

ARTS, AV AND COMMUNICATION CAREER CLUSTER DESIGN

AV Communications Pathway – CIP Code 09.0702

Approved Pathway:

- 1) Includes minimum of three secondary-level credits.
- 2) Includes a work-based element.
- 3) Consists of a sequence:
Introductory-level,
Technical-level, and
Application-level
courses.
- 4) Supporting documentation includes Articulation Agreement(s), Certification, Program Improvement Plan, and a Program of Study.
- 5) Technical-level and Application-level courses receive .5 state-weighted funding in an approved CTE pathway.

INTRODUCTORY LEVEL

Business Essentials	12050	.5 credit
Computer Applications	10004/60004	1 credit

TECHNICAL LEVEL

*21st Century Journalism	30100	.5 credit
Digital Media Technology	30104	.5 credit
Media and Public Relations	43115	.5 credit
Audio/Video Production Fund	30103	.5 credit
Photo Imaging	30105	.5 credit
Graphic Design Fundamentals	30102	.5 credit
Graphic Design	05162/11154	1 credit
Marketing	12152	1 credit

APPLICATION LEVEL

Project Mgmt.& Resource Scheduling	21205	1 credit
Video Production	30150	1 credit
Digital Media Design & Production	30151	1 credit

*Required for pathway approval.

Name_____ID_____			Introductory-level course for Business Management and Administration, Hospitality and Tourism, Marketing and Finance Career Clusters (Unfunded) <i>This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.</i>
Instructor_____School Year_____			
Enrollment Date ____/____/____	Completion Date ____/____/____	Credits Completed _____	
I certify that the student received the training in the area indicated.			
Student Signature : _____Date _____			
Instructor Signature: _____Date _____			
RATING SCALE:3: Skilled, works independently; 2: Competent, may need assistance; 1: Received instruction, skill undeveloped; 0: No exposure, instruction or training. Measured competencies listed should be seen as minimums.			

Competencies reflect standards from National Career Clusters, National Business Education Association and The Council for Economic Education.

Topic	1	Academic Foundations	Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.							
Benchmark	1.01	Examine and employ business and economic principles and concepts in making informed business decisions to continue business operations.								
		Competencies	Sample Indicators							
	1.01.01	Analyze fundamental economic concepts necessary for employment in business.	Distinguish between economic goods and services	3	2	1	0			
			Explain the concept of economic resources							
			Describe the concepts of economics and economic activities							
			Determine economic utilities created by business activities							
			Explain the principles of supply and demand							
			Describe the functions of prices in markets							
	1.01.02	Describe the nature of business and its contribution to society.	Explain the role of business in society	3	2	1	0			
			Describe types of business activities							
			Explain the organizational design of businesses							
			Discuss the global environment in which businesses operate							
			Describe factors that affect the business environment							
			Explain how organizations adapt to today's markets							
	1.01.03	Recognize how economic systems influence environments in which businesses function.	Explain the types of economic systems	3	2	1	0			
			Explain the concept of private enterprise							
			Identify factors affecting a business's profit							
			Determine factors affecting business risk							
			Explain the concept of competition							
			Describe market structures							
	1.01.04	Analyze cost/profit relationships to guide business decision-making.	Explain the concept of productivity	3	2	1	0			
			Analyze impact of specialization/division of labor on productivity							
			Explain the concept of organized labor and business							
			Explain the impact of the law of diminishing returns							
			Describe the concept of economies of scale							

Benchmark		1.02	Examine the history of business both in the United States and other international markets.							
			Competencies		Sample Indicators					
	1.02.01	Describe the purpose and origin of business within the United States.	Discuss the various commodities of trade within the US history			3	2	1	0	
			Explain the origins of Wall Street							
			Describe the evolution in consumer awareness and buyer relationships							
			Explain the concept of Gross Domestic Product and its development within the United States							
	1.02.02	Analyze the history and importance of trade within a global marketplace.	Difference between imports and exports			3	2	1	0	
			Role of cultures and political systems on the global trade							
		Explain the currency exchanges and how the value fluctuates								
Topic	2	Communications		Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.						
Benchmark		2.1	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace.							
			Competencies		Sample Indicators					
	2.1.1	Apply verbal skills when obtaining and conveying information.	Participate in group discussions			3	2	1	0	
			Demonstrate open listening when cultivating relationships							
Share thoughts respectfully while being direct										
Benchmark		2.2	Use correct grammar, punctuation and terminology to write and edit documents.							
			Competencies		Sample Indicators					
	2.2.1	Compose internal and external multi-paragraph documents clearly, succinctly, and accurately to convey and obtain information effectively.	Prepare simple written correspondence (e.g. cover letters, memorandums, resumes)			3	2	1	0	
			Identify the elements of effective written communications							
			Use appropriate etiquette in written communications							
			Write analytical reports (i.e., reports that examine a problem/issue and recommend an action)							
			Write research reports							
Benchmark		2.3	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.							
			Competencies		Sample Indicators					
	2.3.1	Prepare oral presentations to provide information for specific purposes and audiences.	Organize information effectively			3	2	1	0	
			Select and use appropriate graphic aids							
Make oral presentations										

Topic		3	Ethics and Legal Responsibilities	Know and understand the importance of professional ethics and legal responsibilities.					
Benchmark		3.1	Describe business's responsibility to know and abide by laws and regulations that affect business operations.						
			Competencies	Sample Indicators					
	3.1.1	Describe the nature of legally binding business contracts.	Identify the basic torts relating to business enterprises	3	2	1	0		
			Describe the nature of legally binding contracts Understand the civil foundations of the legal environment of business to demonstrate knowledge of contracts						
	3.1.2	Identify regulatory agencies and regulatory legislation.	Describe the nature of legal procedure	3	2	1	0		
			Discuss the nature of debtor-creditor relationships Explain the nature of agency relationships Discuss the nature of environmental law Discuss the role of administrative law						
	3.1.3	Identify types of business ownership.	Explain types of business ownership	3	2	1	0		
			Select form of business ownership						
	Topic		4	Technical Skills	Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.				
	Benchmark		4.1	Create, communicate, and deliver value to customers while managing customer relationships.					
			Competencies	Sample Indicators					
	4.1.1	Perform customer service activities to support customer relationships and encourage repeat business.	Explain a customer-service mindset	3	2	1	0		
			Respond to customer inquiries and complaints Interpret business policies to customers/clients Understands the techniques and strategies used to foster positive-ongoing relationships with customers						
	4.1.2	Utilize technology to facilitate customer relationship management.	Understand the nature of customer relationship management	3	2	1	0		

Topic5Emotional Intelligence								
Benchmark5.1		Employ and manage techniques, strategies, and systems used by management to foster self-understanding and enhance business relationships.						
		Competencies	Sample Indicators					
	5.1.1	Demonstrate managerial and business ethics.	Discuss ethics, responsibility, honesty, integrity, and work habits		3	2	1	0
	5.1.2	Develop personal traits and behaviors to foster career advancement.	Identify desirable personality traits important to business		3	2	1	0
			Exhibit a positive attitude					
			Exhibit self-confidence					
			Demonstrate interest and enthusiasm					
			Demonstrate initiative					
			Foster positive working relationships					
			Participate as a team member					
		Explain the nature of effective communications						
Topic6Entrepreneurship								
Benchmark6.1		Assess entrepreneurship/small-business management-career information to enhance opportunities for career success.						
		Competencies	Sample Indicators					
	6.1.1	Analyze entrepreneur careers to determine careers of interest.	Discuss entrepreneurial discovery processes		3	2	1	0
			Describe entrepreneurial planning considerations					
			Explain the need for entrepreneurial discovery					
			Assess global trends and opportunities for business ventures					
	6.1.2	Compare individual’s abilities, interests, and attitudes with those associated with entrepreneurial success to determine the match between the two.	Analyze desired lifestyle associated with entrepreneurship		3	2	1	0
			Discern between desired benefits and those associated with entrepreneurship					
			Research current business issues and entrepreneurs (e.g., Donald Trump, Martha Stewart, Mark Zuckerberg, Magic Johnson, etc.)					
			Contrast personal characteristics with those associated with entrepreneurial success					
Examine similarities and differences between personal educational goals and educational requirements for entrepreneurship								

Topic		7	Financial Analysis							
Benchmark		7.1	Understand how to maintain, monitor, plan, and control the use of financial resources to protect an entrepreneur and business's fiscal well-being.							
			Competencies		Sample Indicators					
	7.1.1	Analyze how proper management of personal finance relates with maintaining business financial efficiency.	Explain forms of financial exchange			3	2	1	0	
			Manage personal finances to achieve financial goals with savings and investing Identify a business's risks Explain the time value of money Explain the purposes and importance of credit							
	7.1.2	Define the accounting equation and how accounting can assist in maintaining financial solvency.	Interpret cash-flow statements			3	2	1	0	
			Monitor business's profitability Develop personal budget Properly maintain a personal financial account (e.g., savings, checking, etc.) Interpret a pay stub Read and reconcile bank statements Maintain financial records Describe sources of income (e.g., wages/salaries, interest, rent, dividends, transfer payments, etc.)							
EssentialTopic		8	Information Technology Applications			Use information technology tools specific to the career cluster to access, manage, integrate, and create information.				
Benchmark		8.1	Employ technological tools to expedite workflow.							
			Competencies		Sample Indicators					
	8.1.1	Use information technology tools to manage and perform work responsibilities.	Assess information needs			3	2	1	0	
			Use information literacy skills to increase workplace efficiency and effectiveness Identify ways that technology impacts business Explain the role of information systems							
Benchmark		8.2	Operate writing and publishing applications to prepare business communications.							
			Competencies		Sample Indicators					
	8.2.1	Prepare simple documents and other business communications.	Demonstrate basic research skills			3	2	1	0	
			Evaluate quality and source of information							

Topic		9	Marketing						
Benchmark		9.1	Manage marketing activities to facilitate business development and growth.						
			Competencies		Sample Indicators				
	9.1.1	Understand marketing's role and function in business to facilitate economic exchanges with customers.	Plan product mix		3	2	1	0	
			Determine services to provide customers						
			Explain the role of customer service in positioning/image						
			Analyze factors that contribute to business success						
			Develop strategies to position product/business						
			Acquire foundational knowledge of customer, client, and business behavior to understand what motivates decision-making						
9.1.2	Explain marketing and its importance in global economy.	Identify considerations in implementing international marketing strategies		3	2	1	0		
9.1.3	Describe marketing functions and related activities.	Identify elements of the marketing mix		3	2	1	0		
Topic		10	Employability and Career Development		Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills.				
Benchmark		10.01	Explore, obtain, and develop strategies for ensuring a successful business career.						
			Competencies		Sample Indicators				
	10.01.01	Develop personal traits and behaviors to foster career advancement.	Discuss appropriate personal appearance		3	2	1	0	
			Explain the importance of having a vision through properly setting personal short, mid and long-term goals.						
			Conduct mock interviews using local business representatives as interviewers						
			Use time-management skills						
	10.01.02	Identify the impact business has on local communities.	Invite guest speakers from represented modules (e.g., accountant, banker, marketer, etc.) to speak with students		3	2	1	0	
			Tour a large business in the local community						
		Tour a small business in the local business							
Benchmark		10.02	Demonstrate skills related to seeking and applying for employment to find and obtain a desired job.						
			Competencies		Sample Indicators				
	10.02.01	List the standards and qualifications that must be met in order for entering a business career.	Explore Kansas Career Pipeline		3	2	1	0	
			Prepare a resume						
			Prepare a letter of application						
			Complete an employment application						
			Interview for employment						
	10.02.02	Utilize critical thinking and decision-making skills to exhibit qualifications to a potential employer.	Demonstrate problem-solving skills		3	2	1	0	
		Obtain needed information efficiently							
		Evaluate quality and source of information							
		Apply information to accomplish a task							

10004-Computer Applications

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

3 2 1 0 1. Personal Information Management

- a. Identify PIM applications (e.g., Essential PIM, MS Outlook, Lotus Notes...) and maintain safe and secure user profiles.
- b. Manage daily/weekly/monthly schedule using applications such as. (e.g., Notes, MS Outlook, calendars/schedules.)
- c. Create reminder for oneself and send notes/ informal memos using PIM applications.
- d. Access email system using login and password functions. Access email messages received
- e. Create and send e-mail messages in accordance with established business standards (e.g., grammar, word usage, spelling, sentence structure, clarity) demonstrating knowledge of email etiquette.
- f. Attach files to send with messages and access and save received attachments.
- g. Demonstrate knowledge of contamination protection strategies for email.
- h. Maintain shared database of contact information.
- i. Participate in virtual group discussions and meetings.

3 2 1 0 2. Research and Internet

- a. Test Internet connection.
- b. Navigate web sites using software functions. (e.g., Forward, Back, Go To, Bookmarks). Utilize online tools
- c. Explore the multimedia capabilities of the World Wide Web.
- d. Bookmark web addresses (URLs).
- e. Locate information using appropriate search procedures and approaches through a variety of search engines and Boolean logic.
- f. Access, evaluate accuracy, and compile Internet resource information for a variety of purposes. (e.g., library catalogs, business, technical, commercial, government, educational)
- g. Unpack files using compression software. Organize and archive files.

3 2 1 0 3. Word Processing and Presentations

- a. Create/Open Edit and Save documents (e.g., letters, memos, reports) and presentations using existing forms and templates.
- b. Employ word processing utility tools (e.g., spell checker, grammar checker). Locate/replace data using search and replace functions.
- c. Format text using basic formatting functions.
- d. Enhance publications using different fonts, styles, attributes, justification, etc.
- e. Enhance publications using paint/draw functions.
- f. Format new desktop publishing files and recognize the advantages and disadvantages of export options.
- g. Place graphics (e.g., graph, clip art, table) in a document or slide in accordance with basic principles of graphics design and visual communication.
- h. Prepare publications using desktop and cloud publishing applications.

3 2 1 0 4. Spreadsheets

- a. Create/Open Edit and Save spreadsheets.
- b. Create charts and graphs from spreadsheets.

- c. Group worksheets.
- d. Input/process data using spreadsheet functions.
- e. Perform calculations using simple formulas.
- f. Locate/replace data using search and replace functions.
- g. Process data using database functions (e.g., structure, format, attributes, relationships, keys).
- h. Perform single- and multiple-table queries (e.g., create, run, save).
- i. Verify accuracy of output.
- j. Maintain shared database of contact information.

3 2 1 0 6. Ethics and Security

- a. Demonstrate knowledge of potential internal and external threats to security. Maximize threat reduction.
- b. Assess exposure to security issues.
- c. Demonstrate knowledge of virus protection strategy and ability to load virus detection/protection software.
- d. Identify sources of virus infections and how to remove viruses.
- e. Report viruses in compliance with company standards.
- f. Ensure compliance with security rules, regulations, and codes.
- g. Explore ways to implement countermeasures.
- h. Implement security procedures in accordance with business ethics.
- i. Document security procedures.
- j. Understand how to follow a disaster plan.
- k. Understand how to utilize backup and recovery procedures.
- l. Maintain confidentiality.
- m. Understand how to provide for user authentication (e.g., assign passwords, access level).

3 2 1 0 7. History / Quality Assurance

Demonstrate knowledge of the diverse continuous improvement cycles within industry and their characteristics. (e.g., Baldrige Performance Excellence, Demming, ISO 9000, Six Sigma)

3 2 1 0 8. Personal Attributes for success. Career Technical Core Skills.

- a. Act as a responsible and contributing citizen and employee
- b. Demonstrate effective professional communication skills and practices that enable positive customer relationships.
- c. Apply appropriate academic and technical skills
- d. Attend to personal health and financial well-being
- e. Communicate clearly, effectively and with reason
- f. Consider the environmental, social and economic impacts of decisions
- g. Demonstrate the use of cross-functional teams in achieving IT project goals.
- h. Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications

Course KCCMS #: 30100

21st Century Journalism*Competency Profile Sheet*

21st Century Journalism promotes the development of the skill set needed today and in the future. Topics include an exploration of the role media and the communications industry has in society, the development of the technical skills related to journalistic writing and interviewing, as well as understand the ethical and legal issues related to the field.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date:

Completion Date:

Credit Earned: _____

__/__/__

__/__/__

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: __/__/__

Instructor Signature: _____ Date: __/__/__

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1.1 <i>Analyze career paths in the communications field.</i>		3	2	1	0
1.1.1	Identify careers/entrepreneurial opportunities in media and communications (i.e. broadcasting and online communications).				
1.1.2	Explain the ethical responsibilities of individuals in the field of communications/journalism.				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the communications field.</i>		3	2	1	0
1.2.1	Analyze the role of journalism in society today (including the evolution of journalism and present/future need).				
1.2.2	Analyze the different modes of electronic communications.				
1.2.3	Explore the influence media has on society.				
1.2.4	Analyze writing and story forms for various media applications.				
1.2.5	Understand issues related to cultural and regional diversity that affect the field of communications.				
1.2.6	Analyze the relationship between shooting, video, capturing audio, editing, writing and reporting in the production of a story.				
1.2.7	Understand the interview process.				
1.2.8	Define and use journalistic terminology in appropriate contexts.				
1.2.9	Identify expert sources and how to cultivate relationships with them.				
1.2.10	Analyze the reliability of sources of information.				
1.2.11	Analyze the uses of social networking sites (i.e. for promotional, reference and instructional services).				
1.2.12	Understand the importance of identity and reputation management in social media.				
1.2.13	Understand the journalistic writing process (i.e. identify purpose, work with deadlines, conduct research, how to take notes and document sources).				
1.2.14	Produce and use digital media in storytelling.				
1.2.15	Determine what constitutes libel, slander, obscenity, acceptable use, fair use, and plagiarism, invasion of privacy and student press rights.				
1.2.16	Analyze the First Amendment, Freedom of Information Act, and copyright laws and their impact on communications and journalism.				
1.2.17	Understand the necessity of digital file management.				
1.2.18	Demonstrate digital file management.				
1.2.19	Demonstrate ability to write for a variety of audiences and purposes (including feature, editorial and news).				

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications

Course KCCMS #: 30104

Digital Media Technology*Competency Profile Sheet*

Digital Media Technology teaches the technical skills needed to work with electronic media. Topics include exploring the use of digital media and video today and in the future, a study of the relationship of work flow to project planning and completion and the software, equipment and tools used in the industry.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

__/__/__

__/__/__

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: __/__/__

Instructor Signature: _____ Date: __/__/__

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1. 1 <i>Analyze career paths in the communications field.</i>		3	2	1	0
1.1.1	Explore career/entrepreneurial opportunities in digital imaging.				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the communications field.</i>		3	2	1	0
1.2.1	Explore the role and uses of audio in digital media (e.g. podcasts, streaming audio).				

1.2.2	Identify and use common terminology of the industry.				
1.2.3	Investigate software, equipment and other tools used in digital media technology.				
1.2.4	Identify use of color and color theory in media applications.				
1.2.5	Describe the fundamental design principles with digital media applications.				
1.2.6	Analyze the ongoing technological changes in digital media.				
1.2.7	Predict how technological advancements affect the Arts, AV and Communications career cluster.				
1.2.8	Analyze copyright laws affecting the use of digital media for public and educational audiences.				
1.2.9	Understand the planning involved in developing multimedia projects (including contracts, costing, preparation and production legal issues).				
1.2.10	Understand how work flow relates to project planning and completion (i.e. pre-production, production, post-production).				
1.2.11	Analyze the role and responsibilities of individual team members to the success of the digital media project.				
1.2.12	Identify specific requirements necessary for embedding content (e.g. video, photos) in various digital delivery formats (including PDF and webpages).				
1.2.13	Evaluate current laws and regulations dealing with digital media (e.g. cyber ethics).				
1.2.14	Compare and contrast uses of electronic media outlets (e.g. forums, newsgroups, social networking, blogs, micro-blogs. Second Life, mailing lists, electronic publications).				
1.2.15	Identify uses of geospatial data (e.g. geospatial tagging of photo/video).				
1.2.16	Understand and demonstrate quality presentation skills.				

KSDE

Government and Public Administration Career Cluster

Pathway (CIP CODE 44.0401.): Government and Public Administration

Course KCCMS #: 43115 (.5 credit)

Media and Public Relations*Competency Profile Sheet*

This course will build skills needed to communicate messages to the public as it relates to topics of concern involving government and public administration. Topics will include conflict awareness, reliability of sources, creating publicity materials, public relations campaigns and working with the media.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

____/____/____ ____/____/____

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: ____/____/____

Instructor Signature: _____ Date: ____/____/____

Directions: The following competencies are required for full approval of a course in the Government and Public Administration career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division (i.e. cash management, petty cash, spreadsheets, and inventory).				
0.1.2	Analyze mathematical problem statements for missing and/or irrelevant data.				
0.1.3	Construct charts/tables/graphs to support written and oral communication/data.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Model behaviors that demonstrate active listening and respond appropriately.				
0.2.2	Organize oral and written information.				
0.2.3	Identify assumptions, purpose, outcomes/solutions and propaganda techniques.				
0.2.4	Determine the most appropriate reading strategy for identifying the overarching purpose of a text (i.e. skimming, reading for detail, reading for meaning or critical analysis).				
0.2.5	Compose written documents clearly, succinctly, and accurately (i.e. multi-paragraph reports, agendas, forms and memos).				
0.2.6	Demonstrate use of content, technical concepts and vocabulary when analyzing information and following direction.				
0.2.7	Evaluate and/or critique oral and written documents for accuracy, appropriateness, clarity, relevancy and validity.				
0.2.8	Use correct grammar, spelling, punctuation and capitalization when preparing written documents.				
0.2.9	Consider audience and purpose when preparing and editing written documents and oral presentations.				
0.2.10	Present formal and informal speeches including discussion, information requests, interpretation and persuasive arguments.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze data when interpreting operational documents and solving problems (i.e. analyzing and developing budgets).				
0.3.2	Evaluate conflicting data and/or errors using scientific methods when conducting qualitative and quantitative analysis in areas of government and public services (i.e. health issues, estate planning).				
0.3.3	Interpret verbal and non-verbal behaviors when communicating/solving problems with clients and co-workers (i.e. respecting cultural differences).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Operate technical tools to perform workplace tasks and expedite work flow (i.e. electronic mail, internet applications and publishing software).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership traits (i.e. enthusiasm, creativity, conviction, mission, courage) when leading a group in solving a problem.				
0.5.2	Exhibit teamwork traits such as compassion, service, coaching others, team development and understanding and appreciating others.				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Practice security and safety when sharing personal information.				
0.6.2	Evaluate the reliability of information from informational texts, internet web sites and/or technical resources.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Demonstrate flexibility and willingness to learn new knowledge.				

0.7.2	Interpret information, data and observations and apply information learned to actual practice.				
0.7.3	Communicate effectively with internal and external customers/clients/employees to foster positive relationships.				
0.7.4	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.5	Develop effective internal and external business correspondence what conveys and/or obtains information.				
0.7.6	Organize a portfolio (electronic or hard copy) for use in demonstrating knowledge, skills and experience (i.e. certificates, licenses).				

Technical Skills

Comprehensive Standard:

1.0 Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.

Benchmark: 1. 1 <i>Analyze career paths in the government and public administration field.</i>		3	2	1	0
1.1.1	Understand how ideas and information flows through government, public administration the business community and the general public.				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the government and public administration field.</i>		3	2	1	0
1.2.1	Analyze situations for any appearance of conflict of interest and plan for consequences.				
1.2.2	Employ government decision-making processes to achieve desired objectives.				
1.2.3	Obtain data and information from sources recognized to be reliable.				
1.2.4	Analyze the reliability of data and information from available resources.				
1.2.5	Analyze situations to determine appropriate communication formats.				
1.2.6	Prepare arguments, regarding issues or proposals which are professional and diplomatic in presentation.				
1.2.7	Apply logical reasoning skills and experiences to anticipate counter arguments.				
1.2.8	Use carefully selected images and figures of speech for reinforcing a position.				
1.2.9	Recognize and address sources of conflict among constituents through a variety of research techniques.				
1.2.10	Identify common marketing strategies.				
1.2.11	Apply persuasive techniques to convince individuals or groups to take desired actions or avoid undesirable actions.				
1.2.12	Speak publically about an issue of public concern to increase awareness or promote good will.				
1.2.13	Develop an effective media presentation about an issue of public concern.				
1.2.14	Demonstrate actions in a diplomatic manner when dealing with people.				
1.2.15	Plan communication strategies to maintain favorable public perceptions of a policy, organization or individual.				
1.2.16	Prepare or edit organizational publications for internal and external audiences, including newsletters and reports.				
1.2.17	Compare and contrast the forms of advertisements and how they can be used in the field of public relations.				
1.2.18	Analyze the role of advertising agencies in the development of promotional campaigns to promote products/services, organization or individuals.				
1.2.19	Develop a public relations campaign based upon an organizations objectives, promotional policies and needs to influence public opinion or promote ideas and services.				

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.07.02): AV Communications

Course KCCMS #: 30103

Audio Video Production Fundamentals*Competency Profile Sheet*

Audio Video Production Fundamentals provides a basic understanding of producing video for a variety of uses. Topics include analyzing the pre-production, production and post-production process, as well as explore the equipment and techniques used to develop a quality video production.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

__/__/__

__/__/__

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: __/__/__

Instructor Signature: _____ Date: __/__/__

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1.1 <i>Analyze career paths in the communications field.</i>		3	2	1	0
1.1.1	Analyze various careers in audio and video production (e.g. producers, directors, reporters, videographers/photographers, anchors).				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the communications field.</i>		3	2	1	0
1.2.1	Explain the evolution of audio and video production.				
1.2.2	Describe how changing technology is impacting the audio and video industries (i.e. wireless systems, high definition production).				
1.2.3	Analyze the role of the producer (including scheduling, personnel and tracking progress), director (including knowledge of story structure, script analysis, relationship to the production team and crew members), reporters, photographers/videographers and anchors.				
1.2.4	Define common audio and video production terminology and acronyms (including AVI, MPEG, JPEG and TIFF).				
1.2.5	Explore the equipment, software (e.g. Flash, Avid, Final Cut Pro, mobile video platforms) and tools needed in audio and video production (including the variety/features, expense, basic care).				
1.2.6	Identify types of microphones and how to use them in audio video presentations (including pick up patterns, use of lapel vs. stick mic., and mult. box).				
1.2.7	Distinguish between analogue and digital audio and video formats.				
1.2.8	Describe how audio is synchronized with other audio or video.				
1.2.9	Write audio scripts for various types of programs (including key elements, short audio scripts).				
1.2.10	Identify various types of audio and visual approaches that convey information or create an emotional impact (including use of music).				
1.2.11	Analyze music licensing (including performance licensing and synchronization rights, copyright vs. free-use).				
1.2.12	Understand the interview process.				
1.2.13	Explore the lighting requirements of a variety of productions (including types and placement of fixtures).				
1.2.14	Understand video formats (including Mini DV, digital cards, non-linear memory devices and HD).				
1.2.15	Describe non-linear editing and editing skills related to various delivery requirements.				
1.2.16	Analyze the electrical requirements of audio video equipment.				
1.2.17	Analyze video production techniques and use of a switcher (e.g. switching video input from one camera or studio to another and/or from video to live programming).				
1.2.18	Demonstrate video camera operations (including how to frame and maintain picture composition, focusing and adjusting images, performing pans and zooms).				
1.2.19	Demonstrate how to set up a basic production studio (e.g. location of production, pulling and securing cables, audio and/or sound set up, lighting placement, meeting electrical needs).				
1.2.20	Identify potential production problems and solutions (including checking for audio video transmission, sound quality and volume).				
1.2.21	Produce a story using video (including writing the script, shooting the video and editing to make it fluid and seamless).				

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications and (CIP CODE: 50.0499) Visual Arts

Course KCCMS #: 30105

Photo Imaging*Competency Profile Sheet*

Photo Imaging teaches the technical skills needed to produce quality images for use in a variety of applications. Topics include use of equipment, software and techniques to take, edit and manipulate digital images.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

____/____/____

____/____/____

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: ____/____/____

Instructor Signature: _____ Date: ____/____/____

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1. 1 <i>Analyze career paths in the visual arts.</i>		3	2	1	0
1.1.1	Increase knowledge of careers related to photo journalism.				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the visual arts.</i>		3	2	1	0
1.2.1	Explore the variety of uses of photos and images in media.				

1.2.2	Discuss current and emerging issues surrounding imaging technologies.				
1.2.3	Recognize and capture storytelling images that utilize strong elements of composition and complement story content.				
1.2.4	Explain the difference between a photograph and a snapshot.				
1.2.5	Identify camera equipment, hardware and software to meet a variety of needs.				
1.2.6	Explain the operation of different cameras (including features and uses).				
1.2.7	Understand copyright issues as it applies to photography and the use of images (i.e. own work vs. work of others).				
1.2.8	Define the role that photographs and/or images play in storytelling.				
1.2.9	Explore photo editing software.				
1.2.10	Understand the consequences of photo manipulation.				
1.2.11	Explore the use of actions to complete repetitive tasks.				
1.2.12	Understand and correctly resize an image for a variety of media uses (e.g. correct resolution for print, web or display usages.)				
1.2.13	Critique photographic work (including an analysis of technique, content, composition and the ability to convey message or tell a story).				
1.2.14	Understand freedom of the press and define the photographer's rights and responsibilities.				
1.2.15	Apply principles of composition to improve picture taking capabilities.				
1.2.16	Demonstrate the ability to select and use the correct equipment for a specific photographic assignment.				
1.2.17	Demonstrate an understanding of aperture, shutter speed, white balance, ISO and depth of field.				
1.2.18	Demonstrate an understanding of libel, privacy, copyright and counterfeit laws as they apply to photography and image use.				
1.2.19	Create a portfolio to illustrate skill development.				

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications and (CIP CODE: 50.0499) Visual Arts

Course KCCMS #: 30102

Graphic Design Fundamentals*Competency Profile Sheet*

Graphic Design Fundamentals provides a basic understanding of the graphic design process. Topics include analyzing the design elements and principles, exploring industry tools, software and equipment and learning composition techniques to develop a quality product.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

__/__/__

__/__/__

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: __/__/__

Instructor Signature: _____ Date: __/__/__

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1.1 <i>Analyze career paths in the visual arts.</i>		3	2	1	0
1.1.1	Explore visual communication careers which utilize graphic design.				
1.1.2	Compare the advantages and disadvantages of working independently and working for others within the field (including mass production vs. custom work).				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the visual arts.</i>		3	2	1	0
1.2.1	Describe how changing technology is impacting the visual communications industry.				
1.2.2	Explore present and future uses of graphic design by looking at the present market and predicting trends (i.e. magazines, logos, hang tags, store signage, product and packaging design).				
1.2.3	Define common terminology and concepts in graphic design (i.e. scale drawing, thumbnail sketches, perspective, typography and branding).				
1.2.4	Explore the equipment, software and tools used in graphic design for electronic applications.				
1.2.5	Analyze how images can convey messages.				
1.2.6	Describe how graphic design is used in digital applications.				
1.2.7	Demonstrate the methods used to create a visual representation of ideas and messages (i.e. combining words, symbols and/or images).				
1.2.8	Identify the basics of composition.				
1.2.9	Identify and understand the design elements and principles.				
1.2.10	Analyze the effects of the design elements (e.g. Optical illusion and color theory).				
1.2.11	Compare and contrast 2-D and 3-D design.				
1.2.12	Analyze legal concerns that affect the design field such as copyright and trademark issues.				
1.2.13	Describe the fundamental design principles in graphic design.				
1.2.14	Evaluate the visual appeal of graphic designs within visual communications.				
1.2.15	Analyze the design process of graphic projects (from concept to finished product).				
1.2.16	Demonstrate design principles in a graphic design project.				
1.2.17	Demonstrate proper use of tools, software and equipment.				
1.2.18	Understand and demonstrate quality presentation skills.				
1.2.19	Create a portfolio of graphic design projects.				

Name _____ ID _____

Enrollment Date
____/____/____Completion Date
____/____/____Credits Completed

Instructor _____ School Year _____

I certify that the student received the training in the area indicated.

RATING SCALE:

- 3: Skilled, works independently
 2: Competent, may need assistance
 1: Received instruction, skill undeveloped

Student Signature _____ Date _____

0: No exposure, instruction or training

Measured Competencies listed should be seen as minimums (you can add)

Instructor Signature _____ Date _____
Competencies _____/49**I. Graphic Design**

- 3 2 1 0 1** 1. Determine client's needs and expected outcomes.
- 3 2 1 0 1** 2. Determine purpose of the digital communication project.
- 3 2 1 0 1** 3. Determine the digital communication elements to be used.
- 3 2 1 0 1** 4. Determine the target audience.
- 3 2 1 0 1** 5. Create and produce content.
- 3 2 1 0 1** 6. Create and refine design concepts.
- 3 2 1 0 1** 7. Alter digitized images using an image manipulation program.
- 3 2 1 0 1** 8. Apply color theory to select appropriate colors.
- 3 2 1 0 1** 9. Apply knowledge of typography.
- 3 2 1 0 1** 10. Apply principles and elements of design.
- 3 2 1 0 1** 11. Create and/or implement the look and feel of the product.
- 3 2 1 0 1** 12. Create graphical images.
- 3 2 1 0 1** 13. Evaluate visual appeal.
- 3 2 1 0 1** 14. Differentiate between copyright and trademarks.
- 3 2 1 0 1** 15. Define scope of work to achieve individual and group goals.
- 3 2 1 0 1** 16. Use available reference tools as appropriate.

Foundation & 21st Century Competencies
 (lowercase letters are indicators to be considered)

II. Pathway Foundation
Problem Solving and Critical Thinking

- 3 2 1 0 1. Demonstrate knowledge of the process required to evaluate and verify the nature of a problem.**
- Demonstrate knowledge of the underlying concepts of the information systems discipline.
 - Demonstrate knowledge of methods for achieving productivity in knowledge work.
 - Apply general systems theory to the analysis and development of an information system.
 - Identify procedures for formal problem- solving.
 - Demonstrate knowledge of the fundamental concept of information theory and organizational system processes.
 - Identify the essential properties of information systems.
- 3 2 1 0 2. Demonstrate knowledge of the process required to solve a problem.**
- Demonstrate knowledge of problem-solving steps and techniques.
 - Summarize application planning, development, and risk management for information system.
 - Identify potential problems in system implementation.
 - Demonstrate knowledge of the information analysis process.
 - Demonstrate knowledge of information technology solutions.

III. Cluster Foundation
Employability and Career Development

- 3 2 1 0 1. Demonstrate ability to evaluate and compare employment opportunities and accept employment.**
- Identify job advantages and disadvantages.
 - Compare job benefits to individual needs.
 - Compare job opportunities and responsibilities to career

- plan.
- d. Make decision to accept or reject employment.

- e. Write acceptance or rejection letter without error.
- f. Complete employment forms upon acceptance.

3 2 1 0 2. Demonstrate ability to seek and apply for employment.

- a. Identify resources for finding employment.
- b. Analyze resources to determine those that are most appropriate for desired career.
- c. Compare job requirements with personal qualifications, interests, and aptitudes.
- d. Select job that matches personal qualifications, interests, and aptitudes.
- e. Identify prospective employer's submission requirements.
- f. Gather information and prepare rough draft of resume.
- g. Put resume in proper format.
- h. Write letter of application for specific job opening in correct format, without error.
- i. Gather information for application.
- j. Complete all questions on application with appropriate and honest answers.
- k. Sign and date application.
- l. Attach any supporting material required or requested.
- m. Submit full application package to employers.
- n. Dress appropriately for interview.
- o. Exhibit professional conduct before, during and after interview.
- p. Explain your qualifications and interests clearly and concisely.
- q. Answer all questions honestly and concisely.
- r. Write follow-up letter after the interview.

3 2 1 0 3. Demonstrate knowledge of career development/progression patterns in the IT industry.

- a. Identify education and training requirements for IT career pathways.
- b. Identify professional organizations in the area of information technology.
- c. Identify benefits derived from membership in specific professional organizations.

3 2 1 0 4. Demonstrate knowledge of the relationship between lifelong learning and IT career development.

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- a. Identify present and future IT employment opportunities.
- b. Demonstrate knowledge of the potential impact of IT on future society.
- c. Identify the importance of lifelong learning in the IT field.
- d. Identify certification and/or degree requirements.
- e. Identify required knowledge and skills for career ladder.
- f. Research educational and training opportunities.
- g. Identify present and future IT education and training opportunities.
- h. Design a lifelong learning plan that ties in with career advancement plan.

3 2 1 0 5. Develop a personal career plan to meet career goals and objectives.

- a. Identify career that matches individual interests and aptitudes.
- b. Develop career goal with time frame.
- c. Identify goals and objectives for reaching and advancing in career.
- d. Write a list of strategies for achieving educational requirements.
- e. Identify strategies for obtaining employment experiences.
- f. Write a time line for achieving career goals and objectives.
- g. List alternatives and potential changes.

3 2 1 0 6. Explain written organizational policies, rules and procedures to help employees perform their jobs.

- a. Identify the contents of various organizational publications.
- b. Determine the appropriate document(s) for specific job responsibilities and work assignments.
- c. Locate and identify specific organizational policy, rule or procedure to assist with a given situation.
- d. Articulate how a specific organizational policy, rule or procedure will improve a given situation.

3 2 1 0 7. Identify and demonstrate positive work behaviors and personal qualities.

- a. Demonstrate regular attendance.
- b. Follow company dress and appearance standards.
- c. Exhibit pride in work.
- d. Demonstrate leadership and teamwork.
- e. Exhibit ability to handle stress.
- f. Display initiative and open-mindedness.
- g. Participate in company orientation and training programs with enthusiasm.
- h. Identify progressive strategies that will impact efficiency of job.
- i. Follow established rules, regulations and policies.
- j. Explain employer/management responsibilities.
- k. Demonstrate cost effectiveness.
- l. Demonstrate time management.
- m. Complete all tasks thoroughly.

3 2 1 0 8. Identify and explore career opportunities in one or more career pathways.

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- a. Locate and interpret career information for at least one career cluster.
- b. Identify job requirements for three career pathways.
- c. Identify educational and credentialing requirements for three careers.
- d. Identify personal interests and aptitudes.
- e. Identify job requirements and characteristics of selected careers.
- f. Compare personal interests and aptitudes with job requirements and characteristics.
- g. Modify career goals based on results of personal interests and aptitudes with career requirements and characteristics.

3 2 1 0 9. Provide examples of how IT is transforming business in various industries.

- a. Demonstrate knowledge of how both PCs and larger computer systems impact people and are used in business/industry/government and other institutions.
- b. Demonstrate knowledge of the impact of computers on career pathways in business/industry (e.g., how computers have eliminated and created jobs).
- c. Demonstrate knowledge of the impact of computers on access to information and information exchange worldwide.
- d. Demonstrate knowledge of ethical issues that have surfaced in the information age.

Ethics and Legal Responsibilities

3 2 1 0 1. Demonstrate appropriate knowledge and behaviors of legal responsibilities and of positive cyber-citizenship.

- a. Demonstrate knowledge of the legal issues that face information technology professionals.
- b. Identify issues and trends affecting computers and information privacy.

3 2 1 0 2. Demonstrate knowledge of social, ethical, and legal issues in the information technology field.

- a. Analyze the social implications of decisions made and actions taken as an information technology professional.
- b. Demonstrate knowledge of the ethical issues that face information technology professionals.
- c. Determine the practical implications of lawsuits in terms of good will, client relations, the bottom line, diversion of company resources, cash flow and accounts receivable.
- d. Demonstrate knowledge of basic business law concepts.

3 2 1 0 3. Demonstrate knowledge of the rights and responsibilities of IT workers.

- a. Identify generally accepted business ethics.
- b. Demonstrate knowledge of federal laws governing discrimination and harassment.
- c. Demonstrate knowledge of key concepts related to employment discrimination.

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- d. Demonstrate sensitivity to diversity, including differences in gender, culture, race, language, physical and mental challenges, and family structures.
- e. Establish procedures for maintaining the confidentiality of client information.

Leadership and Teamwork

3 2 1 0 1. Build interpersonal skills with individuals and other team members.

- a. Analyze the interdependence of empathetic listening, synergy, and consensus building.
- b. Define roles within the group decision-making process.
- c. Demonstrate knowledge of how to apply team methods to empower coworkers.
- d. Apply knowledge of group dynamics.
- e. Promote teamwork, leadership, and empowerment.
- f. Identify strategies for fostering creativity.

3 2 1 0 2. Demonstrate knowledge of the skills needed for leadership in the IT environment.

- a. Demonstrate knowledge of how to apply team methods to empower coworkers.
- b. Establish goals and objectives for IS.
- c. Define mission and critical success factors.
- d. Identify desired group and team behavior in an IS context.

Safety, Health, and Environmental

3 2 1 0 1. Maintain a safe working environment.

- a. Demonstrate knowledge of the relationship between health, safety, and productivity.
- b. Identify health and safety standards established by government agencies.
- c. Access needed safety information using company and manufacturers' references (e.g., procedural manuals, documentation, standards, and flowcharts).
- d. Ensure maintenance of a clean work area.
- f. Solve safety problems using problem-solving, decision-making, and critical thinking strategies.
- g. Demonstrate knowledge of ergonomics and repetitive strain injury.

Systems

3 2 1 0 1. Demonstrate knowledge of the nature of IT in business.

- a. Determine how business activities interface with data processing functions.
- b. Differentiate between the role of information systems within a company and their role in a global environment.
- c. Measure increases in productivity realized by the implementation of information systems.

3 2 1 0 2. Demonstrate knowledge of the operation of cross-functional teams in achieving project goals.

- a. Consider the benefits of using a cross-functional team in

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- policy and procedure development.
- b. Identify desired group and team behavior in an IS context.

3 2 1 0 3. Explain/discuss general strategies for maximizing organizational learning and productivity in a high tech environment.

- a. Assess the importance of new technologies to future developments and to the future knowledge worker productivity.
- b. Demonstrate knowledge of methods for achieving productivity in knowledge work.
- c. Create/maintain an environment supportive of productivity.

IV. Academic Foundations

Language Arts Courses

3 2 1 0 1. Demonstrate language arts knowledge and skills required to pursue the full-range of career and post-secondary education opportunities within the IT career cluster.

- a. Listen actively.
- b. Adapt language (diction/structure, style) for audience, purpose, situation.
- c. Collect/organize oral and written information.
- d. Compose/edit (agenda, audio-visuals, bibliographies, drafts, forms/documents, notes, oral presentations, reports, technical terminology).
- e. Comprehend oral and written information (cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries, technical matter).
- f. Evaluate oral and written information (accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevancy, validity, relationship of ideas).
- g. Identify oral and written assumptions, purpose, outcomes/solutions, and propaganda techniques.
- h. Predict outcomes/solutions from oral and written information trends.
- i. Present formal and informal speech for the purposes of discussion, supplying/requesting information, interpretation, and persuasion.
- j. Use library, text and Internet resources.

Communications Courses

3 2 1 0 2. Apply active listening skills to obtain and clarify information.

- a. Determine familiarity of discussion.
- b. Respond accordingly using appropriate verbal and nonverbal language.
- c. Explain the message given in your own words.
- d. Ask questions to seek or confirm understanding.
- e. Paraphrase and/or repeat information.

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- f. Record and summarize information in written notes.
- g. Follow directions and/or respond in a positive way with clear, concise comments.

3 2 1 0 2. Build customer relations.

- a. Identify organizations' products and services (including own strengths as a sales agent).
- b. Recognize the importance of all customers to the business.
- c. Determine customers' individual needs.
- d. Project a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication).
- e. Interact with customers and colleagues in a professional (e.g., prompt, friendly, courteous, respectful, helpful, knowledgeable, and understandable) manner.
- f. Comply with established business protocols and company policies.
- g. Communicate company policies to customers.
- h. Handle merchandise returns in accordance with customer service policy.
- i. Handle customer complaints in accordance with customer service policy.
- j. Facilitate customer service through the maintenance of key information systems.
- k. Follow through on commitments made to customers (e.g., special orders, delivery specifications, new items).

3 2 1 0 3. Comprehend and use reading strategies to learn meaning, technical concepts, vocabulary, and follow instructions.

- a. Use reading strategy to achieve intended purpose.
- b. Identify purpose of text.
- c. Identify complexity of text.
- d. Explain purpose of text.
- e. Determine relevance, accuracy and appropriateness to purpose.
- f. Identify complexities and discrepancies in information.
- g. Analyze information presented in a variety of formats, such as tables, lists, figures.
- h. Identify key technical concepts and vocabulary.
- i. Follow all instructions as specifically given.
- j. Explain meaning of new terms, vocabulary and concepts.
- k. Interpret technical materials used.
- l. Summarize overall meaning of text.
- m. Write specific steps for applying information to task or new situation.
- n. Write set of directions for others sharing information learned and applying that to task or new situation.

3 2 1 0 4. Conduct meetings.

- a. Plan meeting.
- b. Set agenda.
- c. Schedule meeting.
- d. Reserve meeting room.
- e. Invite appropriate personnel.

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- f. Identify need for outside speakers.
- g. Assign someone to take minutes.
- h. Make introductions.
- i. Invite questions, comments, and group participation.
- j. Determine appropriate action, time frame, and person accountable for identified tasks.
- k. Monitor time.
- l. Publish minutes in timely manner.

3 2 1 0 5. Demonstrate sensitivity in communicating with a diverse workforce.

- a. Identify factors (e.g., culture, ethnicity, equity, special/exceptional needs) that impact communication.
- b. Identify strategies for successful communication with a diverse workforce.
- c. Determine communication style appropriate for listener(s).
- d. Bridge communication styles.
- e. Establish guidelines for dealing with conflict.

3 2 1 0 6. Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.

- a. Know subject matter well enough to be independent of written aids.
- b. Identify characteristics of the audience and adjust to their ability to understand.
- c. Use technical terms and concepts correctly.
- d. Use proper organization and structure to achieve coherence of major points.
- e. Identify media and visual aids appropriate to understanding of topic.
- f. Prepare visual aids and support materials for easy viewing and without error.
- g. Smoothly and efficiently operate any equipment used with support.
- h. Deliver presentation without grammatical error.
- i. Speak clearly with appropriate volume, rate and gestures while making and maintaining appropriate eye contact.
- j. Use support materials in the presentation that enhance the understanding of the topic and the interest level of the audience.
- k. Stay within presentation time parameters.
- l. Evaluate listeners' interest and receptiveness.
- m. Use verbal and nonverbal feedback strategies to engage discussion and adjust message and delivery.
- n. Respond to questions and comments.

3 2 1 0 7. Interpret and use tables, charts, and figures to support written and oral communications.

- a. Compile facts and arrange in an organized manner for a table, chart or figure.
- b. Document sources of data.
- c. Determine most appropriate way to display data for effective coherence.
- d. Prepare table, chart, graph or figure for inclusion in

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publication or presentation.

- e. Evaluate reference or source of data for authenticity and reliability.
- f. Explain information presented in tables, charts and figures.
- g. Prepare written summary of findings expressed in tables, charts and figures.

3 2 1 0 8. Interpret verbal and nonverbal behaviors to enhance communication with co-workers and clients/participants.

- a. Identify verbal cues.
- b. Observe voice speed, voice quality and tone.
- c. Explain message conveyed by verbal behaviors.
- d. Identify nonverbal cues.
- e. Observe eye contact, facial expressions, posture, gestures and other body language.
- f. Explain message conveyed by nonverbal behaviors.

3 2 1 0 9. Locate, organize and reference written information from various sources to communicate with co-workers and clients/participants.

- a. Identify topic.
- b. Conduct search of information using card catalog, keywords, and/or search engines.
- c. Locate variety of resources such as books, journals, and magazines.
- d. Locate information from electronic forms including the Internet.
- e. Organize resources to use key information.
- f. Read and take notes from selected resources.
- g. Prepare outline that emphasizes major points with supporting data.
- h. Present information in organized, easy-to-follow manner.
- i. Prepare working bibliography according to MLA, APA, CBE, or Chicago, depending on the warranted language style.
- j. Prepare a bibliography according to MLA, APA, CBE, or Chicago, depending on the warranted language style.
- k. Use parenthetical, footnotes and endnotes text citations accurately.
- l. Follow plagiarism and copyright rules and regulations.

3 2 1 0 10. Use correct grammar, punctuation and terminology to write and edit documents.

- a. Organize and arrange information for effective coherence.
- b. Report relevant information in order of occurrence.
- c. Interpret information, data, and observations correctly.
- d. Present main ideas and supporting facts.
- e. Use technical terms and concepts.
- f. Incorporate and use references effectively and accurately.
- g. Report objective and/or subjective information.
- h. Use correct grammar and sentence structure.
- i. Use correct spelling.
- j. Use correct punctuation and capitalization.
- k. Use word processing software to develop text, charts, graphs or figures correctly.

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- l. Use presentation software to prepare visual support materials.
- m. Format written documents with correct font and layout for easy reading.

Mathematics Courses

3 2 1 0 1. Demonstrate mathematics knowledge and skills required to pursue the full range of career and post-secondary education opportunities within the IT career cluster.

- a. Identify whole numbers, decimals, fractions, complex numbers, polynomials, and geometrical figures.
- b. Apply basic arithmetic (addition, subtraction, multiplication, and division) operations.
- c. Apply relational (equal, not equal, greater than, less than, etc.) and logical operators in a logical expression.
- d. Understand the relationship of data and measurements to the problem.
- e. Produce mathematical formulae, expressions, and/or sequence of solution steps from problem statements.
- f. Analyze problem statements for missing/irrelevant data, estimate/exact values, inconsistent parameters.
- g. Construct charts/tables/graphs from functions and data.
- h. Describe problem-solving techniques (e.g., successive approximation, trial and error).

Science Courses

3 2 1 0 1. Demonstrate science knowledge and skills required to pursue the full range of career and post-secondary education opportunities within the IT career cluster.

- a. Analyze/evaluate conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of errors, and variables.
- b. Use computers for information processing, mathematical applications and problem-solving.
- c. Apply/use scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification.

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Marketing (A)

1 Semester / .5 Credit (Minimum)

SCED: 12152

Technical-level course for Marketing Strands

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Channel Management

Explain the nature of channels of distribution

Select channels of distribution

Marketing-Information Management

Acquire foundational knowledge of marketing-information management to understand its nature and scope

Describe the need for marketing information

Explain the role of ethics in marketing-information management

Describe the use of technology in the marketing-information management function

Understand marketing-research activities to show command of their nature and scope

Explain the nature of marketing research

Explain types of primary marketing research

Explain the nature and scope of the marketing information management function

Identify sources of primary and secondary data

Product/Service Management

Acquire a foundational knowledge of product/service management to understand its nature and scope

Identify the impact of product life cycles on marketing decisions

Generate product ideas to contribute to ongoing business success

Identify product opportunities

Identify methods/techniques to generate a product idea

Understand opportunity recognition

Apply quality assurances to enhance product/service offerings

Explain warranties and guarantees

Identify consumer protection provisions of appropriate agencies
Evaluate customer experience
Employ product-mix strategies to meet customer expectations.
Explain the concept of product mix.
Describe the nature of product bundling
Identify product to fill customer need
Plan product mix
Determine services to provide customers
Position products/services to acquire desired business image
Explain the nature of product/service branding
Develop strategies to position products/services
Build product/service brand

Promotion

Acquire a foundational knowledge of promotion to understand its nature and scope
Explain the role of promotion as a marketing function
Explain the types of promotion
Identify the elements of the promotional mix
Describe the use of business ethics in promotion
Describe the use of technology in the promotion function
Describe the regulation of promotion
Understand promotional channels used to communicate with targeted audiences
Explain types of advertising media
Describe word-of-mouth channels used to communicate with targeted audiences
Explain the nature of direct marketing channels
Identify communications channels used in sales promotion
Explain communications channels used in public-relations activities
Understand the use of an advertisement's components to communicate with targeted audiences
Explain the components of advertisements
Explain the importance of coordinating elements in advertisements
Understand the use of public-relations activities to communicate with targeted audiences
Identify types of public-relations activities

Discuss internal and external audiences for public-relations activities

Understand the use of trade shows/expositions to communicate with targeted audiences

Explain how businesses can use trade-show/exposition participation to communicate with targeted audiences

Explain considerations used to evaluate whether to participate in trade shows/expositions

Manage promotional activities to maximize return on promotional efforts

Explain the nature of promotional plan

Coordinate activities in the promotional mix

Marketing (B)

1 Semester / .5 Credit (Minimum)

SCED: 12152

Technical-level course for Marketing Strands

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Market Planning

Employ marketing-information to develop a marketing plan
Explain the concept of marketing strategies
Identify considerations in implementing global marketing strategies
Explain the concept of market and market identification
Identify market segments
Select target market
Explain the nature of market planning
Explain the nature of marketing plans
Explain the role of situational analysis in the marketing planning process
Conduct market analysis
Conduct SWOT analysis for use in the marketing planning process
Identify marketing goals and objectives
Explain market budget
Understanding elements of marketing plan

Pricing

Develop a foundational knowledge of pricing to understand its role in marketing
Explain the nature and scope of the pricing function
Describe the role of business ethics in pricing
Explain factors affecting pricing decisions

Selling

Acquire a foundational knowledge of selling to understand its nature and scope

Explain the nature and scope of the selling function

Explain the role of customer service as a component of selling relationships

Explain key factors in building a clientele

Explain company selling policies

Explain business ethics in selling

Describe the use of technology in the selling function

Describe the nature of selling regulations

Acquire product knowledge to communicate product benefits and to ensure appropriateness of product for the customer

Acquire product information for use in selling

Identify product information to identify product features and benefits

Understand sales processes and techniques to enhance customer relationships and to increase the likelihood of making sales

Explain the selling process

Discuss motivational theories that impact buying behavior

I. Project Management and Resource Scheduling

- 3 2 1 0 1. Recognize different resource types (Work, Material, Cost, Budget, Personnel/Skills, Generic, etc)
- 3 2 1 0 2. Understand the concept of scope and demonstrate in context of assessing the size of a project.
- 3 2 1 0 3. Develop plans for project management and resource scheduling.
- 3 2 1 0 4. Identify key personnel and responsibilities for project.
- 3 2 1 0 5. Develop SWOT analysis [Strengths, Weaknesses, Opportunities, and Threats] for project.
- 3 2 1 0 6. Analyze workload of tasks and projects.
- 3 2 1 0 7. Determine required personnel groups and management hierarchy.
- 3 2 1 0 8. Determine resources necessary for project completion.
- 3 2 1 0 9. Determine essential tasks necessary for project completion.
- 3 2 1 0 10. Design potential timelines for assignments.
- 3 2 1 0 11. Explore appropriate technologies for project management and resource scheduling.
- 3 2 1 0 12. Create and present a project management and resource scheduling plan.
- 3 2 1 0 13. Create Gantt charts.
- 3 2 1 0 14. Evaluate and assign resources to tasks.
- 3 2 1 0 15. Implement project management skills to design and complete a collaborative project.
- 3 2 1 0 16. Learn various survey strategies to track project progress.
- 3 2 1 0 17. Develop strategies for monitoring interconnected assignments.
- 3 2 1 0 18. Survey strategies for critical path scheduling.
- 3 2 1 0 19. Create strategies to manage project budgets.
- 3 2 1 0 20. Build survey analysis for customer satisfaction

All Engineering and Technology Pathways**A. FOUNDATIONAL ACADEMIC EXPECTATIONS****B. ESSENTIAL KNOWLEDGE AND SKILLS**

ACADEMIC FOUNDATIONS: Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.

- 3 2 1 0 1. Complete required training, education, and certification to prepare for employment in a particular career field.
 - a. Identify training, education and certification requirements for occupational choice.
 - b. Participate in career-related training and/or degree programs.
 - c. Pass certification tests to qualify for licensure and/or certification in chosen occupational area.
- 3 2 1 0 2. Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities.
 - a. Model behaviors that demonstrate active listening.
 - b. Adapt language for audience, purpose, situation. (i.e. diction/structure, style).

- c. Organize oral and written information.
 - d. Compose focused copy for a variety of written documents such as agendas, audio-visuals, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
 - e. Edit copy to create focused written documents such as agendas, audio-visuals, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
 - f. Comprehend key elements of oral and written information such as cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries, and technical subject matter.
 - g. Evaluate oral and written information for accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevancy, validity, and relationship of ideas.
 - h. Identify assumptions, purpose, outcomes/solutions, and propaganda techniques.
 - i. Predict potential outcomes and/or solutions based on oral and written information regarding trends.
 - j. Present formal and informal speeches including discussion, information requests, interpretation, and persuasive arguments.
- 3 2 1 0 3. Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities.
- a. Identify whole numbers, decimals, and fractions.
 - b. Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication, and division.
 - c. Demonstrate use of relational expressions such as equal to, not equal, greater than, less than, etc.
 - d. Apply data and measurements to solve a problem.
 - e. Analyze mathematical problem statements for missing and/or irrelevant data.
 - f. Construct charts/tables/graphs from functions and data.
 - g. Analyze data when interpreting operational documents.
- 3 2 1 0 4. Demonstrate science knowledge and skills required to pursue the full range of post-secondary and career education opportunities.
- a. Evaluate scientific constructs including conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of errors, and variables.
 - b. Apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification.

COMMUNICATIONS: Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.

- 3 2 1 0 1. Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
- a. Determine the most appropriate reading strategy for identifying the overarching purpose of a text (i.e. skimming, reading for detail, reading for meaning or critical analysis).
 - b. Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions.
 - c. Select the reading strategy or strategies needed to fully comprehend the content within a written document (i.e., skimming, reading for detail, reading for meaning or critical analysis).
 - d. Interpret information, data, and observations to apply information learned from reading to actual practice.
 - e. Transcribe information, data, and observations to apply information learned from reading to actual practice.
 - f. Communicate information, data, and observations to apply information learned from reading to actual practice.
- 3 2 1 0 2. Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace.
- a. Employ verbal skills when obtaining and conveying information.
 - b. Record information needed to present a report on a given topic or problem.
 - c. Write internal and external business correspondence that conveys and/or obtains information effectively.
 - d. Communicate with other employees to clarify workplace objectives.

- e. Communicate effectively with customers and employees to foster positive relationships.
- 3 2 1 0 3. Locate, organize and reference written information from various sources to communicate with co-workers and clients/participants.
 - a. Locate written information used to communicate with co-workers and customers.
 - b. Organize information to use in written and oral communications.
 - c. Reference the sources of information.
- 3 2 1 0 4. Evaluate and use information resources to accomplish specific occupational tasks.
 - a. Use informational texts, Internet web sites, and/or technical materials to review and apply information sources for occupational tasks.
 - b. Evaluate the reliability of information from informational texts, Internet Web sites, and/or technical materials and resources.
- 3 2 1 0 5. Use correct grammar, punctuation and terminology to write and edit documents.
 - a. Compose multi-paragraph documents clearly, succinctly, and accurately.
 - b. Use descriptions of audience and purpose when preparing and editing written documents.
 - c. Use correct grammar, spelling, punctuation, and capitalization when preparing written documents.
- 3 2 1 0 6. Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
 - a. Prepare oral presentations to provide information for specific purposes and audiences.
 - b. Identify support materials that will enhance an oral presentation.
 - c. Prepare support materials that will enhance an oral presentation.
 - d. Deliver an oral presentation that sustains listeners' attention and interest.
 - e. Align presentation strategies to the intended audience.
 - f. Implement multi-media strategies for presentations.
- 3 2 1 0 7. Interpret verbal and nonverbal cues/behaviors to enhance communication with co-workers and clients/participants.
 - a. Interpret verbal behaviors when communicating with clients and co-workers.
 - b. Interpret nonverbal behaviors when communicating with clients and co-workers.
- 3 2 1 0 8. Apply active listening skills to obtain and clarify information.
 - a. Interpret a given verbal message/information.
 - b. Respond with restatement and clarification techniques to clarify information.
- 3 2 1 0 9. Develop and interpret tables, charts, and figures to support written and oral communications.
 - a. Create tables, charts, and figures to support written and oral communications.
 - b. Interpret tables, charts, and figures used to support written and oral communication.
- 3 2 1 0 10. Listen to and speak with diverse individuals to enhance communication skills.
 - a. Apply factors and strategies for communicating with a diverse workforce.
 - b. Demonstrate ability to communicate and resolve conflicts within a diverse workforce.
- 3 2 1 0 11. Exhibit public relations skills to increase internal and external customer/client satisfaction.
 - a. Communicate effectively when developing positive customer/client relationships.

PROBLEM-SOLVING AND CRITICAL THINKING: Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.

- 3 2 1 0 1. Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).
 - a. Identify common tasks that require employees to use problem-solving skills.
 - b. Analyze elements of a problem to develop creative solutions.
 - c. Describe the value of using problem-solving and critical thinking skills to improve a situation or process.
 - d. Create ideas, proposals, and solutions to problems.
 - e. Evaluate ideas, proposals, and solutions to problems.
 - f. Use structured problem-solving methods when developing proposals and solutions.

- g. Generate new and creative ideas to solve problems by brainstorming possible solutions.
- h. Critically analyze information to determine value to the problem-solving task.
- i. Guide individuals through the process of recognizing concerns and making informed decisions.
- j. Identify alternatives using a variety of problem-solving and critical thinking skills.
- k. Evaluate alternatives using a variety of problem-solving and critical thinking skills.
- 3 2 1 0 2. Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers.
 - a. Analyze situations and behaviors that affect conflict management.
 - b. Determine best options/outcomes for conflict resolution using critical thinking skills.
 - c. Identify with others' feelings, needs, and concerns.
 - d. Implement stress management techniques.
 - e. Resolve conflicts with/for customers using conflict resolution skills.
 - f. Implement conflict resolution skills to address staff issues/problems.
- 3 2 1 0 3. Identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability.
 - a. Write realistic performance goals, objectives and action plans.
 - b. Monitor performance goals and adjust as necessary.
 - c. Recognize goal achievement using appropriate rewards in the workplace.
 - d. Communicate goal achievement with managers and co-workers.
- 3 2 1 0 4. Conduct technical research to gather information necessary for decision-making.
 - a. Align the information gathered to the needs of the audience.
 - b. Gather technical information and data using a variety of resources.
 - c. Analyze information and data for value to the research objectives.
 - d. Evaluate information and data to determine value to research objectives.

INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.

- 3 2 1 0 1. Use Personal Information Management (PIM) applications to increase workplace efficiency.
 - a. Manage personal schedules and contact information.
 - b. Create memos and notes.
- 3 2 1 0 2. Employ technological tools to expedite workflow.
 - a. Use information technology tools to manage and perform work responsibilities.
- 3 2 1 0 3. Operate communications applications within a workplace.
 - a. Share files and documents.
 - b. Identify the functions and purpose of communications systems.
 - c. Use communications tools within and across organizations.
- 3 2 1 0 4. Operate Internet applications to perform workplace tasks.
 - a. Access and navigate Internet (e.g., use a web browser).
 - b. Search for information and resources.
 - c. Evaluate Internet resources for reliability and validity.
- 3 2 1 0 5. Operate writing and publishing applications to prepare business communications.
 - a. Prepare simple documents and other business communications.
 - b. Prepare reports and other business communications by integrating graphics and other non-text elements.
 - c. Prepare complex multi-media publications.
- 3 2 1 0 6. Operate presentation applications to prepare presentations.
 - a. Prepare presentations for training, sales and information sharing.
 - b. Deliver presentations with supporting materials.
- 3 2 1 0 7. Employ spreadsheet applications to organize and manipulate data.
 - a. Create a spreadsheet.
 - b. Perform calculations and analyses on data using a spreadsheet.

- 3 2 1 0 8. Employ database applications to manage data.
 - a. Manipulate data elements.
 - b. Manage interrelated data elements.
 - c. Analyze interrelated data elements.
 - d. Generate reports showing interrelated data elements.
- 3 2 1 0 9. Employ collaborative/groupware applications to facilitate group work.
 - a. Facilitate group work through management of shared schedule and contact information.
 - b. Facilitate group work through management of shared files and online information.
 - c. Facilitate group work through instant messaging or virtual meetings.
- 3 2 1 0 10. Employ computer operations applications to manage work tasks.
 - a. Manage computer operations.
 - b. Manage file storage.
 - c. Compress or alter files.
- 3 2 1 0 11. Use computer-based equipment (containing embedded computers or processors) to control devices.
 - a. Operate computer driven equipment and machines.
 - b. Use installation and operation manuals.
 - c. Troubleshoot computer driven equipment and machines.
 - d. Access support as needed to maintain operation of computer driven equipment and machines.

SYSTEMS: Understand roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.

- 3 2 1 0 12. Describe the nature and types of business organizations to build an understanding of the scope of organizations.
 - a. List the types and functions of businesses.
 - b. Describe the types and functions of businesses.
 - c. Explain the functions and interactions of common departments within a business.
- 3 2 1 0 13. Implement quality control systems and practices to ensure quality products and services.
 - a. Describe quality control standards and practices common to the workplace.

SAFETY, HEALTH AND ENVIRONMENTAL: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.

- 3 2 1 0 14. Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
 - a. Assess workplace conditions with regard to safety and health.
 - b. Align safety issues with appropriate safety standards to ensure a safe workplace/jobsite.
 - c. Identify safety hazards common to workplaces.
 - d. Identify safety precautions to maintain a safe worksite.
 - e. Select appropriate personal protective equipment as needed for a safe workplace/jobsite.
 - f. Inspect personal protective equipment commonly used for selected career pathway.
 - g. Use personal protective equipment according to manufacturer rules and regulations.
 - h. Employ a safety hierarchy and communication system within the workplace/jobsite.
 - i. Implement safety precautions to maintain a safe worksite.
- 3 2 1 0 15. Complete work tasks in accordance with employee rights and responsibilities and employers obligations to maintain workplace safety and health.
 - a. Identify rules and laws designed to promote safety and health in the workplace.
 - b. State the rationale of rules and laws designed to promote safety and health.

- 3 2 1 0 16. Employ emergency procedures as necessary to provide aid in workplace accidents.
 - a. Demonstrate knowledge of First Aid procedures.
 - b. Demonstrate knowledge of CPR procedures.
 - c. Use safety equipment as necessary.
- 3 2 1 0 17. Employ knowledge of response techniques to create a disaster and/or emergency response plan.
 - a. Complete an assessment of an emergency and/or disaster situation.
 - b. Create an emergency and/or disaster plan.

LEADERSHIP AND TEAMWORK: Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

- 3 2 1 0 18. Employ leadership skills to accomplish organizational goals and objectives.
 - a. Analyze the various roles of leaders within organizations (e.g. contribute ideas; share in building an organization; act as role models to employees by adhering to company policies, procedures, and standards; promote the organization's vision; and mentor others).
 - b. Exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem solution, and investment in individuals when leading a group in solving a problem.
 - c. Exhibit traits such as compassion, service, listening, coaching, developing others, team development, and understanding and appreciating others when acting as a manager of others in the workplace.
 - d. Exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living, and change when interacting with others in general.
 - e. Consider issues related to self, team, community, diversity, environment, and global awareness when leading others.
 - f. Exhibit traits such as innovation, intuition, adaptation, life-long learning and coachability to develop leadership potential over time.
 - g. Analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation.
 - h. Describe observations of outstanding leaders using effective management styles.
 - i. Participate in civic and community leadership and teamwork opportunities to enhance skills.
- 3 2 1 0 19. Employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals.
 - a. Implement organizational skills when facilitating others' work efforts.
 - b. Explain how to manage a staff that satisfies work demands while adhering to budget constraints.
 - c. Describe how staff growth and development to increase productivity and employee satisfaction.
 - d. Organize team involvement within a group environment.
 - e. Work with others to develop and gain commitment to team goals.
 - f. Distribute responsibility and work load fairly.
 - g. Model leadership and teamwork qualities to aid in employee morale.
 - h. Identify best practices for successful team functioning.
 - i. Explain best practices for successful team functioning.
- 3 2 1 0 20. Employ teamwork skills to achieve collective goals and use team members' talents effectively.
 - a. Work with others to achieve objectives in a timely manner.
 - b. Promote the full involvement and use of team members' individual talents and skills.
 - c. Employ conflict-management skills to facilitate solutions.
 - d. Demonstrate teamwork skills through working cooperatively with co-workers, supervisory staff, and others, both in and out of the organization, to achieve particular tasks.
 - e. Demonstrate teamwork processes that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability, and conflict resolution.
 - f. Develop plans to improve team performance.

- g. Demonstrate commitment to and a positive attitude toward team goals.
- h. Take responsibility for shared group and individual work tasks.
- i. Assist team members in completing their work.
- j. Adapt effectively to changes in projects and work activities.
- k. Negotiate effectively to arrive at decisions.
- 3 2 1 0 21. Establish and maintain effective working relationships with all levels of personnel and other departments in order to accomplish objectives and tasks.
 - a. Build effective working relationships using interpersonal skills.
 - b. Use positive interpersonal skills to work cooperatively with co-workers representing different cultures, genders and backgrounds.
 - c. Manage personal skills to accomplish assignments.
 - d. Treat people with respect.
 - e. Provide constructive praise and criticism.
 - f. Demonstrate sensitivity to and value for diversity.
 - g. Manage stress and control emotions.
- 3 2 1 0 22. Conduct and participate in meetings to accomplish work tasks.
 - a. Develop meeting goals, objectives and agenda.
 - b. Assign responsibilities for preparing materials and leading discussions.
 - c. Prepare materials for leading discussion.
 - d. Assemble and distribute meeting materials.
 - e. Conduct meeting to achieve objectives within scheduled time.
 - f. Demonstrate effective communication skills in meetings.
 - g. Produce meeting minutes including decisions and next steps.
 - h. Use parliamentary procedure, as needed, to conduct meetings.
- 3 2 1 0 23. Employ mentoring skills to inspire and teach others.
 - a. Use motivational techniques to enhance performance in others.
 - b. Provide guidance to enhance performance in others.

ETHICS AND LEGAL RESPONSIBILITIES: Know and understand the importance of professional ethics and legal responsibilities.

- 3 2 1 0 24. Apply ethical reasoning to a variety of workplace situations in order to make ethical decisions.
 - a. Evaluate alternative responses to workplace situations based on legal responsibilities and employer policies.
 - b. Evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities.
 - c. Identify personal and long-term workplace consequences of unethical or illegal behaviors.
 - d. Explain personal and long-term workplace consequences of unethical or illegal behaviors.
 - e. Determine the most appropriate response to workplace situations based on legal and ethical considerations.
 - f. Explain the most appropriate response to workplace situations based on legal and ethical considerations.
- 2 1 0 25. Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.
 - a. Locate information on organizational policies in handbooks and manuals.
 - b. Discuss how specific organizational policies and procedures influence a specific work situation.

EMPLOYABILITY AND CAREER DEVELOPMENT: Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills.

- 3 2 1 0 26. Identify and demonstrate positive work behaviors and personal qualities needed to be employable.
 - a. Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation.
 - b. Demonstrate flexibility and willingness to learn new knowledge and skills.

- c. Exhibit commitment to the organization.
 - d. Identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions.
 - e. Apply communication strategies when adapting to a culturally diverse environment.
 - f. Manage resources in relation to the position (i.e. budget, supplies, computer, etc).
 - g. Identify positive work-qualities typically desired in each of the career cluster's pathways.
 - h. Manage work roles and responsibilities to balance them with other life roles and responsibilities.
- 3 2 1 0 27. Develop a personal career plan to meet career goals and objectives.
- a. Develop career goals and objectives as part of a plan for future career direction.
 - b. Develop strategies to reach career objectives.
- 3 2 1 0 28. Demonstrate skills related to seeking and applying for employment to find and obtain a desired job.
- a. Use multiple resources to locate job opportunities.
 - b. Prepare a résumé.
 - c. Prepare a letter of application.
 - d. Complete an employment application.
 - e. Interview for employment.
 - f. List the standards and qualifications that must be met in order to enter a given industry.
 - g. Employ critical thinking and decision-making skills to exhibit qualifications to a potential employer.
- 3 2 1 0 29. Maintain a career portfolio to document knowledge, skills and experience in a career field.
- a. Select educational and work history highlights to include in a career portfolio.
 - b. Produce a record of work experiences, licenses, certifications and products.
 - c. Organize electronic or physical portfolio for use in demonstrating knowledge, skills and experiences.
- 3 2 1 0 30. Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
- a. Compare employment opportunities to individual needs and career plan objectives.
 - b. Evaluate employment opportunities based upon individual needs and career plan objectives.
 - c. Demonstrate appropriate methods for accepting or rejecting employment offers.
- 3 2 1 0 31. Identify and exhibit traits for retaining employment to maintain employment once secured.
- a. Model behaviors that demonstrate reliability and dependability.
 - b. Maintain appropriate dress and behavior for the job to contribute to a safe and effective workplace/jobsite.
 - c. Complete required employment forms and documentation such as I-9 form, work visa, W-4 and licensures to meet employment requirements.
 - d. Summarize key activities necessary to retain a job in the industry.
 - e. Identify positive work behaviors and personal qualities necessary to retain employment.
- 3 2 1 0 32. Identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster.
- a. Locate and identify career opportunities that appeal to personal career goals.
 - b. Match personal interest and aptitudes to selected careers.
- 3 2 1 0 33. Recognize and act upon requirements for career advancement to plan for continuing education and training.
- a. Identify opportunities for career advancement.
 - b. Pursue education and training opportunities to acquire skills necessary for career advancement.
 - c. Examine the organization and structure of various segments of the industry to prepare for career advancement.
 - d. Research local and regional labor (workforce) market and job growth information to project potential for advancement.
 - e. Manage employment relations to make career advancements.
- 3 2 1 0 34. Continue professional development to keep current on relevant trends and information within the industry.
- a. Use self-assessment, organizational priorities, journals, Internet sites, professional associations, peers and other resources to develop goals that address training, education and self-improvement issues.
 - b. Read trade magazines and journals, manufacturers' catalogues, industry publications and Internet sites to keep current on industry trends.

- c. Participate in relevant conferences, workshops, mentoring activities and in-service training to stay current with recent changes in the field.
- 3 2 1 0 35. Examine licensing, certification and credentialing requirements at the national, state and local levels to maintain compliance with industry requirements.
 - a. Examine continuing education requirements related to licensing, certification, and credentialing requirements at the local, state and national levels for chosen occupation.
 - b. Examine the procedures and paperwork involved in maintaining and updating licensure, certification and credentials for chosen occupation.
 - c. Align ongoing licensing, certification and credentialing requirements to career plans and goals.
- 3 2 1 0 36. Examine employment opportunities in entrepreneurship to consider entrepreneurship as an option for career planning.
 - a. Describe the opportunities for entrepreneurship in a given industry.

TECHNICAL SKILLS: Use of technical knowledge and skills required to pursue careers in all career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.

- 3 2 1 0 37. Employ information management techniques and strategies in the workplace to assist in decision-making.
 - a. Use information literacy skills when accessing, evaluating and disseminating information.
 - b. Describe the nature and scope of information management.
 - c. Maintain records to facilitate ongoing business operations.
- 3 2 1 0 38. Employ planning and time management skills and tools to enhance results and complete work tasks.
 - a. Develop goals and objectives.
 - b. Prioritize tasks to be completed.
 - c. Develop timelines using time management knowledge and skills.
 - d. Use project-management skills to improve workflow and minimize costs.

C. CLUSTER (FOUNDATION) KNOWLEDGE AND SKILLS

ACADEMIC FOUNDATIONS: Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.

COMMUNICATIONS: Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.

Prepare STEM material in oral, written, or visual formats that provide information to an intended audience to fulfill specific communication need of an audience.

- 3 2 1 0 1. Use effective methods to communicate concepts of STEM to a broadly represented audience.
 - a. Report subjective and objective information.
 - b. Report information with the intent of being persuasive.
 - c. Report information with the intent of being informational.
 - d. Report information with the intent of being instructional.
 - e. Analyze the audience and presentation environment.
 - f. Explain technical concepts to non-technical audiences
 - g. Use professional terminology.
 - h. Identify, select, use appropriate multimedia resources.
 - i. Discern between various communication techniques and their ability to convey various types of information.
 - j. Explain various methods of obtaining information.
- 3 2 1 0 2. Effectively communicate STEM information to a select audience.
 - a. Explain the various methods of presenting information.
 - b. Use oral presentation skills to present scientific, technological, engineering, or mathematical reports.
 - c. Use written presentation skills to present scientific, technological, engineering, or mathematical reports.

- d. Use visual presentation skills to present scientific, technological, engineering, or mathematical reports.
- e. Use multimedia presentation skills to present scientific, technological, engineering, or mathematical reports.
- 3 2 1 0 3. Apply the ability to read, interpret, and analyze STEM materials discerning the information and concepts.
 - a. Use appropriate note-taking methods.
 - b. Write a report on technical literature; use graphical tools as appropriate.
 - c. Present a report on technical literature; use graphical tools as appropriate.
 - d. Discriminate between fact and opinion.

Apply active listening skills to obtain or clarify information pertaining to plans, processes, projects, or designs.

- 3 2 1 0 4. Interpret messages or information provided that clarifies issues, ideas, plans, projects, or processes.
 - a. Indicate familiarity of topic being presented.
 - b. Respond accordingly using appropriate verbal and nonverbal language.
 - c. Answer questions correctly and be able to provide feedback in own words.
- 3 2 1 0 5. Respond and/or restate information that will clarify STEM techniques to be used and/or information to be applied to projects, plans, or processes.
 - a. Ask questions to seek or confirm understanding.
 - b. Paraphrase and/or repeat information.
 - c. Record notes and summarize information from written notes.

PROBLEM-SOLVING AND CRITICAL THINKING: Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.

Effectively develop and apply the skills inherent in systems engineering where requirements, configuration, integration, project management, quality assurance, and process applications are necessary.

- 3 2 1 0 1. Apply the skills and abilities in requirements analysis and configuration control while working plans, processes, and projects as assigned.
- 3 2 1 0 2. Use the skills required in project management to track and assess the progress of a plan, process, or project as assigned.
- 3 2 1 0 3. Apply the skills in quality assurance as well as those in process management and development for appropriate applications of systems integration techniques to an assigned project.

INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.

Effectively use information technology to gather, store, and communicate data in appropriate formats.

- 3 2 1 0 1. Use IT in support of gathering, storage, and transfer of data or results in appropriate formats to support assigned projects.
 - a. Apply different techniques for gathering storing and transferring data.
- 3 2 1 0 2. Select and use assorted forms of IT to meet the requirements of a plan, process, project, report, issue, or problem.
 - a. Write a report based on Internet research, using calculations, graphs, and/or spreadsheets.
 - b. Create, organize, manage, and distribute information in electronic format.

Evaluate and use skills relating to the differing technological tools used to manipulate, report, or operate with data acquisition.

- 3 2 1 0 3. Use IT tools to manipulate data creating reports, plans, processes, or projects from data provided.
 - a. Use statistical tools to analyze data.

- b. Query and extract information from data.
- c. Create knowledge from data.
- 3 2 1 0 4. Use modeling, simulation, or visual reproduction to effectively analyze, create, and/or communicate to others regarding plans, projects, problems, issues or processes.
 - a. Apply techniques for modeling systems or problems.
 - b. Apply techniques for scientific visualization and animation of complex physical systems or problems.
 - c. Test different scenarios to multiple variables.
- 3 2 1 0 5. Apply a currently applicable computer programming language to a process, project, plan, or issue as assigned.
 - a. Write a computer program, e.g., Java, C++.
 - b. Execute a computer program, e.g., Java, C++.
- 3 2 1 0 6. Apply statistical tools that verify the reliability or validity of the data used or collected in the plan, project, process, or problem.
 - a. Using a selected statistical tool, compute data reliability.
 - b. Select and use the tools to analyze and synthesize data.
 - c. Describe the meaning of probability and how it applies to a set of data.
- 3 2 1 0 7. Apply a technological, scientific, or mathematical concept (use of algorithms) when communicating with others on issues, plans, processes, problems, or concepts.
 - a. Select the proper visualization tools.
 - b. Use simulation, modeling, prototype techniques to solve problems.
 - c. Communicate data visually.

SYSTEMS: Understand roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.

SAFETY, HEALTH AND ENVIRONMENTAL: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.

Apply safety practices in the environment where science, technology, engineering, and/or mathematical principles are appropriate to ensure a safe workplace.

- 3 2 1 0 1. Apply appropriate safety and health practices when developing plans, projects, processes, or solving complex problems.
 - a. Exercise good safety practices.
 - b. Follow various regulatory codes, such as EPA, FEMA, UL, OSHA, CSA.
 - c. Reference and use material safety data sheets (MSDS).
 - d. Encourage others to employ safe practices.
- 3 2 1 0 2. Use appropriate safety techniques, equipment, and processes in planning and /or project applications.
 - a. Demonstrate safe use of tools and equipment.
 - b. Develop and implement emergency plans.
 - c. Develop and implement workplace lab safety plan.
 - d. Follow workplace regulations and record-keeping requirements.
 - e. Demonstrate the use of safety equipment in the workplace.
 - f. Demonstrate the use of eyewash and safety showers
 - g. Accurately interpret safety signs, symbols, and labels.
 - h. Demonstrate basic first aid techniques.

Develop an awareness of safety, health, and environmental hazards inherent in the STEM arenas when solving problems, developing plans, processes, or completing projects to be proactive in promoting safety.

- 3 2 1 0 3. Identify existing or potential hazards to existing or assigned plans, projects, or processes where safety, health, or environment might be in play.
- Describe potential safety, health and environmental hazards in various situations.
 - Identify physical, chemical, toxicological, biological, and radioactive hazards.
 - Analyze environmental impacts.
 - Conduct a safety audit.

LEADERSHIP AND TEAMWORK: Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

ETHICS AND LEGAL RESPONSIBILITIES: Know and understand the importance of professional ethics and legal responsibilities.

Develop the knowledge and abilities to comprehend ethical and legal standards as they apply to STEM where plans, processes, and projects will be dependent upon them.

- 3 2 1 0 1. Demonstrate the skill of application to ethical and legal standards as they apply to the plans, processes, and projects as assigned in simulated environments.
- Evaluate the pros and cons of current ethical questions and scenarios, for example, environmental stewardship, genetic research, and living subjects in research.
 - Comply with ethical standards and professional code of ethics.
 - Follow legal requirements for the treatment of people in the workplace (ADA, EEO).
 - Follow requirements of regulatory agencies in the scientific, and mathematics, engineering, or technology field (e.g., NFPA, OSHA, EPA, ADA, EOE, FCC).
 - Develop personal ethics for real-life situations and experiences.
 - Evaluate personal, professional, and organizational ethics.
 - Explain fundamentals of patents, trademarks, copyrights, and proprietary information.
 - Recognize and refute misleading information.
 - Evaluate methods for protecting and conserving resources.

EMPLOYABILITY AND CAREER DEVELOPMENT: Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills.

Develop the skills and abilities to research career pathways in STEM.

- 3 2 1 0 1. Engage experiences in STEM where an individual can identify personal interests and expectations for career and personal development.
- List resources for researching funding sources for scientific projects and technology.
 - List careers that you have investigated, internships that you could apply for, and job shadowing opportunities that you have identified.
 - Construct and maintain a portfolio of experiences and accomplishments.

TECHNICAL SKILLS: Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.

D. PATHWAY KNOWLEDGE AND SKILLS

ACADEMIC FOUNDATIONS

Apply the concepts and processes using the guiding principles and standards of school mathematics to solve STEM problems.

- 3 2 1 0 1. Apply and create appropriate models, concepts, and processes for an assigned situation, and apply them in solving the problem.

3 2 1 0 2. Explain the impact of assumptions, initial conditions, boundary conditions, and other constraints on problem solutions.

Apply and use algebraic, geometric and trigonometric relationships, characteristics, and properties to solve problems.

3 2 1 0 3. Evaluate mathematical solutions for reasonableness.

3 2 1 0 4. Apply appropriate data collection, statistical analysis methods, and the means of displaying data to make decisions.

3 2 1 0 5. Apply the processes and concepts for science literacy relative to engineering and technology.

Demonstrate the ability to select, apply, and convert systems of measurement to solve problems.

3 2 1 0 6. Apply scalar and vector quantities as applied to physical systems, such as the relationship between position, velocity, and acceleration.

3 2 1 0 7. Apply fundamental laws and principles relevant to engineering and technology.

Demonstrate the ability to use Newton's Laws of Motion to analyze static and dynamic systems with and without the presence of external forces.

3 2 1 0 8. Use the laws of conservation of energy, charge, and momentum, to solve a variety of problems involving mechanical, fluid, chemical, biological, electrical, and thermal systems.

3 2 1 0 9. Use the relationships between energy, work, and power to solve a variety of problems involving mechanical, fluid, electrical, and thermal systems.

Explain relevant physical properties of materials used in engineering and technology.

3 2 1 0 10. Use the principles of ray optics to describe reflection and refraction of light.

3 2 1 0 11. Explain the relationships between amplitude, wavelength, frequency, period, and speed of a wave.

Explain the relationships between scientific theory, scientific principles and laws, in technology, and engineering.

3 2 1 0 12. Develop concepts and processes for the application of technology standards.

COMMUNICATIONS

PROBLEM-SOLVING AND CRITICAL THINKING

Use mathematics, science, and technology concepts and processes to solve problems in projects involving design and/or production (e.g. medical, agricultural, biotechnological, energy and power, information and communication, transportation, manufacturing, and construction).

3 2 1 0 13. Apply the core concepts of technology and recognize the relationships with STEM systems (e.g. systems, resources, criteria and constraints, optimization and trade-off, and controls).

3 2 1 0 14. Develop the active use of information technology applications.

3 2 1 0 15. Use computer applications to solve problems by creating and using algorithms, and through simulation and modeling techniques.

INFORMATION TECHNOLOGY APPLICATIONS

Select and use different forms of communications technology including word processing, spreadsheets, database, presentation software, email to communicate, and use of the internet to search for and display information.

3 2 1 0 16. Select and use information technology tools to collect, analyze, synthesize, and display data to solve problems.

3 2 1 0 17. Read and create basic computer aided engineering drawings.

TECHNICAL SKILLS

Apply concepts and processes for the application of technology to engineering.

- 3 2 1 0 18. Use knowledge, techniques, skills, and modern tools necessary for engineering practice.
- 3 2 1 0 19. Describe the elements of good engineering practice (e.g. understanding customer needs, planning requirements analysis, using appropriate engineering tools, prototyping, test, evaluation, and verification).
- 3 2 1 0 20. Demonstrate the ability to characterize a plan and identify the necessary engineering tools that will produce a technical solution when given a problem statement.
- 3 2 1 0 21. Effectively use project management techniques (e.g. working in teams, appropriate time management practices, effective organizational skills, conduct analysis of cost, resources, and production capacity, and quality practices with continuous improvement).

Develop processes and concepts for the use of technology which model technical competence.

- 3 2 1 0 22. Use and calibrate probes, sensors, measuring systems, and devices to collect data using traceable standards.
- 3 2 1 0 23. Explain the impact of error in measurement, predict the effect of error propagation in calculations, and record data with the correct number of significant digits.
- 3 2 1 0 24. Safely operate a variety of tools, machines, and equipment (e.g. milling machines, rapid prototyping machines, drill press, band saw, CNC machines, and hand tools).
- 3 2 1 0 25. Use, handle, and store tools and materials correctly, perform preventative maintenance, understanding the results of negligence and improper maintenance or improper calibration.

DESIGN**Know the elements of the processes and concepts for understanding the design process.**

- 3 2 1 0 26. Explain why and how the contributions of great innovators are important to society.
- 3 2 1 0 27. Explain the elements and steps of the design process and tools or techniques that can be used for each step.
- 3 2 1 0 28. Describe design constraints, criteria, and trade-offs in regard to variety of conditions (e.g. technology, cost, safety, society, the environment, time, human resources, manufacturability).

Develop processes and concepts to apply the design process.

- 3 2 1 0 29. Apply the design process, including understanding customer needs, interpreting and producing design constraints and criteria, planning and requirements analysis, brainstorming and idea generation, using appropriate modeling and prototyping, testing, verification, and implementation.
- 3 2 1 0 30. Demonstrate the ability to evaluate a design or product and improve the design using testing, modeling, and research.
- 3 2 1 0 31. Demonstrate the ability to record and organize information and test data during design evaluation.

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications

Course KCCMS #: 30150

Video Production*Competency Profile Sheet*

Video Production applies the technical skills learned in Audio Video Production Fundamentals by allowing students to orchestrate projects from setting the objectives to the post-production evaluation. The subject of the presentation may be determined in a number of ways, but must address an authentic need. The complexity of the presentation is not the focus of the course, but the experience of the entire process in, to include planning the presentation, setting up the studio (if applies), acting as videographer and editor to make it fluid and seamless.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date: _____ Completion Date: _____ Credit Earned: _____

__/__/__

__/__/__

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: __/__/__

Instructor Signature: _____ Date: __/__/__

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				

0.1.4	Analyze data when interpreting operational documents.				
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Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1. 1 <i>Analyze career paths in the communications field.</i>		3	2	1	0
1.1.1	Experience all aspects of the video production industry (i.e. producer, director, manager, videographer, editor and related personnel).				

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the communications field.</i>		3	2	1	0
1.2.1	Design and produce a video presentation (i.e. set objectives, create a story board and write script, identify equipment/people/etc. needed; design a studio layout, develop a Gantt chart, monitor production process, etc.).				
1.2.2	Demonstrate appropriate use of equipment and tools to produce a video production.				
1.2.3	Lead discussions with the production staff to discuss production progress and to ensure production objects were attained.				
1.2.4	Coordinate the activities of writers, directors, managers, videographers, producers and/or other personnel throughout the production process.				
1.2.5	Monitor strength, clarity and reliability of incoming and outgoing signals to maintain broadcast and/or recording quality				
1.2.6	Identify potential problems to the production process and possible solutions.				
1.2.7	Demonstrate teamwork.				
1.2.8	Resolve problems that arise during the production.				
1.2.9	Evaluate the pre-production, production and post-production process.				
1.2.10	Create a portfolio of video projects.				

KSDE

Arts, AV Technology and Communication Career Cluster

Pathway (CIP CODE: 09.0702): AV Communications

Course KCCMS #: 30151

Digital Media Design and Production*Competency Profile Sheet*

Digital Media Design and Production will provide students with the opportunity to apply the fundamental techniques learned in Digital Media Technology course through the production of a multi-media project for public presentation. Topics include developing a production schedule, working as a team, utilizing composition principles and embedding audio, video or other content in digital formats.

Learner Name: _____ ID _____

Instructor: _____ School Year: 20__ to 20__

Enrollment Date:

Completion Date:

Credit Earned: _____

___/___/___

___/___/___

I certify that the student received the training in the competencies listed below.

Student Signature: _____ Date: ___/___/___

Instructor Signature: _____ Date: ___/___/___

Directions: The following competencies are required for full approval of a course in the Arts, AV Technology and Communication career cluster. Student abilities are judged by the level in which they achieved each. Use this form to indicate individual achievement.

Rating Scale:

- 3 Skilled/Works independently
- 2 Limited skills/requires assistance
- 1 Underdeveloped skill
- 0 No exposure/No instruction or training

Essential Knowledge and Skills**Academic Foundations**

Benchmark: 0.1 <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>		3	2	1	0
0.1.1	Adapt language for audience, purpose, situation (i.e. diction/structure, style).				
0.1.2	Compose focused copy for a variety of written documents (i.e. documents, notes, oral presentations reports).				
0.1.3	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication and division.				
0.1.4	Analyze data when interpreting operational documents.				

Communications

Benchmark: 0.2 <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>		3	2	1	0
0.2.1	Interpret information, data and observations to apply information learned from reading to actual practice.				
0.2.2	Communicate effectively with others to foster positive relationships.				
0.2.3	Reference the sources of information.				
0.2.4	Compose multi—paragraph documents clearly, succinctly, and accurately (i.e. correct grammar, spelling, punctuation and capitalization).				
0.2.5	Deliver an oral presentation to provide information for specific purposes and audiences.				

Problem Solving

Benchmark: 0.3 <i>Solve problems using creativity, innovation and critical thinking skills (analyze, synthesize, and evaluate) independently and in teams.</i>		3	2	1	0
0.3.1	Analyze elements of a problem to determine solutions (including how to think creatively).				

Safety, Health and Environmental:

Benchmark: 0.4 <i>Understand the importance of health, safety, and environmental management systems and follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>		3	2	1	0
0.4.1	Follow operation manuals for all equipment and tools to maintain safe workplace for self and others.				
0.4.2	Demonstrate safe work habits and procedures (i.e. personal habits, around electricity, storage of equipment).				

Leadership and Teamwork:

Benchmark: 0.5 <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>		3	2	1	0
0.5.1	Exhibit leadership skills (i.e. management of resources, listening to others, respect, supporting others).				
0.5.2	Work with others to achieve objectives in a timely manner (i.e. follow direction, take responsibility, respect for others and cooperation).				

Ethics and Legal Responsibilities

Benchmark: 0.6 <i>Know and understand the importance of professional ethics and legal responsibilities.</i>		3	2	1	0
0.6.1	Follow code of ethics for the Arts, AV and Communications field in all projects, decisions and actions.				

Employability and Career Development

Benchmark: 0.7 <i>Know and understand the importance of employability skills, effectively manage careers and the importance of entrepreneurship skills.</i>		3	2	1	0
0.7.1	Model behaviors of a good employee (i.e. reliability, dependability, professionalism).				
0.7.2	Create a record of work experiences, certifications and products.				

Technical Skills

Comprehensive Standard:

1.0 *Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.*

Benchmark: 1. 2 <i>Demonstrate technical skills related to careers in the communications field.</i>		3	2	1	0
1.2.1	Apply design principles to convergent media using various software applications currently in use by industry.				
1.2.2	Capture, edit and/or manipulate photos and/or video for digital media applications.				

1.2.3	Create a digital media project for public presentation.				
1.2.4	Capture, edit and/or manipulate and use audio in a digital media project.				
1.2.5	Practice digital file management procedures.				
1.2.6	Design and follow a production schedule for a digital media project.				
1.2.7	Demonstrate the proper use of terminology.				
1.2.8	Collaborate with team members on a digital media project.				
1.2.9	Perform tasks assigned as part of a project development team.				
1.2.10	Demonstrate creativity (e.g. project development, problem solving and conflict resolution).				
1.2.11	Apply design concepts in all projects.				
1.2.12	Utilize composition principles when designing visual elements (i.e. images, text) in projects.				
1.2.13	Follow local acceptable use policy.				
1.2.14	Understand and adhere to all applicable fair use and copyright laws (including Creative Commons).				
1.2.15	Demonstrate an understanding of the pre-production, production and post-production of media projects.				
1.2.16	Develop a plan for a multi-media project (including contracts, budgeting concerns, costs, preparation, production and legal issues).				
1.2.17	Demonstrate an understanding of the First Amendment, student press rights and Freedom of Information Act.				
1.2.18	Demonstrate an understanding of what constitutes libel, slander, obscenity, acceptable use, plagiarism and invasion of privacy.				
1.2.19	Demonstrate knowledge of digital video hardware and software resources (i.e. digital compression, audio/video digital editing).				
1.2.20	Embed audio, video or other appropriate content in digital formats (i.e. PDF document, webpage).				
1.2.21	Demonstrate use of video conferencing and broadcasting applications.				
1.2.22	Create a portfolio of digital media projects.				