risks of food-borne illness	70.02%
5) OB 5 Practice good personal hygiene/health procedures and report symptoms of illness	92%
6) OB 6 Demonstrate proper receiving and storage of both raw and prepared foods	89.98%
9) OB 9 Examine Occupational Safety and Health Administration	42.55%
3) OC SELECTING, USING, AND MAINTAINING FOOD PREPERATION EQUIPMENT	69.03%
1) OC 1 Identify tools and equipment that meet OSHA requirements	82.69%
2) OC 2 Demonstrate procedures for cleaning and sanitizing equipment	55.37%
4) OD PLANNING MENU ITEMS BASED ON RESTAURANT CONCEPTS	53.8%
2) OD 2 Apply menu planning principles to develop a standard course-based menu (e.g., appetizers, soup, salad, entr	63.58%
4) OD 4 Create menu layout and design	76.4%
5) OD 5 Prepare requisitions for production requirements	21.41%
5) OE COMMERCIAL PREPARATION FOR ALL MENU CATEGORIES TO	

PRODUCE A VARIETY OF FOOD PRODUCTS	64.15%
1) OE 1 Demonstrate skills in knife, tool, equipment handling and mise en place	79.52%
2) OE 2 Demonstrate a variety of cooking methods (e.g., roasting, baking, broiling, smoking, grilling, saut	54.11%
3) OE 3 Utilize weights and measures to demonstrate proper scaling and measurement technique	87.84%
7) OE 7 Prepare various fruits, vegetables, starches, and farinaceous items	55.53%
10) OE 10 Prepare baked goods and desserts	43.76%
6) OF FOOD SERVICE PLANNING AND OPERATIONAL FUNCTIONS	68.34%
2) OF 2 Practice inventory procedures including first in/first out concept, date markings, and record keeping	75.3%
3) OF 3 Apply accounting principles in planning and forecasting profit and loss	38.72%
5) OF 5 Identify human resource policies including rules, regulations, laws and hiring/compensation/overtime	76.78%
7) OF 7 Explain the importance of staff orientation, regular training/education, and on-the-job training/retraining	86.2%
8) OF 8 Implement marketing plan for food service operations	80.28%
9) OF 9 Follow internal/external disaster plan	52.74%
7) OG INTERNAL AND EXTERNAL CUSTOMER SERVICE	68.55%
1) OG 1 Examine the role of service as a strategic component of performance (e.g., types of service, customer service skills)	70.59%
2) OG 2 Demonstrate quality services, which exceed the expectations of customers (e.g., types of service, customer service skills)	68.29%
4) OG 4 Apply strategies for resolving complaints	66.76%
8) OH NUTRITION PRINCIPLES, FOOD PLANS, PREPARATION TECHNIQUES, AND SPECIALIZED DIETARY PLANS	66.43%
1) OH 1 Determine nutrient requirements across the life span addressing the diversity of people, culture, and religions	67.63%
3) OH 3 Assess principles to maximize nutrient retention in prepared foods	70.37%
5) OH 5 Critique the selection of foods to promote a healthy lifestyle	61.28%
9) OI PRODUCT MANAGEMENT PRINCIPLES AND PRACTICES	65.13%
1) OI 1 Build menus to customer/client preferences	74.92%
3) OI 3 Verify standards for food quality	83.41%
5) OI 5 Manage amounts of food to meet the needs of customers/clients	75.41%

7) OI 7 Implement procedures that provide cost effective products 59.75%

9) OI 9 Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing, and personal hygiene as criteria for safe food preparation 32.15%

10) OJ FACTORS THAT INFLUENCE NUTRITION AND WELLNESS PRACTICES ACROSS THE LIFE SPAN 59.47%

1) OJ 1 Examine physical, emotional, social, psychological, and spiritual components of individual and family wellness 75.36%

2) OJ 2 Compare the impact of psychological, cultural, and social influences on food choices and other nutrition practices 66.43%

3) OJ 3 Examine the governmental, economic, and technological influences on food choices and practices 36.64%

11) OK NUTRITIONAL NEEDS OF INDIVIDUALS AND FAMILIES IN RELATION TO HEALTH AND WELLNESS ACROSS THE LIFE SPAN 50.22%

1) OK 1 Assess the effect of nutrients on health, appearance, and peak performance 42.99%

2) OK 2 Research the relationship of nutrition and wellness to individual and family health throughout the life span 57.45%

12) OL ABILITY TO ACQUIRE, HANDLE, AND USE FOODS TO MEET NUTRITION AND WELLNESS NEEDS OF INDIVIDUALS AND FAMILIES ACROSS THE LIFE SPAN 71.18%

1) OL 1 Apply various dietary guidelines in planning to meet nutrition and wellness needs 77.22%

2) OL 2 Design strategies that meet the health, nutrition, and requirements of individuals and families with special dietary needs 77.55%

4) OL 4 Analyze and evaluate food allergies and food additives (e.g., gluten, dairy, nuts, MSG, vitamins, preservatives) 58.76%

13) OM FACTORS THAT AFFECT FOOD SAFETY, FROM PRODUCTION THROUGH CONSUMPTION 65.7%

1) OM 1 Determine conditions and practices that promote safe food handling 72.18%

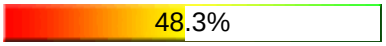
4) OM 4 Appraise federal, state, and local inspection/labeling systems that protect the health of individuals and the public 64.95%

6) OM 6 Review public dialogue (e.g., current events) about food safety and sanitation 59.97%

14) ON IMPACT OF SCIENCE AND TECHNOLOGY ON FOOD CONSUMPTION, SAFETY, AND OTHER ISSUES 63.56%

5) ON 5 Know the environmental impact of materials (e.g., organic farming, recycling, effect of chemicals, sustainability) 71.19%

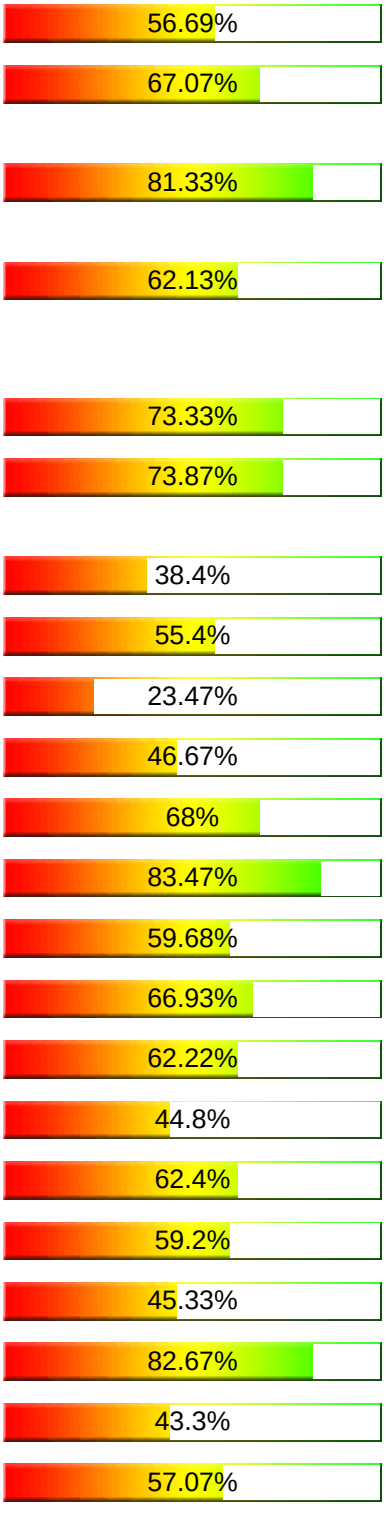
6) ON 6 Describe and explain heat conduction/convection, insulation requirements, radiant heating/temperature, and converts Fahrenheit to Centigrade and vice-versa



Assessment: Digital Design and Game Development
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Digital Design and Game Development
- Accumulating results

Number tested: 375

KOSSA Program Areas



2) OE2 Understand fundamentals of art	53.07%
4) OE4 Develop a character	36%
5) OE5 Create 3D game art	48.8%
6) OE6 Apply animation to 3D game assets	33.33%
6) OF UNDERSTAND PROGRAMMING FOR DIGITAL GAME DEVELOPMENT	44.04%
1) OF1 Apply logic to game development	41.6%
2) OF2 Understand programming language concepts	22.13%
3) OF3 Understand algorithms	78.13%
7) OG BUILD A GAME	57.57%
1) OG1 Explore 2D and 3D game engines	48.8%
2) OG2 Diagram game levels	73.07%
3) OG3 Utilize Graphical User Interface (GUI)	41.6%
4) OG4 Design custom mechanics	70.27%
5) OG5 Integrate media types	46.13%
8) OH UNDERSTAND LEGAL AND ETHICAL ISSUES IN GAME DESIGN AND DEVELOPMENT	63.79%
1) OH1 Understand copyright laws in relationship to game development	46.27%
2) OH2 Understand security issues in relation to game development and design	90.13%
3) OH3 Apply personal and professional ethics	68.13%
9) OI PUBLISHING THE GAME	77.78%
1) OI1 Target platforms	75.47%
2) OI2 Market a game	78.93%

Assessment: Early Childhood Education
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Early Childhood Education
- Accumulating results

Number tested: 1337

KOSSA Program Areas

– Early Childhood Education	69.91%
1) OA CAREER PATHS WITHIN EARLY CHILDHOOD EDUCATION AND SERVICES	53.18%
3) OA 3 Examine education/training requirements and opportunities for career paths in early childhood education and services	53.18%
2) OB BUSINESS PLANNING AND OPERATIONAL FUNCTIONS	50.37%
2) OB 2 Maintain inventory records	68.89%
4) OB 4 Identify the effects of continous quality improvement	31.86%
3) OC DEVELOPMENTALLY APPROPRIATE PRACTICES FOR EARLY CHILDHOOD EDUCATION AND SERVICES	66.67%
1) OC 1 Examine child development theories and their implications for educational and childcare practices	41.51%
2) OC 2 Determine a variety of assessment methods to observe and interpret childrens growth and development	57.74%
3) OC 3 Consider cultural and environmental influences with assessing childrens development	66.12%
4) OC 4 Determine special needs of children	81.6%
5) OC 5 Put into effect strategies that promote childrens growth and development	86.39%
4) OD INTEGRATION OF CURRICULUM AND INSTRUCTION TO MEET CHILDRENS DEVELOPMENTAL NEEDS AND INTERESTS	76.78%
1) OD 1 Examine a variety of curriculum and instructional models	82.8%
2) OD 2 Implement learning activities in all curriculum areas that meet the developmental needs of children	77.49%
3) OD 3 Implement an integrated curriculum that incorporates a childs language, learning styles, home experiences, and cultural values	88.86%
4) OD 4 Demonstrate a variety of teaching methods to meet individual needs of children	78.23%
5) OD 5 Arrange learning centers that provide for childrens exploration,	

discovery, and development	64.1%
6) OD 6 Establish activities, routines, and transitions	67.76%
5) OE SAFE AND HEALTHY LEARNING ENVIRONMENT FOR CHILDEREN	82.84%
1) OE 1 Manage physical space to maintain a safe and healthy learning environment	74.57%
2) OE 2 Apply safe and healthy practices that comply with state regulations	71.13%
4) OE 4 Provide safe and healthy meals and snacks	92.26%
5) OE 5 Document symptoms of child abuse and neglect and use appropriate reporting procedures to the designated authorities	91.85%
7) OE 7 Demonstrate security and emergency procedures	86.69%
6) OF TECHNIQUES FOR POSITIVE COLLARBORATIVE RELATIONSHIPS WITH CHILDREN	79.11%
1) OF 1 Establish developmentally appropriate guidelines for behavior	82.8%
2) OF 2 Demonstrate problem-solving skills with children	72.03%
5) OF 5 Present information to parents regarding developmental issues and concerns related to children	82.5%
7) OG PROFESSIONAL PRACTICES AND STANDARDS RELATED TO WORKING WITH CHILDREN	75.28%
2) OG 2 Apply professional and ethical standards as accepted by the recognized professional organizations	84.44%
3) OG 3 Implement federal, state, and local standards, policies, regulations, and laws which impact children, families, and programs	88.63%
4) OG 4 Demonstrate enthusiasm, initiative, and commitment to program goals and improvements	72.63%
5) OG 5 Apply business management skills to planning businesses in early childhood education and services	55.42%
8) OH PRINCIPLES OF HUMAN GROWTH AND DEVELOPMENT ACROSS THE LIFE SPAN	57.22%
1) OH 1 Examine physical, emotional, social, and intellectual development	68.18%
2) OH 2 Examine interrelationships among physical, emotional, social, and intellectual aspects of human growth and development	35.3%
9) OI CONDITIONS THAT INFLUENCE HUMAN GROWTH AND DEVELOPMENT	72.06%
1) OI 1 Investigate the impact of heredity and environment on human growth and development	74.5%
4) OI 4 Examine the effects of life events on individuals physical and emotional development	69.63%

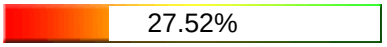
10) OJ STRATEGIES THAT PROMOTE GROWTH AND DEVELOPMENT ACROSSS THE LIFE SPAN

2) OJ 2 Examine the role of communication on human growth and development

3) OJ 3 Examine the role of support systems in meeting human growth and development needs

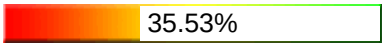
11) OK ROLES AND RESPONSIBILITIES OF PARENTING

1) OK 1 Examine parenting roles across the life span



2) OK 2 Examine expectations and responsibilities of parenting

3) OK 3 Determine consequences of parenting practices to the individual, family, and society



12) OL PARENTING PRACTICES THAT MAXIMIZE HUMAN GROWTH AND DEVELOPMENT

1) OL 1 Choose nurturing practices that support human growth and development

2) OL 2 Select communication strategies that promote positive self-esteem in family members

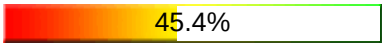
5) OL 5 Determine criteria for selecting care and services for children

13) OM EXTERNAL SUPPORT SYSTEMS THAT PROVIDE SERVICES FOR PARENTS

1) OM 1 Assess community resources and services available to families

2) OM 2 Appraise community resources that provide opportunities related to parenting

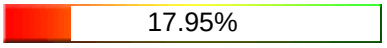
3) OM 3 Review current laws and policies related to parenting



14) ON PHYSICAL AND EMOTIONAL FACTORS RELATE TO BEGINNING THE PARENTING PROCESS

1) ON 1 Examine biological processes related to prenatal development, birth, and health of child and mother

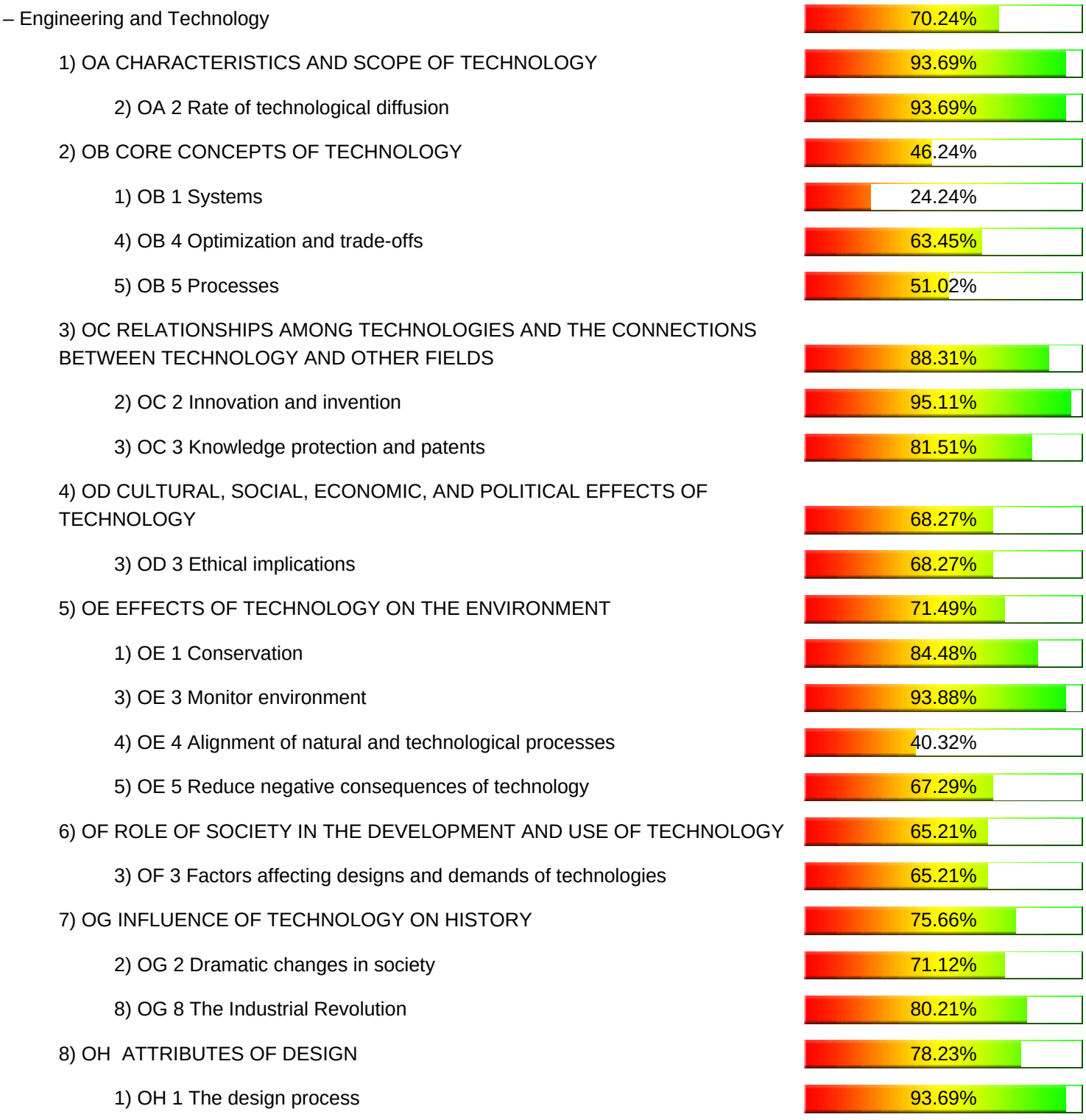
4) ON 4 Determine legal and ethical impacts of technology



Assessment: Engineering and Technology
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Engineering and Technology
- Accumulating results

Number tested: 1617

KOSSA Program Areas



4) OH 4 Requirements	62.77%
9) OI ENGINEERING DESIGN	77.53%
1) OI 1 Design principles	81.88%
2) OI 2 Influence of personal characteristics	59.68%
3) OI 3 Prototypes	91.03%
10) OJ ROLE OF TROUBLESHOOTING, RESEARCH AND DEVELOPMENT, INVENTION, AND INNOVATIONS, AND EXPERIMENTING IN PROBLEM SOLVING	84.6%
1) OJ 1 Research and development	84.6%
11) OK APPLY DESIGN PROCESSES	70.92%
2) OK 2 Identify criteria and constraints	78.23%
3) OK 3 Refine the design	92.39%
4) OK 4 Evaluate the design	61.66%
6) OK 6 Reevaluate final solution(s)	61.16%
12) OL USE AND MAINTAIN TECHNOLOGICAL PRODUCTS AND SYSTEMS	55.33%
1) OL 1 Document and communicate processes and procedures	53.74%
4) OL 4 Operate and maintain systems	57.14%
5) OL 5 Use computers to communicate	55.1%
13) OM ASSESS THE IMPACT OF PRODUCTS AND SYSTEMS	89.59%
2) OM 2 Synthesize data to draw conclusions	93.6%
3) OM 3 Employ assessment techniques	81.57%
15) OO AGRICULTURAL AND RELATED BIOTECHNOLOGIES	74.4%
2) OO 2 Biotechnology	74.4%
16) OP ENERGY AND POWER TECHNOLOGIES	63.34%
1) OP 1 Law of Conservation of energy	50.34%
2) OP 2 Energy sources	46.44%
4) OP 4 Renewable and non-renewable forms of energy	84.42%
5) OP 5 Power systems are a source, a process, and a load	72.17%
17) OQ INFORMATION AND COMMUNICATION	70.39%
1) OQ 1 Parts of information and communications systems	70.5%
2) OQ 2 Information and communication systems	61.47%
5) OQ 5 Many ways of communicating	70.48%

6) OQ 6 Communication through symbols	78.91%
18) OR TRANSPORTATION TECHNOLOGIES	66.57%
4) OR 4 Positive and negative impacts of transportation systems	79.59%
5) OR 5 Transportation processes and efficiency	53.56%
19) OS MANUFACTURING TECHNOLOGIES	51.27%
2) OS 2 Materials	64.87%
4) OS 4 Manufacturing systems	37.66%
20) OT CONSTRUCTION TECHNOLOGIES	72.67%
1) OT 1 Infrastructure	76.47%
3) OT 3 Requirements	65.06%

Assessment: Environmental Science/Natural Resources Systems
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard ENVIRONMENTAL SCIENCE NATURAL RESOURCES SYSTEMS
- Accumulating results

Number tested: 535

KOSSA Program Areas

– ENVIRONMENTAL SCIENCE NATURAL RESOURCES SYSTEMS	63.68%
1) OA USE ANALYTICAL PROCEDURES AND INSTRUMENTS TO MANAGE ENVIRONMENTAL AND NATURAL RESOURCE SYSTEM ACTIVITIES	61.87%
1) OA 1 Identify sample types and sampling techniques in soil, water, wildlife survey, microorganisms, and pollution	76.82%
3) OA 3 Analyze and interpret results of sample measurements	46.92%
2) OB EVALUATE THE IMPACT OF PUBLIC POLICIES AND REGULATIONS ON ENVIRONMENTAL SERVICES AND NATURAL RESOURCE OPERATIONS	70.97%
1) OB 1 Identify laws associated with environmental service and natural resources systems (e.g., Endangered Species, Clean Water, timer harvest regulations)	70.84%
2) OB 2 Identify production agricultural practices that enhance natural resources	61.68%
3) OB 3 Discuss agricultural practices that negatively impact the environment and natural resources	80.37%
3) OC DEVELOP PROPOSED SOLUTIONS TO ENVIRONMENTAL ISSUES, PROBLEMS AND APPLICATIONS USING SCIENTIFIC PRINCIPLES OF METEOROLOGY, SOIL SCIENCE, HYDROLOGY, MICROBIOLOGY, CHEMISTRY, AND ECOLOGY	66.28%
2) OC 2 Explain the importance of parent material in soil formation	82.43%
3) OC 3 Describe how the biodiversity found in soil contributes to its physical and chemical characteristics	82.99%
4) OC 4 Describe the physical qualities of soil (e.g., infiltration, percolation of water, plant growth, erosion) that determines its use for environmental/natural resources	58.63%
6) OC 6 Differentiate between sustainable and non-sustainable land uses	45.42%
7) OC 7 Describe the worlds water supplies and the uses of it in the biosphere to sustain life	65.61%
18) OC 18 Identify the major types of living organisms that inhabit wetlands	70.16%
4) OD DEMONSTRATE THE OPERATION OF ENVIRONMENTAL SERVICE AND NATURAL RESOURCE SYSTEMS	65.73%

1) OD 1 Distinguish between point source and nonpoint source pollution — 74.39%

2) OD 2 Describe how industrial and non industrial pollution impacts the environment — 52.71%

4) OD 4 Identify characteristics of solid waste treatment including the byproducts of solid waste treatment in an sanitary landfill — 70.09%

5) OE PLAN AND CONDUCT NATURAL RESOURCE MANAGEMENT ACTIVITIES THAT APPLY LOGIC, REASONED AND SCIENTIFICALLY BASED SOLUTIONS TO NATURAL RESOURCE ISSUES AND GOALS — 76.07%

1) OE 1 Demonstrate how to use maps to identify directions, features, calculate actual distance, and determine the elevations of points — 39.81%

3) OE 3 Employ Global Positioning System and Geographic Information Systems technologies to inventory features in natural resource management — 85.98%

4) OE 4 Demonstrate surveying/mapping principles with appropriate industry equipment — 89.25%

6) OF ANALYZE INTERRELATIONSHIPS BETWEEN NATURAL RESOURCES AND HUMANS NEEDED TO MANAGE NATURAL RESOURCE SYSTEMS — 58.76%

1) OF 1 Identify trees and other woody plants using morphological characteristics — 67.2%

2) OF 2 Identify herbaceous plants using morphological characteristics — 86.92%

7) OF 7 Demonstrate safety practices when working in an outdoor environment — 85.79%

8) OF 8 Demonstrate proper use and maintenance of power and hand tools — 53.64%

9) OF 9 Describe the factors considered in stream classification — 22.62%

11) OF 11 Identify characteristics of a healthy forest — 68.22%

12) OF 12 Describe ways in which forest stands may be improved — 42.99%

15) OF 15 Identify natural resource characteristics desirable for recreational purposes — 46.54%

17) OF 17 Diagram biogeochemical cycles (i.e., carbon, nitrogen, oxygen, water) and their processes — 40.56%

19) OF 19 Explain primary succession and secondary succession of species in a community of organisms — 17.57%

20) OF 20 Discuss factors that influence population density and population dispersion — 77.57%

7) OG DEVELOP PLANS TO ENSURE RESPONSIBLE AND SUSTAINABLE PRODUCTION AND PROCESSING OF NATURAL RESOURCES — 63.48%

1) OG 1 Describe forest harvesting methods and practices — 55.89%

2) OG 2 Describe how certain tree species are utilized for specific purposes — 51.03%

4) OG 4 Describe techniques used in the sustainable harvesting of wildlife — 66.92%

6) OG 6 Describe techniques used in the processing of wildlife — 66.92%

10) OG 10 Describe renewable and nonrenewable natural resources — 77.66%

8) OH DEMONSTRATE RESPONSIBLE CONTROL AND MANAGEMENT PROCEDURES AND TECHNIQUES TO PROTECT AND MAINTAIN NATURAL RESOURCES — 58.75%

1) OH 1 Identify invasive species including factors encouraging their establishment/spread — 39.25%

2) OH 2 Differentiate between desirable and undesirable fires — 60%

7) OH 7 Identify harmful insects and damage caused to natural resources — 56.64%

9) OH 9 Identify beneficial insects and their role in supporting natural resources — 83.36%

Assessment: Fashion and Interior Design
Standard Set: KOSSA Program Areas
Filters:

- Restricted to standard Fashion and Interior Design
- Accumulating results

Number tested: 212

KOSSA Program Areas

– Fashion and Interior Design 63.11%

1) OA CAREER PATHS WITHIN THE FASHION AND INTERIOR DESIGN INDUSTRIES 69.81%

1) OA 1 Determine the roles and functions of individuals engaged in fashion and interior design careers 79.25%

2) OA 2 Explore opportunities for employment and entrepreneurial endeavors 65.57%

3) OA 3 Examine education/training requirements and opportunities for career paths in fashion and interior design 56.13%

4) OA 4 Examine the impact of fashion and interior design occupations on local, state, national, and global economies 78.3%

2) OB PAST, PRESENT AND FUTURE INFLUENCES ON DESIGN 56.76%

1) OB 1 Explore features of furnishings and clothing styles that are characteristic of various historical periods 60.38%

2) OB 2 Consider how prosperity, mass production, and technology are related to the various periods 77.83%

3) OB 3 Examine the development of architectural styles throughout history 55.66%

4) OB 4 Compare historical architectural details to current housing and interior design trends 47.17%

5) OB 5 Consider future trends in architectural and fashion design and development 67.45%

6) OB 6 Demonstrate knowledge of the arts, design industry (i.e. designers, capitols, cycles), available resources, and cultural impact upon fashion and interior design industries 32.08%

3) OC UTILIZE ELEMENTS AND PRINCIPLES OF DESIGN 68.63%

1) OC 1 Apply the principles and elements of design 76.42%

2) OC 2 Determine the psychological impact that the principles and elements of design have on the individual or space 48.58%

3) OC 3 Analyze the effects that the principles and elements of design have on aesthetics and function 60.85%

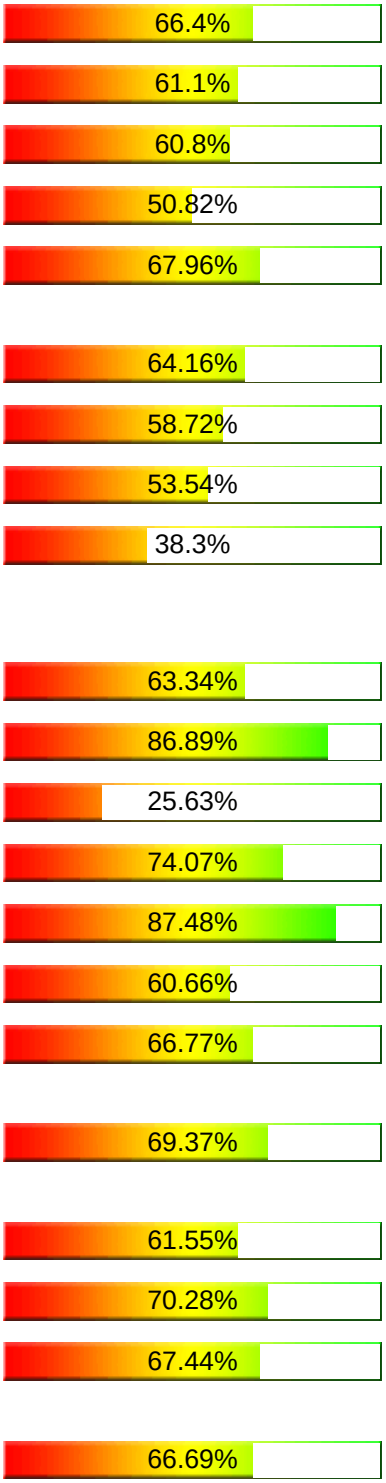
4) OC 4 Apply basic complex color schemes/color theory to develop and enhance visual effects	78.3%
5) OC 5 Utilize elements and principles of design in designing, constructing, and/or altering textiles products	61.79%
7) OC 7 Implement design that takes into consideration ecological, environmental, sociological, psychological, technical, and economic trends and issues	85.85%
4) OD TEXTILE PRODUCTION AND CARE	58.08%
1) OD 1 Select appropriate terminology for identifying, comparing, and analyzing the most common generic textile fibers	90.09%
2) OD 2 Determine performance characteristics of fiber and textiles	26.42%
3) OD 3 Review textiles legislation, standards, and labeling in the global economy	61.79%
5) OD 5 Select appropriate procedures for care of textile products	88.21%
6) OD 6 Examine production processes for creating fibers, yarn, woven/knit fabrics, and non-woven textile products	38.21%
7) OD 7 Use appropriate industry materials for cleaning, pressing, and finishing textiles products	33.49%
8) OD 8 Explore current technology and trends that facilitate design and production of textile products and apparel	73.58%
9) OD 9 Demonstrate basic skills for producing and altering textiles products and apparel	52.83%
5) OE INTERIOR DESIGN APPLICATION AND ANALYSIS	71.7%
1) OE 1 Read information provided on blueprints	87.26%
2) OE 2 Examine floor plans for efficiency and safety in areas including but not limited to zones, traffic patterns, storage, electrical, and mechanical systems	75.47%
3) OE 3 Draw an interior space to scale, using correct architecture symbols and drafting skills	68.4%
5) OE 5 Identify applicable building codes, universal guidelines, and regulations in space planning	55.66%
6) OF FASHION DESIGN APPLICATION AND ANALYSIS	50%
2) OF 2 Demonstrate ability to use technology for fashion design	46.23%
7) OF 7 Use a variety of equipment, tools, and supplies for apparel and textiles construction, alteration, and repair	53.77%
7) OG CLIENT'S NEEDS, GOALS, AND RESOURCES IN CREATING DESIGN	70.09%
1) OG 1 Assess human needs, safety, space, and technology as they relate to client goals	85.85%

2) OG 2 Assess community, family, and financial resources needed to achieve client goals	63.21%
3) OG 3 Assess a variety of available environmental resources for fashion and interior design	55.19%
4) OG 4 Critique design plans that address client	84.91%
6) OG 6 Select and compare products and materials considering care, maintenance, safety, cost, quality and environmental issues for client needs	61.32%
8) OH DESIGN IDEAS THROUGH VISUAL PRESENTATION	36.56%
2) OH 2 Prepare renderings, elevations, and sketches using appropriate media	7.55%
3) OH 3 Prepare visual presentations including legends, keys, or schedules	65.57%
9) OI MARKETING AND MERCHANDISING	77.59%
2) OI 2 Assess the cost of constructing, manufacturing, altering, or repairing textiles products	86.79%
3) OI 3 Assess ethical considerations for merchandising fashion and interior products	67.45%
4) OI 4 Review external factors that influence merchandising (e.g., target market, competition, supply and demand, forecasting)	65.09%
5) OI 5 Critique varied methods for promoting fashion and interior products	91.04%
10) OJ OPERATIONAL PROCEDURES	59.85%
1) OJ 1 Interpret legislation, regulations, and public policy affecting the fashion and interior industry	21.7%
2) OJ 2 Analyze personal/employer responsibilities and liabilities regarding industry-related safety, security, and environmental factors	51.42%
3) OJ 3 Analyze the effects of security and inventory control strategies, laws, worksite policies, and how they affect loss prevention and store profit	75%
4) OJ 4 Demonstrate procedures for reporting and handling accidents, safety, and security incidents	52.83%
7) OJ 7 Examine operational costs such as markups, markdowns, cash flow, and other factors affecting profit	73.11%
8) OJ 8 Explain the effect of quality on profit	72.64%
9) OJ 9 Identify the effects of continuous quality improvement	44.81%
10) OJ 10 Review measuring, estimating, ordering, purchasing, and pricing skills	60.85%
11) OJ 11 Apply and use laboratory techniques and equipment safely	86.32%

Assessment: Financial Services
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Financial Services
- Accumulating results

Number tested: 671

KOSSA Program Areas



3) OE 3 Greet and assist customers	83.16%
6) OF SAFETY AND SECURITY PROCEDURES	79.16%
1) OF 1 Know the importance of securing cash and cash items	80.1%
2) OF 2 Identify valid currency	86.74%
3) OF 3 Be attentive and aware of your surroundings	87.33%
4) OF 4 Understand the importance of audits and regulations	70.34%
7) OG BANKING OPERATIONS	65.19%
1) OG 1 Sort and count currency and coins by denominations	70.04%
2) OG 2 Compute simple and compound interest	23.7%
3) OG 3 Open, close, and reconcile teller stations	66.92%
4) OG 4 Understand debits and credits	58.57%
5) OG 5 Verify cash transactions	59.61%
6) OG 6 Provide customers with their account information	81.22%
7) OG 7 Reconcile accounts with statements	52.61%
8) OG 8 Verify interest on accounts	25.48%
9) OG 9 Prepare customer deposit slips	68.11%
10) OG 10 Prepare cash in and cash out tickets	66.02%
12) OG 12 Process check with cash return for deposit	66.72%
13) OG 13 Recognize negotiable instruments	56.04%
15) OG 15 Receive loan application	91.65%
16) OG 16 Process loan requests	89.94%
17) OG 17 Accept loan payments	67.29%
18) OG 18 Understand the loan collection process	72.88%

Assessment: Food Science & Processing Systems
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Food Science & Processing System
- Accumulating results

Number tested: 106

KOSSA Program Areas

– Food Science & Processing System	54.68%
1) OA FOOD SCIENCE TRENDS	56.6%
1) OA 1 Discuss the history and describe /explain the components (e.g., processing, distribution, byproducts) of the food products and processing industry	56.6%
2) OB REGULATORY GROUPS AND LAWS	40.88%
1) OB 1 Explain the purpose of agencies (i.e. ,USDA, FDA, WHO) that are part of/or regulate the food products and processing industry	44.34%
4) OB 4 Explain the importance and usage of industry standards in food products and processing	33.96%
4) OD HAZARD ANALYSIS AND CRITICAL POINT (HACCP)	57.55%
1) OD 1 Describe contamination hazards and outline procedures to eliminate possible contamination hazards (e.g., physical, chemical, biological) associated with food products and processing	57.55%
5) OE SAFETY AND SANITATION	61.67%
1) OE 1 Explain techniques and procedures for the safe handling of food products	41.51%
2) OE 2 Evaluate food product handling procedures	65.09%
3) OE 3 Demonstrate approved food product handling techniques	56.6%
5) OE 5 Perform quality assurance tests on food products	83.02%
8) OE 8 Explain the importance of microbiological tests in food product preparation, listing common spoilage and pathogenic microorganisms	57.55%
9) OE 9 Conduct and interpret microbiological tests for foodborne pathogens and implement corrective procedures	87.74%
12) OE 12 Demonstrate proper record keeping (e.g., good agricultural practices, HACC) in a food products and processing system	60.38%
7) OG SCIENCE APPLICATION	58.84%
4) OG 4 Explain the application of chemistry to food science	67.92%
5) OG 5 Explain how the chemical and physical properties of foods influence	

nutritional value and eating quality	45.28%
6) OG 6 Determine the chemical and physical properties of food products	62.89%
7) OG 7 Explain the Food Guide Pyramid in relation to essential nutrients for the human diet	63.21%
11) OG 11 Compare and contrast food constituents and their relative value to product taste and appearance	52.83%
12) OG 12 Analyze food products to identify food constituents	60.38%
14) OG 14 Describe the purpose of common food additives	66.04%
17) OG 17 Explain the required components of a food label	23.58%
20) OG 20 Plan and create a new food product	66.98%
21) OG 21 Perform sensory testing and marketing functions to characterize and determine consumer preference and market potential	74.53%
8) OH HARVESTING, SELECTION, AND INSPECTION	76.42%
7) OH 7 Identify and describe accepted animal treatment and harvesting techniques	79.25%
10) OH 10 Describe the importance of pre-mortem and post-mortem inspections of animals for harvest	73.58%
9) OI EVALUATION OF FOOD PRODUCTS	52.43%
1) OI 1 Identify and describe foods derived from meat, egg, poultry, fish, and dairy products	55.42%
2) OI 2 Discuss desirable qualities of processed meat, egg, poultry, fish, and dairy products	42.45%
3) OI 3 Evaluate, grade, and classify processed meat, egg, poultry, fish, and dairy products	65.09%
5) OI 5 Discuss desirable qualities of fruit and vegetable products	37.74%
10) OJ FOOD PROCESSING	42.74%
2) OJ 2 Weigh and measure food products and perform conversions between units of measure	20.75%
4) OJ 4 Explain methods and materials for processing foods for sale as fresh food products	24.53%
7) OJ 7 Identify methods of food preservation and give examples of foods preserved by each method	34.91%
8) OJ 8 Explain the processes of food preservation methods	48.11%
10) OJ 10 Explain techniques for preparing ready-to-eat food products	27.36%
13) OJ 13 Explain materials and methods of food packaging and presentation	77.36%

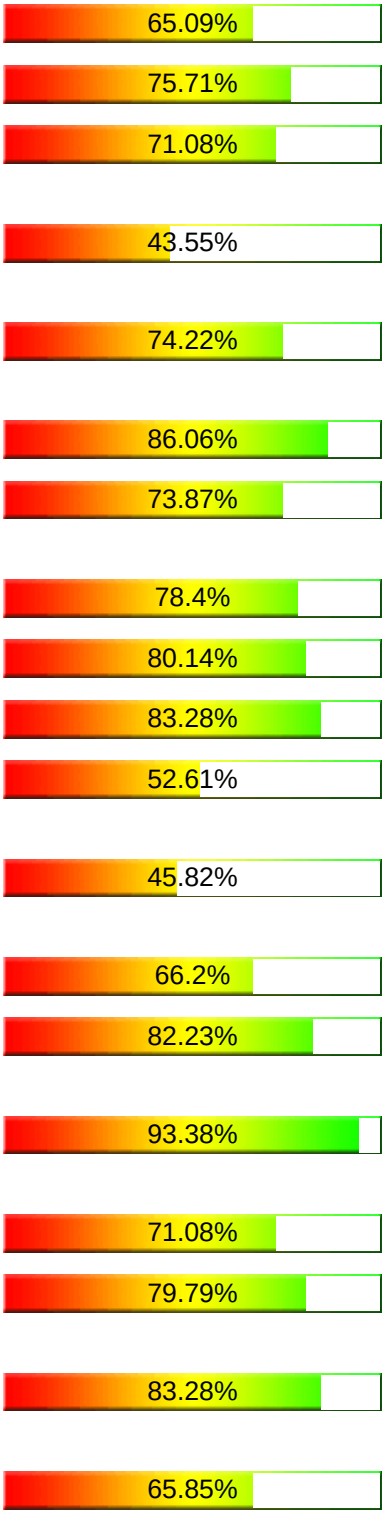
16) OJ 16 Identify and explain storage conditions to preserve product quality

18) OJ 18 Compare and contrast foods stored under varying conditions for quality, shelf life, and intended use

Assessment: Graphic Design
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Graphic Design
- Accumulating results

Number tested: 287

KOSSA Program Areas



4) OD 4 Key information into computer equipment to create layouts for client or supervisor — 86.76%

5) OE ELEMENTS & PRINCIPLES OF DESIGN — 59.91%

1) OE 1 Identify the applications of color, line, shape, texture, size, and value in samples of graphic work — 60.1%

2) OE 2 Analyze the use of color, line, shape, texture, size, and value in samples of graphic work — 43.9%

6) OE 6 Analyze the principles of balance, contrast, alignment, rhythm, repetition, movement, harmony, emphasis, and unity in samples of graphic works — 85.54%

7) OE 7 Incorporate principles of balance, contrast, alignment, rhythm, repetition, movement, harmony, emphasis, and unity in student-generated graphic works — 74.56%

9) OE 9 Identify the anatomical components and qualities of type (i.e., x-height, ascenders, descenders, counters) — 55.92%

10) OE 10 Apply and adjust formatting to type — 33.1%

11) OE 11 Construct graphic works utilizing and manipulating type — 81.18%

12) OE 12 Apply effective use of negative space, composition, message structure, and graphics to graphic works — 14.63%

13) OE 13 Create graphic works utilizing grids — 58.54%

14) OE 14 Create graphic works utilizing templates — 55.75%

16) OE 16 Demonstrate layout skills for digital media — 23.69%

18) OE 18 Explain the importance of usability — 51.57%

20) OE 20 Apply measurement tools and ratio analysis to image positioning in graphic works — 86.76%

21) OE 21 Solve aspect ratio proportion measurement in video and animation development — 77%

6) OF PRODUCTION & INDUSTRY STANDARD SOFTWARE — 61.77%

1) OF 1 Generate project ideas through the use of thumbnails, roughs, mock-ups, and wireframes — 11.15%

3) OF 3 Analyze differences and appropriate applications of vector-based and bitmap images — 53.31%

4) OF 4 Use a variety of input devices to import photos, images, and other content — 72.82%

5) OF 5 Incorporate the use of image manipulation and illustration software into final products — 92.68%

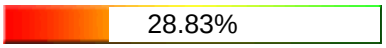
6) OF 6 Apply nondestructive image editing techniques such as layering and

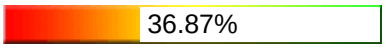
masking	52.96%
8) OF 8 Practice in-camera composition and cropping	74.56%
9) OF 9 Use appropriate resolution, compression, and file formats for various media outputs including web, video, and print	36.59%
10) OF 10 Incorporate appropriate color modes in graphic works including but not limited to RGB and CMYK	67.6%
15) OF 15 Explain the design process	82.58%
17) OF 17 Analyze branding and corporate identity (i.e., purpose, constituents)	67.6%
7) OG CREATE & MAINTAIN A PERSONAL PORTFOLIO	49.13%
2) OG 2 Develop graphics portfolios that include traditional and digital works	30.31%
3) OG 3 Recognize that portfolios are dynamic and require maintenance	67.94%

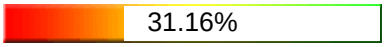
Assessment: Horticulture
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Horticulture
- Accumulating results

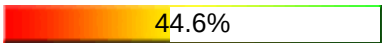
Number tested: 1953

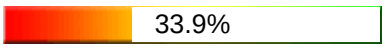
KOSSA Program Areas

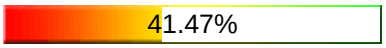


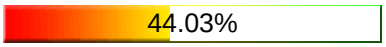


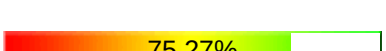












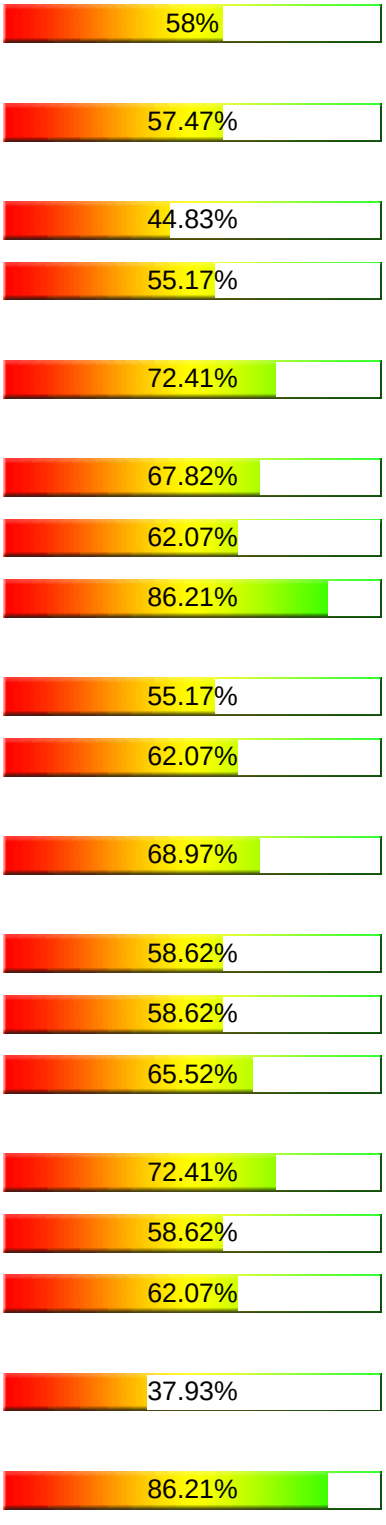
2) OC2 Describe processes for servicing equipment according to

manufacturer's recommendations	67.38%
3) OC3 Compare and contrast methods of plant propagation (e.g., tissue culture, grafting, layering, cutting, stolonizing)	44.5%
4) OC4 Differentiate various watering technologies and methods	65.75%
5) OC5 Determine proper techniques to control and manage plant growth through mechanical, cultural, and chemical means	47.47%
7) OC7 Examine the importance of macronutrients and micronutrients to plant growth	55.91%
8) OC8 Identify major local weeds, insect pests and infectious and noninfectious plant diseases in horticultural crops	45.06%
9) OC9 Predict pest and diseases problems based on environmental conditions and life cycles	50.28%
10) OC10 Outline pest control strategies associated with integrated pest management	47.13%
11) OC11 Explain safe handling and application of chemicals	54.25%
13) OC13 Generalize how GMO's impact the horticulture industry	54.74%
4) OD APPLY PRINCIPLES OF DESIGN IN PLANT SYSTEMS TO ENHANCE THE ENVIRONMENT (E.G., FLORAL, FOREST, LANDSCAPE, FARM)	63.29%
1) OD1 Explain design elements of line, form, texture and color and express the visual effect each has on the viewer	75.22%
2) OD2 Discuss the applications of art in agriculture/horticulture	51.36%
5) OE EFFECTIVELY UTILIZE BUSINESS/MARKETING STRATEGIES TO DEVELOP A SUCCESSFUL OPERATION	57.74%
1) OE1 Discuss how imports and exports impact the horticulture markets in the US and abroad	29.24%
3) OE3 Distinguish roles and responsibilities of state and federal government agencies as they impact horticulture businesses	67%
4) OE4 Examine the impact of environmental issues on horticulture production (e.g., surface or ground water, government regulations, chemical residue, runoff, water testing)	67.59%
5) OE5 Assess methods to determine target audience and products for a horticulture business	68.56%
6) OE6 Outline the types of fixed and variable costs in horticulture production	48.9%
7) OE7 Develop production, maintenance and harvest schedules for horticulture crops	62.78%

Assessment: Hospitality Services
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Hospitality Services
- Accumulating results

Number tested: 30

KOSSA Program Areas



6) OF APPROPRIATE LAUNDERING PROCESSES	79.31%
2) OF 2 Demonstrate laundry procedures	79.31%
7) OG FACILITIES MANAGEMENT FUNCTIONS	56.9%
1) OG 1 Demonstrate quality customer service which exceeds expectations	79.31%
2) OG 2 Examine the elements involved in staff planning, recruiting, interviewing, and selecting of employees	58.62%
6) OG 6 Apply principles of purchasing and receiving in facility management operations	48.28%
7) OG 7 Implement inventory procedures and maintain receipts and disbursement records	68.97%
8) OG 8 Apply accounting principles in planning and forecasting profit and loss	34.48%
9) OG 9 Implement a marketing plan	51.72%
8) OH CAREER PATH WITHIN THE HOSPITALITY, TOURISM, AND RECREATION INDUSTRIES	60.92%
1) OH 1 Determine the roles and functions of individuals engaged in hospitality, tourism, and recreation careers	72.41%
2) OH 2 Examine education and training requirements and opportunities for career paths in hospitality, tourism, and recreation	72.41%
3) OH 3 Examine the impact of hospitality, tourism, and recreation occupations on local, state, national, and global economies	37.93%
9) OI PROCEDURES APPLIED TO SAFETY, SECURITY, AND ENVIRONMENTAL ISSUES	43.45%
1) OI 1 Examine the importance of safety, security, and environmental issues related to the hospitality, tourism, and recreation industries	31.03%
2) OI 2 Demonstrate ability to ensure customer safety	41.38%
3) OI 3 Manage evacuation plans and emergency procedures	51.72%
4) OI 4 Examine utilization of resources and ways to conserve them	37.93%
5) OI 5 Design a system for documenting and investigating reports related to safety, security, and environmental issues	55.17%
10) OJ CONCEPTS OF SERVICE TO MEET CUSTOMER EXPECTATIONS	73.56%
1) OJ 1 Practice service methods which exceed the expectations of customers	79.31%
3) OJ 3 Employ strategies for resolving complaints	65.52%
5) OJ 5 Measure the impact customer relations have on the needs of special populations	75.86%
11) OK PRACTICES AND SKILLS INVOLVED IN LODGING OCCUPATIONS	57.64%

1) OK 1 Demonstrate front desk skills	79.31%
2) OK 2 Perform cash handling, accounting, and financial transactions	41.38%
3) OK 3 Manage convention, meeting, and banquet support functions	44.83%
4) OK 4 Apply basic skills in food and catering services	48.28%
5) OK 5 Manage use, care, maintenance, and storage of equipment, tools, and supplies	86.21%
7) OK 7 Apply time and work management to facility services tasks	34.48%
8) OK 8 Perform appropriate work roles within the sales and marketing division	68.97%
12) OL PRACTICES AND SKILLS FOR TRAVEL RELATED SERVICES	51.03%
1) OL 1 Examine geography, climate, sites, and time zones of various regions and countries	27.59%
3) OL 3 Inspect food, beverage, and etiquette for various regions and countries	65.52%
4) OL 4 Assemble information needed for domestic and international travel	48.28%
5) OL 5 Produce travel documents and itineraries	65.52%
13) OM MANAGEMENT OF RECREATION, LEISURE, AND OTHER PROGRAMS AND EVENTS	54.68%
1) OM 1 Coordinate client inquiries and requests	41.38%
2) OM 2 Design themes, time lines, budgets, agendas, and itineraries	41.38%
3) OM 3 Organize locations, facilities, suppliers, and vendors for specific services	68.97%
4) OM 4 Prepare for distribution of event materials	68.97%
5) OM 5 Demonstrate skills related to promoting and publicizing events	51.72%

Assessment: Information Support & Services
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard INFORMATION SUPPORT AND SERVICES
- Accumulating results

Number tested: 390

KOSSA Program Areas

– INFORMATION SUPPORT AND SERVICES	62.14%
1) OA COMPUTER LITERACY	72.67%
9) OA 9 Navigate a World Wide Web browser	78.97%
12) OA 12 Identify what an operating system is, how it works, and be able to solve common problems	84.62%
14) OA 14 Discriminate between ethical and unethical uses of computers and information	67.69%
18) OA 18 Identify types of computers, platforms, and devices explaining how they process information and how individual computers interact with other computing systems and devices	77.82%
19) OA 19 Identify the function of computer hardware components	79.49%
21) OA 21 Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded	42.31%
2) OB INFORMATION TECHNOLOGY PROJECT MANAGEMENT	47.76%
2) OB 2 Determine the purpose and goals of the project	28.46%
3) OB 3 Identify target audience	50.51%
4) OB 4 Identify stakeholders and decision makers	53.33%
7) OB 7 Estimate time requirements	58.72%
3) OC COMPUTER MAINTENANCE ESSENTIALS	59.67%
1) OC 1 Identify the names, purpose, and characteristics of computer systems and peripheral devices (e.g., motherboards, expansion/adapter cards, processors, cooling systems, memory, storage devices, power supplies, input devices, cables, output devices)	46.67%
7) OC 7 Identify locations, purposes, and characteristics of operating system files	71.03%
8) OC 8 Create, view, and manage disks, directories, and files in operating systems	58.72%
9) OC 9 Identify tools, diagnostic procedures, and troubleshooting techniques for operating systems	36.41%

12) OC 12 Describe basic physical networking connectivity concepts (e.g., cables, connectors, connection types, network devices) 65.38%

13) OC 13 Install, configure, and troubleshoot network interfaces and manage wired/wireless connections 72.56%

18) OC 18 Convert among decimal, binary, and hexadecimal number systems 66.92%

4) OD ADVANCED COMPUTER MAINTENANCE 44.74%

5) OD 5 Identify the steps to use appropriate tools, diagnostic procedures, and troubleshooting techniques to diagnose power conditions, video, keyboard, pointer, and network connectivity issues in portable devices (e.g., multimeters, anti-static devices, loopback plugs, specialty tools, cleaning products, cable testers) 63.85%

6) OD 6 Use command line functions and utilities, including proper syntax, to manage and troubleshoot operating systems (e.g., msconfig, regedit, chkdsk) 62.82%

8) OD 8 Demonstrate ability to recover operating systems 40.51%

9) OD 9 Implement basic network components (e.g., server, switch, router, access point) 28.21%

10) OD 10 Identify names, purposes, and characteristics of basic IP networks and terminologies (e.g. port identification, usage) 36.54%

5) OE OPERATING SYSTEM SUPPORT 65.79%

2) OE 2 Identify the steps to perform post installation configuration (e.g., user configuration, apply service packs) 70.26%

3) OE 3 Answer end user questions related to upgrading from a previous version of an operating system 79.74%

4) OE 4 Identify and troubleshoot system startup and user logon problems 74.36%

5) OE 5 Identify the steps to monitor and analyze system performance 79.23%

7) OE 7 Identify the steps to configure support for multiple languages or multiple locations 58.72%

9) OE 9 Identify the steps to configure and troubleshoot end user systems using remote access 61.79%

10) OE 10 Identify and describe how and when to use hard drive imaging as a repair tool 36.41%

6) OF SMALL NETWORK SUPPORT 65.38%

2) OF 2 Verify and troubleshoot network and Internet connectivity 65.38%

7) OG APPLICATIONS SUPPORT 68.21%

1) OG 1 Explain troubleshooting guidelines and tools to support users running applications 59.49%

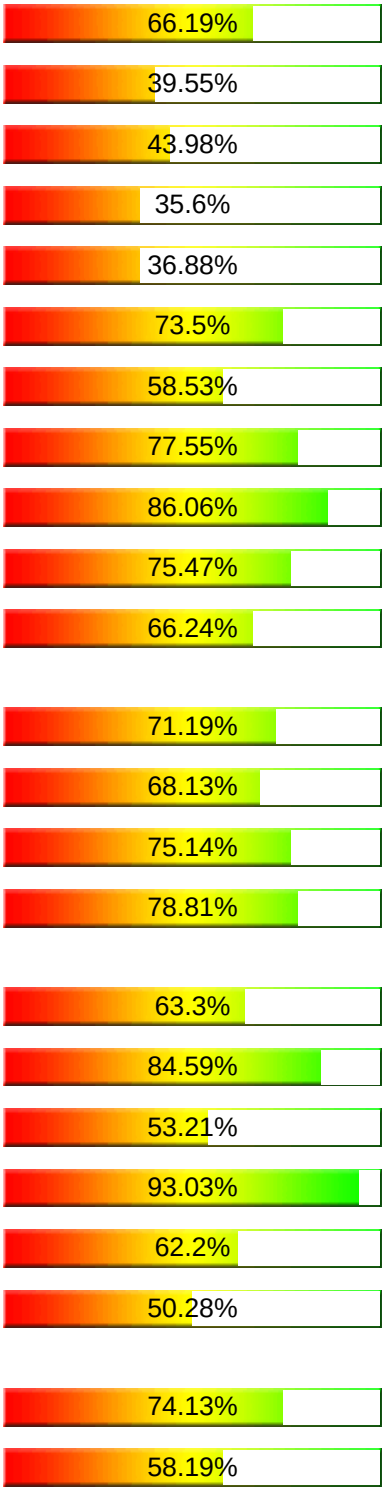
3) OG 3 Troubleshoot application installation and compatibility issues 59.23%

6) OG 6 Troubleshoot issues related to personal information management	86.15%
7) OG 7 Identify the steps to backup client email	75.38%
8) OG 8 Identify the steps to configure and troubleshoot application access on a network	60.77%
8) OH GREEN INFORMATION TECHNOLOGY	65.38%
2) OH 2 Explain ways to make the work space more energy efficient	83.59%
3) OH 3 Identify benefits of working in a non-traditional work environment	47.18%
9) OI HELP DESK SERVICE SKILLS AND TOOLS	66.3%
1) OI 1 Analyze the role of a help desk and customer service in an organization	91.54%
2) OI 2 Describe different computer support roles (e.g., bench tech, field tech, telephone support)	53.59%
3) OI 3 Describe technology trends and current issues such as virus outbreaks, virtual environment, cloud computing, and personal devices	76.92%
5) OI 5 Interact with customers over the telephone	62.31%
7) OI 7 Demonstrate technical writing skills	60.77%
10) OI 10 Demonstrate personal, system, and stress management by using self-help tools	73.08%
11) OI 11 Identify and utilize how best to use call management software	40%
14) OI 14 Identify and implement the steps to use alerts and notification tools for support	61.54%
16) OI 16 Evaluate trends in hardware and software failures	76.92%
10) OJ INDUSTRY CERTIFICATION	62.56%
1) OJ 1 Describe the process and requirements for obtaining industry certification related to information support and services	62.56%
11) OK CAREER PATHWAYS IN INFORMATION SUPPORT AND SERVICES	64.1%
1) OK 1 Identify careers in the information support and services field	64.1%

Assessment: Manufacturing
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard MANUFACTURING
- Accumulating results

Number tested: 545

KOSSA Program Areas



1) OD 1 Define basic blueprint terminology	57.19%
2) OD 2 Interpret commonly used abbreviations and terminology	53.58%
3) OD 3 Identify types of lines within a drawing	66.61%
5) OE WORKPLACE SKILLS	90.46%
1) OE 1 Demonstrate safe, careful use, treatment and maintenance of tools, equipment, and machines	90.46%

Assessment: Marketing
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard MARKETING
- Accumulating results

Number tested: 1930

KOSSA Program Areas

– MARKETING	64.51%
1) OA ECONOMIC PRINCIPLES	62.44%
1) OA 1 Distinguish between economic goods and services	69.95%
2) OA 2 Explain the concept of economic resources (e.g., land, labor, capital, entrepreneurship)	61.09%
5) OA 5 Explain the principles of supply and demand	70.05%
7) OA 7 Determine the role of government (e.g., regulator, provider of services, competitor, supporter, protection agencies) in business	69.74%
9) OA 9 Identify factors (e.g., economics, human, nature) effecting a business's profit	47.67%
10) OA 10 Describe ways competition affects business decisions	56.11%
2) OB BUSINESS, MANAGEMENT, AND ENTREPRENEURIAL CONCEPTS	66.89%
1) OB 1 Explain the social responsibility (e.g., environmental issues, ethical decisions, community involvement) of business in society	39.38%
2) OB 2 Describe types of business activities (e.g., market research, financial analysis, marketing, human resources)	77.36%
3) OB 3 Explain the process of purchasing (e.g., information gathering, open-to-buy, selecting suppliers)	67.15%
5) OB 5 Calculate gross and net sales	60.83%
6) OB 6 Explain the role of management (e.g., planning, organizing, controlling) in business	73.5%
7) OB 7 Explain the use of various business records (i.e., income statement, balance sheet, sales records, employment records)	68.96%
8) OB 8 Analyze the types of business ownership (e.g., sole proprietorship, partnership, corporation)	76.58%
9) OB 9 Analyze the effect business trends have on decision making	74.72%
11) OB 11 Explain ways to handle business risk (i.e., risk prevention & control, risk transfer, risk retention, risk avoidance)	63.01%
3) OC CHANNEL MANAGEMENT	63.31%

1) OC 1 Differentiate between direct and indirect channels of distribution	52.12%
2) OC 2 Identify the channels of distribution members (e.g., manufacturer, wholesaler, retailer)	58.08%
4) OC 4 Identify, prepare, and explain the use of invoices	78.39%
5) OC 5 Explain the process and procedures of receiving merchandise (e.g., receiving, checking, marking)	70.98%
6) OC 6 Explain the transportation systems and services used in distribution (e.g., motor, rail, water, air)	56.94%
4) OD MARKETING INFORMATION MANAGEMENT	58.37%
1) OD 1 Describe how marketing information is used in business decisions	72.52%
2) OD 2 Identify ways to obtain market data for market research (e.g., surveys, interviews, observations, trade publications, internet sources)	61.19%
3) OD 3 Differentiate between primary and secondary data	13.11%
5) OE FUNDAMENTAL MARKETING CONCEPTS	62.91%
1) OE 1 Explain the marketing concept	19.53%
2) OE 2 Identify and describe the components of the marketing mix (ie, product, price, placement, promotion)	84.77%
3) OE 3 Describe market segmentation methods used to identify target market (i.e., demographics, geographic, psychographics, product benefits and behavioral)	78.34%
4) OE 4 Identify the characteristics of a target market	49.79%
5) OE 5 Explain the concept of product mix	63.37%
6) OE 6 Compare various pricing strategies and explain the goals of pricing	56.32%
7) OE 7 Explain factors affecting pricing decision (e.g., cost, competition, economic factors)	70.73%
8) OE 8 Explain the seven marketing functions (e.g., distribution, pricing, selling, promotion, product service management, marketing info management, financing)	80.41%
6) OF ADVERTISING AND PROMOTION	72.39%
1) OF 1 Explain the concept of branding	76.48%
3) OF 3 Explain the role of promotion as a marketing function	61.5%
4) OF 4 Explain the types of advertising (e.g. radio, television, direct mail, outdoor, newspaper, Internet, social media)	80.78%
5) OF 5 Identify the advantages and disadvantages of each type of advertising	68.65%
6) OF 6 Identify the elements of the promotional mix (i.e., advertising, publicity, sales promotion, personal selling)	74.56%

7) OG SELLING — 64.16%

1) OG 1 Acquire and analyze product information (e.g., labels, manufacturer, product manuals) used in selling — 81.45%

2) OG 2 Prepare for the sales presentation — 43.58%

4) OG 4 Identify methods of approaching (e.g., greeting, service, merchandise, combination) the customer — 65.96%

5) OG 5 Explain how to determine customer needs and expectations in selling process — 54.61%

8) OG 8 Explain techniques (e.g., boomerang, denial, demonstration) used to convert customer/client objections into selling points — 67.72%

11) OG 11 Identify the procedures of departure and follow-up (e.g., receipt, reassurance, thank you, phone calls, written correspondence) in the selling process — 66.27%

12) OG 12 Explain the role of customer service as a component of selling relationships — 79.74%

13) OG 13 Explain business ethics in selling — 82.23%

14) OG 14 Identify customer buying motives used in selling — 41.92%

16) OG 16 Compare and contrast warranties and guarantees — 58.08%

Assessment: Network Administration
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard NETWORK ADMINISTRATION
- Accumulating results

Number tested: 276

KOSSA Program Areas

– NETWORK ADMINISTRATION	62.67%
1) OA COMPUTER LITERACY	76.14%
9) OA 9 Navigate a World Wide Web browser	81.16%
12) OA 12 Identify what an operating system is, how it works, and be able to solve common problems	82.25%
14) OA 14 Discriminate between ethical and unethical uses of computers and information	71.74%
18) OA 18 Identify types of computers, platforms, and devices explaining how they process information and how individual computers interact with other computing systems and devices	82.25%
19) OA 19 Identify the function of computer hardware components	84.78%
21) OA 21 Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded	48.55%
2) OB INFORMATION TECHNOLOGY PROJECT MANAGEMENT	50.54%
2) OB 2 Determine the purpose and goals of the project	26.09%
3) OB 3 Identify target audience	54.71%
4) OB 4 Identify stakeholders and decision makers	53.26%
7) OB 7 Estimate time requirements	68.12%
3) OC COMPUTER MAINTENANCE ESSENTIALS	64.8%
1) OC 1 Identify the names, purpose, and characteristics of computer systems and peripheral devices (e.g., motherboards, expansion/adapter cards, processors, cooling systems, memory, storage devices, power supplies, input devices, cables, output devices)	54.71%
7) OC 7 Identify locations, purposes, and characteristics of operating system files	76.45%
8) OC 8 Create, view, and manage disks, directories, and files in operating systems	63.04%
9) OC 9 Identify tools, diagnostic procedures, and troubleshooting techniques for operating systems	42.39%

12) OC 12 Describe basic physical networking connectivity concepts (e.g., cables, connectors, connection types, network devices) 69.57%

13) OC 13 Install, configure, and troubleshoot network interfaces and manage wired/wireless connections 78.26%

18) OC 18 Convert among decimal, binary, and hexadecimal number systems 69.2%

4) OD ADVANCED COMPUTER MAINTENANCE 51.03%

5) OD 5 Identify the steps to use appropriate tools, diagnostic procedures, and troubleshooting techniques to diagnose power conditions, video, keyboard, pointer, and network connectivity issues in portable devices (e.g. multimeters, anti-static devices, loopback plugs, specialty tools, cleaning products, cable testers) 70.29%

6) OD 6 Use command line functions and utilities, including proper syntax, to manage and troubleshoot operating systems (e.g., msconfig, regedit, chkdsk) 79.35%

8) OD 8 Demonstrate ability to recover operating systems 55.07%

9) OD 9 Identify and implement basic network components (e.g., server, switch, router, access point) 26.81%

10) OD 10 Identify names, purposes, and characteristics of basic IP networks and terminologies (e.g. port identification, usage) 37.32%

5) OE OPERATING SYSTEM SUPPORT 67.03%

2) OE 2 Identify the steps to perform post installation configuration (e.g., user configuration, apply service packs) 66.3%

3) OE 3 Answer end user questions related to upgrading from a previous version of an operating system 81.88%

4) OE 4 Identify and troubleshoot system startup and user logon problems 78.62%

5) OE 5 Identify the steps to monitor and analyze system performance 83.7%

7) OE 7 Identify the steps to configure support for multiple languages or multiple locations 56.88%

9) OE 9 Identify the steps to configure and troubleshoot end user systems using remote access 65.22%

10) OE 10 Identify and describe how and when to use hard drive imaging as a repair tool 36.59%

6) OF SMALL NETWORK SUPPORT 74.28%

2) OF 2 Verify and troubleshoot network and Internet connectivity 74.28%

7) OG APPLICATIONS SUPPORT 67.9%

1) OG 1 Explain troubleshooting guidelines and tools to support users running applications 59.06%

3) OG 3 Troubleshoot application installation and compatibility issues 55.43%

6) OG 6 Troubleshoot issues related to personal information management	88.41%
7) OG 7 Identify the steps to backup client email	76.81%
8) OG 8 Identify the steps to configure and troubleshoot application access on a network	59.78%
8) OH GREEN INFORMATION TECHNOLOGY	67.75%
2) OH 2 Explain ways to make the work space more energy efficient	86.59%
3) OH 3 Identify benefits of working in a non-traditional work environment	48.91%
9) OI NETWORKING FUNDAMENTALS	53.47%
5) OI 5 Describe and compare the protocols, services, and functions provided in the OSI and TCP/IP models and describe how each layer operates in various networks (encapsulation)	49.28%
8) OI 8 Demonstrate understanding of basic network structure and physical/logical topologies	29.35%
9) OI 9 Describe the characteristics of networking media types and connectors	54.35%
11) OI 11 Differentiate between network protocols in terms of routing, addressing schemes, interoperability, and naming conventions	38.04%
17) OI 17 Define the basic purposes and capabilities of firewalls, proxy servers, VLANs, extranets, and intranets	67.75%
19) OI 19 Identify good practices to ensure network security including antivirus software an authentication mechanisms	50%
20) OI 20 Use the appropriate TCP/IP utilities to test, validate, and troubleshoot IP connectivity (e.g. Ping, tracenet, IP config, MBstat, Netstat)	85.51%
10) OJ ROUTING PROTOCOLS AND CONCEPTS	40.58%
5) OJ 5 Identify and troubleshoot errors that occur in small routed networks	40.58%
12) OL LAN SWITCHING AND WIRELESS	64.13%
5) OL 5 Describe standards associated with wireless media, such as IEEE WI-FI Alliance, ITU/FCC, A, B, G, N standards	64.13%
13) OM INDUSTRY CERTIFICATION	60.14%
1) OM 1 Describe the process and requirements for obtaining industry certification related to networking	60.14%
14) ON CAREER PATHWAYS IN NETWORKING	80.8%
1) ON 1 Identify careers in the networking field	80.8%

Assessment: Production Crop
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Production Crop
- Accumulating results

Number tested: 23

KOSSA Program Areas

– Production Crop	56.61%
1) OA BASIC PLANT SCIENCE CONCEPTS AND SKILLS	52.72%
7) OA 7 Utilize appropriate variety selection techniques	52.17%
8) OA 8 Demonstrate ability to read and utilize seed tag information	39.13%
9) OA 9 Demonstrate acceptable agronomic practices (e.g., seeding rates, plant spacing, planting dates)	17.39%
10) OA 10 Identify appropriate seed bed preparation techniques (e.g., no-till, conventional-till, rotations)	91.3%
11) OA 11 Identify appropriate techniques for harvesting and storage of crops	39.13%
12) OA 12 Understand plant growth requirements	71.74%
2) OB INDUSTRY RESOURCES	55.65%
1) OB 1 Apply use of related electronic technology (e.g., email, computer applications, GPS, precision farming)	47.83%
2) OB 2 Interpret the input of local, state, national, and international economy to production agriculture	43.48%
3) OB 3 Maintain awareness of current trends in production agriculture through industry associations, trade journals, and Internet resources	95.65%
3) OC FARM BUSINESS MANAGEMENT PRACTICES	63.04%
1) OC 1 Apply effective record keeping skills including financial records	52.17%
2) OC 2 Demonstrate knowledge of budgeting and cash flow	58.7%
3) OC 3 Understand requirements and sources of credit	69.57%
4) OC 4 Understand procedures related to buying, leasing, and renting land and/or equipment	52.17%
5) OC 5 Understand issues related to tax records and filing taxes	86.96%
4) OD MARKETING AND SALES STRATEGIES	52.17%
1) OD 1 Maintain an awareness of world trade issues (e.g., GMOs, drought, trade agreements)	39.13%
2) OD 2 Maintain an awareness of strategies relating to futures, forward cash	

contracts, and storage	69.57%
3) OD 3 Maintain an awareness of risk management practices such as crop insurance	52.17%
4) OD 4 Explore marketing resources (e.g., marketing clubs, extension programs, brokers, consultants)	47.83%
5) OE AGRICULTURAL MATHEMATICS SKILLS	47.83%
1) OE 1 Calculate break-even prices	36.96%
3) OE 3 Calculate area and volume measurements (e.g., acreage, storage, stocking)	73.91%
4) OE 4 Calculate fertilizer analysis	32.61%
6) OF EFFECTIVE LABOR MANAGEMENT TECHNIQUES	26.09%
1) OF 1 Demonstrate an understanding of the issues related to utilizing immigrant labor	26.09%
7) OG MONITOR AND CONTROL HEALTH, DISEASES, AND PESTS	75.36%
1) OG 1 Demonstrate effective pest management practices	91.3%
3) OG 3 Apply appropriate prevention techniques and treatments of plant diseases	69.57%
4) OG 4 Utilize understanding of plant nutrition in the management and prevention of diseases	65.22%
8) OH APPROPRIATE PRODUCTION TECHNIQUES	45.65%
1) OH 1 Utilize appropriate production techniques for crops (e.g., corn, soybeans, tobacco, forage)	45.65%
9) OI MANAGEMENT SAFETY PRACTICES	65.22%
1) OI 1 Follow anti-theft and security procedures	100%
2) OI 2 Identify hazardous substances in the workplace	65.22%
3) OI 3 Identify immediate and real cost of an accident	30.43%
10) OJ GOVERNMENT AND LEGAL ISSUES	69.57%
2) OJ 2 Demonstrate an understanding of agricultural law (e.g., border disputes, incorporation, liability issues, injury claims, attractive nuisance, farming in populated areas)	69.57%
11) OK INDUSTRY-RELATED TERMINOLOGY AND IDENTIFICATION SYSTEMS	55.43%
1) OK 1 Identify common agronomic plants, grains, feeds, and seeds	82.61%
3) OK 3 Use appropriate agricultural terminology	46.38%
13) OM BEST MANAGEMENT PRACTICES AS RELATES TO AGRICULTURAL ENVIRONMENTAL ISSUES	60.14%

1) OM 1 Utilize appropriate soil conservation practices

2) OM 2 Identify and apply appropriate water conservation practices

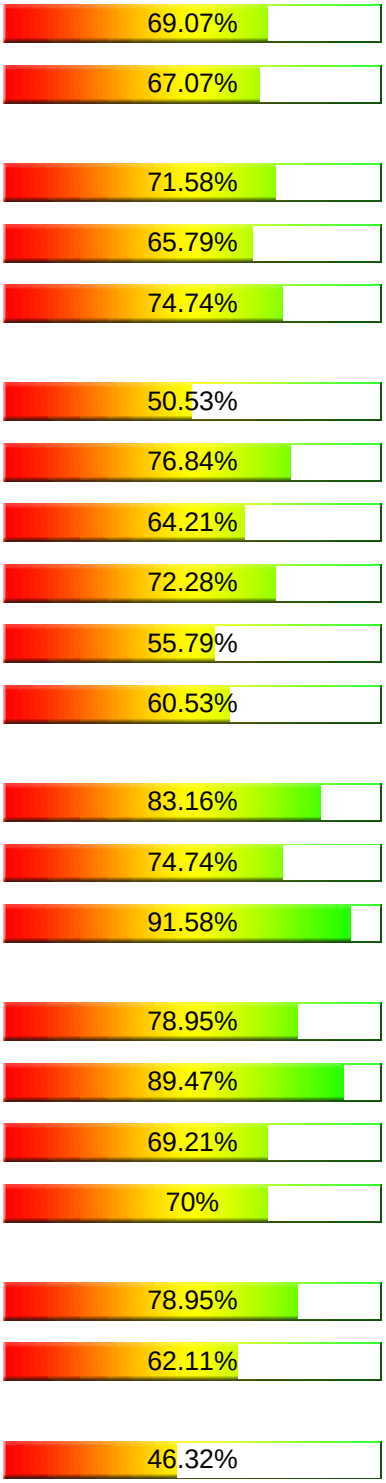
3) OM 3 Analyze and enhance soil fertility

4) OM 4 Assess fertilizer and pesticide applications

Assessment: Retail Services
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard RETAIL SERVICES
- Accumulating results

Number tested: 95

KOSSA Program Areas



5) OC 5 Explain the types of advertising (e.g., radio, tv, direct mail, outdoor, newspaper, Internet, social media)	90.53%
7) OC 7 Identify the purpose and types of visual merchandising (e.g., open, closed, room-setting, point-of-sale)	61.05%
8) OC 8 Explain the importance of the elements of design (e.g., balance, proportion, color, line) in visual merchandising	74.74%
4) OD SELLING	69.8%
1) OD 1 Acquire and analyze product information (e.g., labels, manufacturer, product manuals) used in selling	74.21%
2) OD 2 Explain the steps of the selling process (e.g., approach, determine needs/wants, present product)	52.63%
6) OD 6 Identify and demonstrate product features/benefits to match customer needs	87.37%
7) OD 7 Identify effective product presentation techniques (e.g., display, handling, demonstrating sales aids)	81.05%
8) OD 8 Explain techniques (e.g., boomerang, denial, demonstration) used to convert customer/client objections into selling points	61.58%
10) OD 10 Explain the methods and benefits of suggestion selling	71.05%
11) OD 11 Identify the procedures of departure and follow-up (e.g., receipt, reassurance, thank you, phone calls, written correspondence) in the selling process	63.16%
12) OD 12 Explain the role of customer service as a component of selling relationships	82.11%
18) OD 18 Explain proper procedures for packing merchandise	63.68%
5) OE STOCK HANDLING AND INVENTORY CONTROL	52.89%
1) OE 1 Explain the process and procedures of receiving merchandise (e.g., receiving, checking, marking)	29.47%
3) OE 3 Describe stock and re-stock procedures (e.g., LIFO, FIFO, rotation) for merchandise and operating supplies	63.16%
4) OE 4 Compare and contrast inventory processes (i.e., physical or perpetual)	55.79%
6) OF INVENTORY MANAGEMENT	71.84%
2) OF 2 Explain the procedures for returning inventory to manufacturer/vendor	84.21%
3) OF 3 Initiate and/or respond to requests for merchandise transfer	59.47%
7) OG LOSS PREVENTION	74.74%
1) OG 1 Identify the importance of loss prevention and its effect on business	53.68%
2) OG 2 Describe loss prevention methods (e.g., security cameras, ink tags)	70.53%

3) OG 3 Explain stock shrinkages and the importance of reporting

5) OG 5 Demonstrate the ability to follow store policy regarding security violations (e.g., shoplifting, pilferage, fraud)

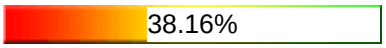
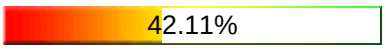
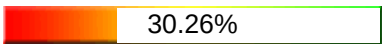
Assessment: Transportation
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard TRANSPORTATION
- Accumulating results

Number tested: 76

KOSSA Program Areas

– TRANSPORTATION	66.03%
1) OA COMMUNICATION AND TEAMWORK	79.61%
1) OA 1 Apply principles of interpersonal skills and team work to transportation situations	79.61%
2) OB MATH AND MEASUREMENT	50.66%
1) OB 1 Create and interpret basic graphs and charts commonly used in transportation accurately	36.84%
3) OB 3 Demonstrate proper general measurement techniques	65.79%
4) OB 4 Demonstrate competencies in technical mathematics and in the use of applicable measuring tools and techniques	63.16%
3) OC WORKPLACE SAFETY AND HEALTH	81.99%
2) OC 2 Wear protective safety clothing as required	82.89%
3) OC 3 Maintain and use protective guards and equipment on machinery	81.58%
4) OC 4 Identify, handle, and store flammable and hazardous materials appropriately	84.21%
5) OC 5 Use electrical devices correctly and safely	57.89%
6) OC 6 Practice proper waste disposal habits	68.42%
7) OC 7 Keep aisles clear of equipment and materials	85.53%
8) OC 8 Read and apply MSDS sheets	68.42%
9) OC 9 Operate equipment in a safe prescribed manner	89.47%
10) OC 10 Follow established safety procedures when around machinery or equipment	85.53%
12) OC 12 Operate hand tools in a safe prescribed manner	88.16%
13) OC 13 Know location of power shut off controls for all machinery and equipment	88.16%
14) OC 14 Report safety malfunctions to appropriate personnel	96.05%
15) OC 15 Inspect material, equipment, and fixtures to determine defects	93.42%

16) OC 16 Determine weight and operating limits of equipment	85.53%
17) OC 17 Perform periodic checks during operation to assure proper function	84.21%
20) OC 20 Demonstrate the ability to apply continuous quality improvement to transportation processes	72.37%
4) OD PROBLEM SOLVING	46.71%
2) OD 2 Determine causes of the problem	59.21%
3) OD 3 Apply problem-solving system	63.16%
4) OD 4 Recommend possible solutions	27.63%
5) OD 5 Inspect, troubleshoot, diagnose service, and/or verify compliance	36.84%
5) OE QUALITY ASSURANCE	67.11%
1) OE 1 Demonstrate compliance with manufacturers required specifications and/or industry standards	92.11%
2) OE 2 Identify how quality control systems influence specific transportation activities	42.11%
6) OF OPERATION, MAINTENANCE, & SERVICE PUBLICATION	54.82%
1) OF 1 Read and interpret operation, maintenance, and service publications and drawings	45.39%
2) OF 2 Interpret commonly used abbreviations and terminology	73.68%
7) OG BUSINESS ENVIRONMENT AND OPERATION	59.54%
1) OG 1 Identify opportunities for profit in transportation processes	67.11%
2) OG 2 Identify possible barriers to profit in transportation process	88.16%
4) OG 4 Define the term value added related to transportation process	53.95%
5) OG 5 Identify steps within transportation processes that determine cost	28.95%
8) OH WORKPLACE SKILLS	80.26%
2) OH 2 Demonstrate basic mechanical and manipulative motor skills	89.47%
3) OH 3 Demonstrate the ability to troubleshoot, diagnose, service, inspect, and/or verify a transportation concern	71.05%
9) OI LEARNING SKILLS	55.26%
1) OI 1 Participate in product or process specific training	18.42%
2) OI 2 Demonstrate ability to learn new process steps	77.63%
4) OI 4 Read process instructions and implement appropriate steps	69.74%
10) OJ TRANSPORTATION FUNDAMENTALS	58.77%
1) OJ 1 Identify a variety of common tools and/or equipment	82.89%

2) OJ 2 Describe the function of specific tools and/or equipment	 55.26%
3) OJ 3 Interpret transportation resources to determine appropriate tool and/or equipment usage	 38.16%
11) OK COMPUTER USE	 58.33%
1) OK 1 Identify computer applications used in the transportation industry	 82.89%
2) OK 2 List various methods of tracking inventory quantities	 50%
3) OK 3 Identify factors that determine inventory demand	 42.11%
12) OL SCIENCE	 56.58%
1) OL 1 Describe the internal combustion engine cycle	 60.53%
2) OL 2 Apply Ohms law	 30.26%
4) OL 4 Describe the principle of basic hydraulics and pneumatics	 55.26%
5) OL 5 Describe hand tools as simple machines	 80.26%

Assessment: Web Development/Administration
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard WEB DEVELOPMENT/ADMINISTRATION
- Accumulating results

Number tested: 314

KOSSA Program Areas

– WEB DEVELOPMENT/ADMINISTRATION	60.67%
1) OA COMPUTER LITERACY	69.47%
9) OA 9 Navigate a World Wide Web browser	65.29%
12) OA 12 Identify what an operating system is, how it works, and be able to solve common problems	78.03%
14) OA 14 Discriminate between ethical and unethical uses of computers and information	62.1%
18) OA 18 Identify types of computers, platforms, and devices explaining how they process information and how individual computers interact with other computing systems and devices	85.19%
19) OA 19 Identify the function of computer hardware components	70.06%
21) OA 21 Identify how software and hardware work together to perform computing tasks and how software is developed and upgraded	40.45%
2) OB INFORMATION TECHNOLOGY PROJECT MANAGEMENT	47.93%
2) OB 2 Determine the purpose and goals of the project	24.52%
3) OB 3 Identify target audience	53.18%
4) OB 4 Identify stakeholders and decision makers	49.68%
7) OB 7 Estimate time requirements	64.33%
3) OC WEB DESIGN FUNDAMENTALS	65.13%
1) OC 1 Define basic web design vocabulary	79.72%
4) OC 4 Apply principles of design, (e.g., color theory and schemes, proximity, alignment, repetition, web graphics, optimization, typography) identify technical contraints, and create sample designs showing placement of buttons/navigational graphics and suggested color scheme	76.11%
8) OC 8 Define and create storyboards/thumbnails	68.15%
9) OC 9 Demonstrate web site accessibility and device standards such as 508 (The legislation referred to as "Section 508" is actually an amendment to the Workforce Rehabilitation Act of 1973. The amendment was signed into law by President Clinton on August 7, 1998. Section 508 requires that electronic and	

information technology that is developed by or purchased by the Federal Agencies be accessible by people with disabilities. The 1986 version of Section 508 established non-binding guidelines for technology accessibility while the 1998 version created binding, enforceable standards that are incorporated into the Federal Procurement process. In addition to providing for enforceable standards, the amended Section 508 established a complaint procedure and reporting requirements, which further strengthen the law. 62.1%

13) OC 13 Identify industry standard tags 48.73%

15) OC 15 Demonstrate basic coding of Hypertext Mark-up Language (HTML) and multiple HTML areas 62.55%

18) OC 18 Explain the pros and cons of web editors 86.62%

23) OC 23 Demonstate knowledge of CSS and use appropriate CSS techniques 45.86%

4) OD ADVANCED INTERACTIVE DESIGN 56.94%

1) OD 1 Identify web animation techniques 81.85%

3) OD 3 List procedures to capture digital video using a video camera 47.77%

4) OD 4 Describe techniques to edit and enhance digital video 90.76%

5) OD 5 Identfy web navigation standards (e.g., consistent, functioning, heirarchy) 46.82%

6) OD 6 Identify methods for incorporating and creating media for use on websites 80.57%

9) OD 9 Identify common file types and link these to the web document to add external images, sound, and video 78.98%

10) OD 10 Identify unique characteristics between HTML and other web based languages such as XML and XHTML 39.81%

12) OD 12 Compare and contrast client-side or server-side scripting as appropriate for a particular application 34.55%

14) OD 14 Characterize interactive elements of a website 67.52%

15) OD 15 Identify the characteristics of a secure web page 65.92%

16) OD 16 Identify characteristics of ethical user behavior 68.47%

20) OD 20 Collect and analyze usage statistics 55.41%

21) OD 21 Publicize a web design site and submit announcements to major search engines 33.12%

22) OD 22 Demonstrate knowledge of the quality assurance process, standards/requirements for QA, develop team relationships to support QA tasks, and perform quality assurance tasks to produce a quality product 32.8%

23) OD 23 Demonstrate knowledge of how to use advanced communication

protocols by having your own web server over using a hosting company — 87.9%

5) OE INDUSTRY CERTIFICATION — 59.87%

1) OE 1 Describe the process and requirements for obtaining industry certification related to web development and administration — 59.87%

6) OF CAREER PATHWAYS IN WEB DEVELOPMENT AND ADMINISTRATION — 41.4%

1) OF 1 Identify careers in the web development and administration field — 41.4%

Assessment: Welding
Standard Set: KOSSA Program Areas
Filters:
- Restricted to standard Welding
- Accumulating results

Number tested: 965

KOSSA Program Areas

– Welding	56.64%
1) OA SAFETY AND HEALTH OF WELDERS	56.99%
7) OA7 Demonstrates proper inspection and operation of equipment used for each welding and thermal cutting process.	56.99%
2) OB DRAWING AND WELDING SYMBOL INTERPRETATION	64.99%
1) OB1 Interprets basic elements of a drawing or sketch.	69.24%
2) OB2 Interprets welding symbol information.	56.48%
3) OC SHIELDED METAL ARC WELDING (SMAW)	60.27%
1) OC1 Performs safety inspections of SMAW equipment and accessories.	61.5%
3) OC3 Sets up for SMAW operations on carbon steel.	67.73%
4) OC4 Operates SMAW equipment on carbon steel.	58.91%
5) OC5 Makes fillet weld in all positions on carbon steel.	49.95%
6) OC6 Makes groove welds, in all positions, on carbon steel.	53.83%
4) OD GAS METAL ARC WELDING (GMAW-S, GMAW spray transfer)	38.03%
4) OD4 Short Circuiting Transfer: Operates GMAW-S equipment on carbon steel.	38.03%
6) OF GAS TUNGSTEN ARC WELDING (GTAW)	14.51%
4) OF4 Carbon Steel: Operates GTAW equipment on carbon steel.	14.51%
7) OG MANUAL OXYFUEL GAS CUTTING (OFC)	51.3%
1) OG1 Performs safety inspections of manual OFC equipment and accessories.	49.43%
2) OG2 Makes minor external repairs to manual OFC equipment and accessories.	65.28%
3) OG3 Sets up for manual OFC operations on carbon steel.	48.84%
4) OG4 Operates manual OFC equipment on carbon steel.	74.4%
5) OG5 Performs straight, square edge cutting operations, in the flat position, on carbon steel.	27.15%

9) OI MANUAL PLASMA ARC CUTTING (PAC)	66.53%
1) OI1 Performs safety inspections of manual PAC equipment and accessories.	66.53%
10) OJ MANUAL AIR CARBON ARC CUTTING (CAC-A)	38.76%
3) OJ3 Sets up for manual CAC-A scarfing and gouging operations on carbon steel.	38.76%
11) OK WELDING INSPECTION AND TESTING	50.79%
2) OK2 Examines tacks, root passes, intermediate layers, and completed welds.	50.79%