COURSE SEQUENCE

Art/Design 10-4 ⟶ **Art/Design 20-4** ⟶ **Art/Design 30-4**

Workplace Readiness 10-4 ⟶ **Workplace Practicum 20-4** ⟶ **Workplace Practicum 30-4**

**Art/Media
Communications 10-4** ⟶ **Art/Media
Communications 20-4** ⟶ **Art/Media
Communications 30-4**

Workplace Readiness 10-4 ⟶ **Workplace Practicum 20-4** ⟶ **Workplace Practicum 30-4**

Knowledge and Employability 10-level courses provide opportunities for *exploration* of, and *orientation* toward, an occupational grouping in a single career field. In 20-level courses, students progress from *orientation* toward *preparation*; and in 30-level courses, students are involved in *preparation* for direct job entry.

Art/Design and Art/Media Communications courses are designed to teach occupational knowledge and skills for entry-level positions in art, design and media communications by developing employability competencies that relate to all career paths.

- All courses focus on developing career awareness, safety standards and knowledge of tools, equipment and materials related to the industry.

- Art/Design 10-4 provides an understanding of, and an opportunity for students to practise,

techniques and the effective use of media and equipment. These skills will enable students to illustrate visual solutions to situations they encounter in any career field.

- Art/Design 10-4 provides a basis for, and an introduction to, Art/Design 20-4 and 30-4.

- Art/Design 20-4 and 30-4 focus on the practical applications of art in the working world.

- Art/Media Communications 10-4 provides a basis for, and an introduction to, Art/Media Communications 20-4 and 30-4.

- Art/Media Communications 20-4 and 30-4 focus on computer-related design projects and animation.

- Students interested in art, design and media communications should be encouraged to take both courses at the 10, 20 and 30 levels.

- A related Workplace Practicum or Work Experience course is recommended to further enhance employability and occupational skills and to adequately prepare students for entry into the work force. In senior high school, a 30-level Workplace Practicum course, 30-level Work Experience course or 30-level Green Certificate course is required to fulfill the requirements of a Certificate of High School Achievement. Workplace practicums are supportive work placements in a related field that will allow students to validate their learning in the workplace.

- demonstrate practical applications through on- and off-campus experiences/community partnerships
- experience career development to assist them in exploring careers, assessing their career skills and developing a career-focused portfolio
- develop interpersonal skills to ensure respect, support and cooperation with others
- develop safety awareness and habits to ensure a safe working environment.

COURSE DELIVERY

This Knowledge and Employability occupational strand includes two sequences of 5-credit courses. Students progress through the courses in a sequence and may combine courses across sequences to increase the depth of their knowledge.

Within each sequence, the 10-level course is a prerequisite for the 20-level course and the 20-level course is a prerequisite for the 30-level course.

The occupational courses may be offered in a variety of learning environments that range from a classroom in a school to a business/industry work site. The courses offer a balance between school-based and work-based learning that provides options for students to enter the workplace or to pursue post-secondary education or training.

GOALS

Students in Knowledge and Employability occupational courses will:

- identify standards determined by the workplace for the academic and occupational competencies considered necessary for success
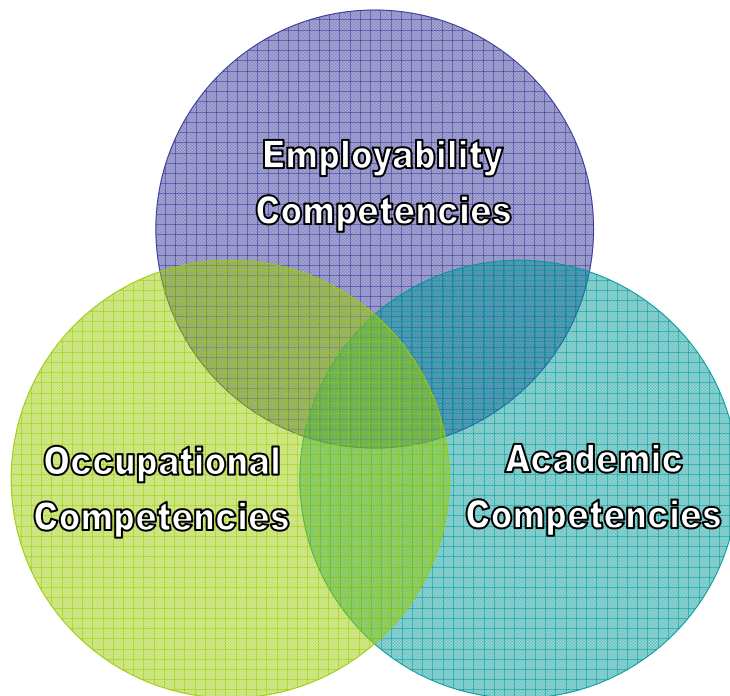
COMPETENCIES FRAMEWORK

Each Knowledge and Employability occupational course is made up of three elements: employability, occupational and academic competencies. The combination of these three elements is essential to the delivery of the occupational courses.

- Employability competencies are transferable to all occupations and are consistent throughout all courses.

- Occupational competencies are specific to an occupational area and provide the context through which students will develop their employability competencies.

- Academic competencies are to be reinforced and further developed through the occupational context that provides relevance to the academic courses.

The integration of the three elements is essential to equip students to make the transition from school to the workplace.
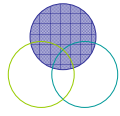
**KNOWLEDGE AND EMPLOYABILITY OCCUPATIONAL COURSES
COMPETENCIES FRAMEWORK**

ART/DESIGN 10-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will develop an awareness of how learning contributes to personal success. • Students will develop an ability to manage change effectively. • Students will explore and discover personal aptitudes and interests related to occupational opportunities.
Personal Management	• Students will develop self-esteem, confidence and the ability to set personal goals and priorities. • Students will identify and understand the risks associated with occupational activities.
Working with Others	• Students will develop communication skills and strategies in an occupational context. • Students will demonstrate respect for the thoughts and opinions of others in the group. • Students will demonstrate positive effort and behaviour toward achieving a group's goals.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will explore a variety of occupations within an art and design career environment. • Students will develop safe workplace practices and procedures. • Students will identify the elements and principles of design. • Students will identify and demonstrate techniques to produce 2-D projects. • Students will identify and demonstrate techniques to produce 3-D projects.
Ensuring Quality	• Students will develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will enhance their ability to listen, speak, read and write effectively.
Thinking	• Students will develop problem-solving strategies.
Numeracy	• Students will understand the value of numeracy skills in the workplace.
Information Technology	• Students will familiarize themselves with the information technology used in daily workplace operation.

ART/DESIGN 10-4

> **EMPLOYABILITY COMPETENCIES:** These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

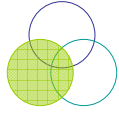| General Outcomes	Specific Outcomes
Students will develop an awareness of how learning contributes to personal success.	**Lifelong Learning** *Students will:* • identify learning preferences and strengths and apply learning styles and strategies appropriate to the situation • set learning goals and identify how formal/informal learning can help them achieve goals • develop an awareness of senior high school courses and work experience and identify educational possibilities; e.g., Registered Apprenticeship Program (RAP), Green Certificate, Career and Technology Studies (CTS) and Career Internship.
Students will develop an ability to manage change effectively.	**Adapting to Change** *Students will:* • identify available support resources and assess potential barriers • prepare an action plan to proactively respond to a particular change or challenge.
Students will explore and discover personal aptitudes and interests related to occupational opportunities.	**Career Development** *Students will:* • create an inventory of personal competencies, interests, goals and work preferences and link this inventory to career options • identify sources of support for investigating and finding work; e.g., Alberta Learning Information Service (ALIS) Web site • describe how work contributes to individual goals • explore the workplace through community partnerships and identify employer and employee expectations, rights and responsibilities.

PERSONAL MANAGEMENT

General Outcomes	Specific Outcomes
Students will develop self-esteem, confidence and the ability to set personal goals and priorities.	**Self-development** *Students will:* • identify personal characteristics, strengths and talents and establish an action plan to build on them • recognize the use of strengths and talents to achieve goals • identify acceptable and appropriate behaviours and present themselves to suit an activity or role; e.g., body language, grooming, clothing, manners • describe personal beliefs about what is right and wrong and assess the consequences of ethical/unethical behaviours.
Students will identify and understand the risks associated with occupational activities.	**Risk Management** *Students will:* • identify current health and safety procedures; e.g., at home, at school, in the community and in the workplace • identify risks that could impact themselves and others and identify hazards in the work environment; e.g., chemical, physical, biological and ergonomic • identify a potential emergency situation and develop strategies for personal emergency responses • identify sources of support when taking risks in their personal lives and in the workplace; e.g., entrepreneurship.

WORKING WITH OTHERS

General Outcomes	Specific Outcomes

Students will develop communication skills and strategies in an occupational context.	**Interpersonal Communication**
	
	Students will:
	• demonstrate appropriate communication strategies for communicating thoughts and feelings; e.g.,
	  – listen without interrupting
	  – contribute to be heard
	  – disagree courteously
	  – accept conflicting opinions
	  – use appropriate language and body language
	• develop awareness of verbal and nonverbal communication strategies
	• improve their ability to communicate by working with others
	• communicate common goals and expectations to improve their team's ability to achieve goals
	• identify causes of conflict.

General Outcomes	Specific Outcomes
Students will demonstrate respect for the thoughts and opinions of others in the group.	**Building Community** *Students will:* • identify commonly accepted courteous behaviour • assess and respect how their personal values and beliefs differ from those of others and how those beliefs impact personal behaviour • identify the value of volunteering in community activities; e.g., charity work, community car wash.

Students will demonstrate positive effort and behaviour toward achieving a group's goals.	**Teamwork**
	
	Students will:
	• identify team goals
	• work independently and with others to support team goals; e.g.,
	  – generate ideas
	  – assess resources
	  – contribute abilities and interests
	  – monitor progress
	  – share responsibility for completion of a task
	• establish short- and long-term team goals.

> **OCCUPATIONAL COMPETENCIES:** Students will develop and demonstrate the following competencies to succeed in a specific occupation or career. They will achieve results through a variety of projects/activities as appropriate to enhance their knowledge and skills. Students will ensure the quality of their work through effective task management and will highlight their achievements in a career-based portfolio.

ACHIEVING RESULTS

General Outcomes	Specific Outcomes

Students will explore a variety of occupations within an art and design career environment.	**Career Awareness**
	
	Exploration
	
	Students will:
	• identify local opportunities within a career field
	• define and recognize entrepreneurship as a potential career path
	• research employment information; e.g., duties, working conditions, personal characteristics, education, salary.
	
	Standards
	
	Students will:
	• identify workplace protocols, procedures and standards of conduct; e.g.,
	  – clean the entire work area, return tools to designated areas, minimize the waste of materials
	  – identify related health and sanitation standards
	  – display punctuality and come prepared for classroom and laboratory activities
	  – treat the laboratory area with care and pay attention to potential workplace health and safety risks
	  – treat other members of the team with respect
	  – use appropriate language and terminology
	  – wear appropriate dress.

Students will develop safe workplace practices and procedures.	**Workplace Health and Safety**
	
	Students will:
	• identify and demonstrate preventive measures to avoid accidents and injury to themselves and others during construction procedures; e.g.,
	  – identify safety device locations in the laboratory or classroom; e.g., eyewash station, emergency shut-off, fire extinguisher, emergency exits, telephone
	  – demonstrate the correct procedures for addressing injuries
	  – identify the proper use of tools with regard to other classmates and laboratory conditions

General Outcomes	Specific Outcomes

	– identify personal protective equipment (PPE); e.g., coveralls, proper eyewear, proper footwear
	    – demonstrate proper body position while at a work station
	    – maintain a safe and clean work area
	    – identify and practise the safe use of electrical equipment
	• demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements.

Students will identify the elements and principles of design.	**Elements and Principles of Design**
	
	Students will:
	• define the elements and principles of design and their applications
	• demonstrate effective uses of the elements and principles of design in a visual communication
	• design solutions to visual problems using personal experiences and abilities
	• recognize elements and principles of design in published communications, designs and artworks
	• apply techniques used in previously published communications to create original artworks
	• identify a message communicated by visual tools; e.g.,
	    – interpret messages from visual images or objects
	    – analyze visual communication using criteria derived from the elements and principles of design
	• recognize that all elements of a design change depending on viewpoint
	• identify the positive and negative spatial relationships of a design or object
	• arrange various images to compose attractive and effective visual communications.

Students will identify and demonstrate techniques to produce 2-D projects.	**2-D Media and Techniques** **Drawing** *Students will:* • recognize the basic uses of various types of lines to communicate forms, textures and value • identify various drawing media and their applications • recognize that all forms are made up of various combinations of basic shapes • demonstrate the use of shading to show 3-D forms, with or without a light source to create shadows • demonstrate the ability to draw an object using oblique, isometric and point systems of perspective • recognize the principles of design used to compose images on a page • identify the relationship between the scale and proportion of an object and its surrounding environment

General Outcomes	Specific Outcomes
	• identify the basic proportion of human features • demonstrate the ability to depict humans from varying viewpoints and to depict humans performing varying actions. **Using Colour** *Students will:* • recognize the principles of the colour wheel • understand that colour may be used to communicate messages and moods • identify various media and their technical use to portray objects in colour • demonstrate the ability to use various coloured media and tools effectively • demonstrate the application of colour to show form, texture and effects of light in depicting objects and/or environments • recognize the various uses of colour in industrial design and advertising • demonstrate how the effective representation of ideas is enhanced by the use of colour.

Students will identify and demonstrate techniques to produce 3-D projects.	**3-D Media and Techniques**
	
	Purpose of Sculpture
	
	Students will:
	• identify that sculptural or 3-D forms may be used to represent ideas so that all views may be seen
	• understand the four main methods of creating 3-D forms; e.g.,
	  – addition
	  – subtraction (carving)
	  – casting
	  – assemblages of mixed media
	• demonstrate the ability to use media and tools effectively and safely
	• identify that form usually follows function
	• recognize that scale and proportion need to be believable when portraying ideas in three dimensions
	• demonstrate the ability to design a space or object; e.g.,
	  – build a model using appropriate materials
	  – document the process with drawings and photographs for a personal portfolio
	  – demonstrate creative thinking to complete a task.

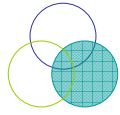| General Outcomes	Specific Outcomes

Malleable Sculpture

Students will:
- identify various materials that may be manipulated to create a form
- demonstrate and practise how to make objects from clay or clay-like media, using various techniques; e.g.,
  - coil
  - slab
  - pinch
  - mould
  - potter's wheel
- recognize the function of these objects in their everyday lives
- identify the aesthetic elements that make a functional object attractive
- demonstrate the ability to translate a 2-D plan or idea into a 3-D form
- understand the processes of finishing 3-D forms to safely suit their function(s)
- choose the best technology to create forms
- describe and practise the safety precautions associated with working around ceramic equipment and materials
- demonstrate proper maintenance procedures for tools, equipment and machinery.

Nonmalleable Sculpture

Students will:
- identify the limitations of working with nonmalleable media
- recognize the proper effective joining techniques needed to create a safe structure or form
- identify the effective finishing methods of various media
- demonstrate the ability to transfer their own ideas from a 2-D plan or drawing into a 3-D form that fulfills a function or presents a solution to a problem
- demonstrate the use of safety equipment and conditions required by each medium and its technology
- document the steps and processes of production for the sculptural form.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed quality standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

COMMUNICATION

General Outcomes	Specific Outcomes
Students will enhance their ability to listen, speak, read and write effectively.	**Listening, Speaking, Reading and Writing** *Students will:* • read, view and interpret information presented in a variety of forms, including text, videos, graphs, charts, diagrams, manuals • identify a purpose for writing • print or write legibly, spell accurately and apply rules of grammar to construct text • listen and ask questions to expand information and to appreciate the points of view of others.

THINKING

General Outcomes	Specific Outcomes
Students will develop problem-solving strategies.	**Problem Solving** *Students will:* • identify and define, and ask relevant questions to clarify, the problem • evaluate the results in terms of expected outcomes.

NUMERACY

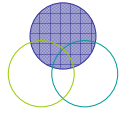| General Outcomes	Specific Outcomes
Students will understand the value of numeracy skills in the workplace.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion to solve problems in a meaningful context • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHNOLOGY

General Outcomes	Specific Outcomes

Students will familiarize themselves with the information technology used in daily workplace operation.	**Computer Operations**
	
	Students will:
	• identify the most appropriate technology tool for the task; e.g., fax, e-mail, networks, telephone
	• identify appropriate telephone operations, answer telephone calls appropriately, locate numbers and make telephone calls
	• identify basic computer operations; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• identify procedures for connecting and using audio, video and digital equipment
	• identify procedures for sending and receiving faxes and setting up a fax machine
	• identify procedures for copying and printing documents.

Knowledge and Employability (Occupational Component)

ART/DESIGN 20-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will apply their abilities and interests toward achieving learning goals. • Students will practise the skills and abilities needed to manage change. • Students will orient themselves toward an occupation that reflects their personal aptitudes and interests.
Personal Management	• Students will increase their self-esteem and confidence and enhance their ability to set personal goals and priorities. • Students will understand risks and be accountable for their actions.
Working with Others	• Students will develop effective communication skills and strategies in an occupational context. • Students will demonstrate the ability to understand and work within the culture of a group. • Students will plan and make decisions with others.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will orient themselves toward an occupation within an art and design career environment. • Students will demonstrate safe workplace practices and procedures. • Students will identify the elements and process of design. • Students will apply the elements of design to visual graphics. • Students will apply the elements of design to the built environment. • Students will apply the elements of design to various products. • Students will apply the elements of design to create articles of clothing (optional).
Ensuring Quality	• Students will continue to develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will demonstrate effective listening, speaking, reading and writing skills.
Thinking	• Students will apply creative thinking skills to solve problems.
Numeracy	• Students will apply mathematical concepts to solve occupational problems.
Information Technology	• Students will enhance their performance by using information technology to help complete tasks.

ART/DESIGN 20-4

EMPLOYABILITY COMPETENCIES: These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

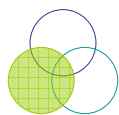| General Outcomes	Specific Outcomes
Students will apply their abilities and interests toward achieving learning goals.	**Lifelong Learning** *Students will:* • relate learning preferences and strengths to formal and informal learning opportunities and identify post-secondary opportunities within the related field • assess learning goals and current competencies, identify competencies needing development and identify and prioritize learning goals • create a pathway of senior high school courses to reflect learning goals • identify educational possibilities; e.g., Registered Apprenticeship Program (RAP), Green Certificate, Career and Technology Studies (CTS) and Career Internship.

Students will practise the skills and abilities needed to manage change.	**Adapting to Change**
	
	Students will:
	• identify goals, responsibilities and commitments
	• assess and reflect on the success of an action plan; e.g.,
	  – create alternative choices to deal with unexpected change
	  – identify stressors in personal environments that they can and cannot change
	• identify the need for personal support and create an inventory of available personal and community sources of support.

Students will orient themselves toward an occupation that reflects their personal aptitudes and interests.	**Career Development** *Students will:* • assess work preferences and nonpreferences (e.g., indoor, outdoor, shift work), assess life/work options and outline career goals and paths • work in and seek out a variety of roles and responsibilities • measure and celebrate personal contributions to workplace goals; e.g., paid, unpaid or volunteer work • orient themselves to the workplace through community partnerships and assess personal performance in terms of workplace expectations.

Knowledge and Employability (Occupational Component)

PERSONAL MANAGEMENT

General Outcomes	Specific Outcomes
Students will increase their self-esteem and confidence and enhance their ability to set personal goals and priorities.	**Self-development** *Students will:* • re-evaluate an action plan to develop strengths and talents • use strengths and talents to achieve personal goals • clarify acceptable and appropriate behaviours for specific activities and roles • act ethically in personal, community and workplace contexts and accept the consequences of their actions.
Students will understand risks and be accountable for their actions.	**Risk Management** *Students will:* • follow health and safety procedures; e.g., at home, at school, in the community and in the workplace • identify potential hazards, take corrective action and develop and practise action plans to ensure safety • practise personal emergency responses • assess their comfort level with, and the consequences of, taking risks.

WORKING WITH OTHERS

General Outcomes	Specific Outcomes
Students will practise effective communication skills and strategies in an occupational context.	**Interpersonal Communication** *Students will:* • assess the effectiveness of communication strategies used to communicate thoughts and feelings; e.g., – listen without interrupting – contribute to be heard – disagree courteously – accept conflicting opinions – use appropriate body language • assess verbal and nonverbal communication strategies • apply social norms to build specific relationships • demonstrate the ability to accept praise and/or criticism.
Students will demonstrate the ability to understand and work within the culture of a group.	**Building Community** *Students will:* • interact with others in a courteous manner • accommodate the beliefs of others in work and personal environments and show respect for differences in beliefs, abilities, etiquette and styles of interaction • identify opportunities for participation in community growth.

General Outcomes	Specific Outcomes

Students will plan and make decisions with others.	**Teamwork**
	
	Students will:
	• participate effectively as group members; e.g.,
	  – generate ideas
	  – assess resources
	  – contribute abilities and interests
	  – monitor progress
	  – share responsibility for completion of a task
	• assume various roles within a group; e.g., leadership
	• clarify the expected outcomes of teamwork.

ACHIEVING RESULTS

General Outcomes	Specific Outcomes

Students will orient themselves toward an occupation within an art and design career environment.	**Career Awareness**
	
	Orientation
	
	Students will:
	• identify entry-level competencies
	• identify post-secondary opportunities
	• recognize entrepreneurial opportunities within the industry
	• introduce themselves to local business/industry operations
	• match their personal interests to their job search; e.g.,
	  – identify sources of support for investigating and finding work
	  – describe entry-level requirements
	  – recognize potential career ladders
	• recognize that the arts industry represents one of Canada's major sources of employment or vocational opportunities and recognize that opportunities will continue to grow as emerging technologies develop
	• identify various career paths available to designers and people skilled in art
	• explore the marketing, displaying and advertising of design products.
	
	Standards
	
	Students will:
	• develop workplace protocols, procedures and standards of conduct; e.g.,
	  – demonstrate appropriate work habits
	  – use safe and sanitary practices
	  – demonstrate pride in themselves
	  – demonstrate pride in their work performance
	  – show respect for others
	  – respect the property of others.

General Outcomes	Specific Outcomes

Students will demonstrate safe workplace practices and procedures.	**Workplace Health and Safety**
	
	Students will:
	• identify safety device locations and procedures within the workplace environment
	• identify government regulatory bodies that support a safe workplace
	• demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB)
	• demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials
	• demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources
	• select and wear personal protective equipment (PPE) appropriate to the specific task
	• demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste
	• demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements
	• follow proper procedures when reporting hardware/software problems
	• demonstrate safety and proper ergonomic conditions while using the computer
	• identify potential safety hazards at work and at home; e.g.,
	  – building security
	  – property protection
	  – window security
	  – fire protection
	• demonstrate adaptability to avoid/correct possible workplace hazards; e.g.,
	  – workplace temperature
	  – noise
	  – computer glare
	  – lighting
	  – posture/wrists
	  – lifting/moving products.

Students will identify the elements and process of design.	**Elements and Process of Design** **Orientation** *Students will:* • identify the components of a professional design portfolio • label diagrams using recognized universal standards of production relevant to a specific area of design • describe how a design fulfills its purpose; e.g., meeting a human need or ecological need

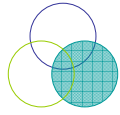| General Outcomes	Specific Outcomes

	• identify why ergonomics is important when designing products
	• identify and critique the values underlying the intentions, design, manufacture and consequences of any technology
	• identify the relationship between scale and proportion
	• identify the seven elements and seven principles of art and design and how they affect the design of an object, environment or communication/advertisement
	• identify opportunities to combine various technological tools to enhance the presentation of design proposals
	• identify the relationships, in each type of design, among history, technology and demand.
	
	Foundational Skills
	
	Students will:
	• interpret and use appropriate universal symbols in design plans
	• measure and record data accurately
	• demonstrate the ability to produce neat design ideas that are easy to read
	• interpret information from various sources to evaluate a design
	• estimate the probability of successful application of a design
	• identify the target audience for the use of the design
	• recognize how the use of elements and principles of art and design can be interpreted by people using the design
	• recognize that changes in, and adaptations and combinations of, designs are a part of the design process.
	
	Design Process
	
	Students will:
	• identify the six steps of the design process; i.e.,
	  – the brief
	  – research
	  – idea generation
	  – test
	  – final solution
	  – evaluation
	• identify the relationship between design and the four phases of technology; i.e.,
	  – intention at its conception (function)
	  – its design (form)
	  – its manufacture (developing the product)
	  – its consequences
	• describe the three main areas of design; i.e.,
	  – graphics/visual communication
	  – product
	  – the built environment.

General Outcomes	Specific Outcomes
Students will apply the elements of design to visual graphics.	**Graphics – Visual Communication** *Students will:* • develop an awareness of the various graphic arts used to convey information • find examples of various layout styles and explain their purpose in graphic design • recognize that the use of colour, typography style, layout and other elements and principles of design affect the message conveyed to the target audience • demonstrate the ability to use typography effectively • demonstrate the ability to combine text and images using effective composition techniques • demonstrate the ability to portray the final solution in an attractive and professional manner • use various technologies to execute and/or enhance an original design.

Students will apply the elements of design to the built environment.	**The Built Environment**
	
	Architectural Design
	
	Students will:
	• use basic blueprints of a simple building to interpret real dimensions and appearance
	• demonstrate the use of universal symbols in an original design or a technical illustration of a plan
	• create architectural plans to fulfill a brief
	• use drawing materials effectively and neatly
	• follow a standard design format to present a personal portfolio
	• evaluate the final solution based on the following:
	  – whether form fits the function
	  – the ergonomics of design
	  – environmental concerns
	  – aesthetics
	  – the elements and principles of design
	• demonstrate the ability to illustrate various views of a building; e.g., use systematic solutions to interpret these views—perspective, oblique views, isometric views, expanded views, orthographic views
	• combine various architectural styles to create an original solution to the brief
	• use various media to achieve the most effective depiction of the final solution
	• create a 3-D model of the architectural (or built) design, using scaled dimensions from existing or original plans.

General Outcomes	Specific Outcomes
	Landscape/Exterior Design *Students will:* • demonstrate the use of scale and proportion • analyze examples of various types of landscape design, considering space, texture, colour, materials, mood and functional ergonomic aspects • insert architectural design symbols into original designs to represent materials • use various media and techniques to effectively represent the final solution • critique the final solution using criteria from the brief.
Students will apply the elements of design to various products.	**Product Design** *Students will:* • create a concept to improve the design of an existing product; e.g., reverse engineering • use ergonomic considerations and environmental awareness in an original design • explain the design process • use various media and techniques to present the final solution • recognize the psychological effects of colour and imagery in the appearance of a product • self-evaluate an original design and critique other designs constructively • demonstrate an understanding of, and the ability to use, the elements and principles of design.
Students will apply the elements of design to create articles of clothing (optional).	**Clothing Design (Optional)** *Students will:* • demonstrate the ability to draw the human form using correct proportions • demonstrate the ability to represent the human form in action or performing activities realistically; e.g., – collect examples of people in various activities – analyze their positions using principles of proportion • recognize that colour can be interpreted in a variety of ways • recognize the idea of a uniform as identifying groups of people; e.g., tribes, cliques, teams, students, age • demonstrate the ability to create an original clothing design that fulfills the criteria of the brief • use various techniques and media to illustrate the final solution from at least two viewpoints.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will continue to develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed quality standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

Knowledge and Employability (Occupational Component)
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COMMUNICATION

General Outcomes	Specific Outcomes

Students will demonstrate effective listening, speaking, reading and writing skills.	**Listening, Speaking, Reading and Writing**
	
	Students will:
	• read, view and interpret occupation-related materials; e.g.,
	  – use related occupational terms
	  – identify occupation-related literature
	  – interpret and follow written instructions
	• select and create a text format to suit a purpose and audience, e.g., forms, letters, reports, memos, résumé, and:
	  – describe uses of writing skills in related occupations
	  – write a letter of inquiry
	  – write a letter of thanks
	  – complete job applications
	• listen and present information in a clear, concise manner; e.g.,
	  – listen attentively to organize and classify information and ideas
	  – organize main ideas and key messages with clarity.

THINKING

General Outcomes	Specific Outcomes
Students will apply creative thinking skills to solve problems.	**Problem Solving, Decision Making and Creative Thinking** *Students will:* • apply a problem-solving model to identify the problem/issue • identify appropriate actions and develop several alternatives for each promising idea • evaluate the results, in terms of expected outcomes related to the initial problem, and evaluate personal satisfaction with the outcome of the idea; e.g., product/process.

NUMERACY

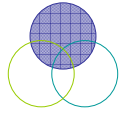| General Outcomes	Specific Outcomes
Students will apply mathematical concepts to solve occupational problems.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion to solve problems in a meaningful context • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHNOLOGY

General Outcomes	Specific Outcomes

Students will enhance their performance by using information technology to help complete tasks.	**Computer Operations and Computer Applications**
	
	Students will:
	• demonstrate appropriate language and etiquette when using information technology
	• demonstrate appropriate telephone operations; e.g., answer telephone calls appropriately, locate numbers and make telephone calls
	• demonstrate basic computer operations to complete a task; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• demonstrate procedures for connecting and using audio, video and digital equipment
	• demonstrate procedures for sending and receiving faxes and setting up a fax machine
	• demonstrate procedures for copying and printing documents.

ART/DESIGN 30-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will consistently demonstrate personal discovery and continuous learning. • Students will manage change effectively to support their goals. • Students will prepare themselves for entry-level employment in an occupation that reflects their personal aptitudes and interests.
Personal Management	• Students will exhibit self-esteem and confidence through the achievement of personal goals. • Students will manage risks to achieve both personal and workplace goals.
Working with Others	• Students will model effective communication skills and strategies in the home, school, community and workplace. • Students will promote equity in work and community endeavours. • Students will demonstrate the ability to complete tasks in a team environment.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will prepare for entry-level employment within an art and design career environment. • Students will demonstrate entry-level standards of safe workplace practices and procedures. • Students will use graphics to communicate a message. • Students will develop an understanding of reading and creating blueprints. • Students will demonstrate the ability to design various products. • Students will demonstrate the ability to design articles of clothing (optional).
Ensuring Quality	• Students will demonstrate an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will demonstrate effective listening, speaking, reading and writing skills to prepare for employment.
Thinking	• Students will research information, use creative thinking skills and use effective problem-solving strategies to solve problems.
Numeracy	• Students will demonstrate mathematical operations to effectively solve problems in a meaningful context.
Information Technology	• Students will demonstrate the effective use of information technology to perform daily workplace operations.

ART/DESIGN 30-4

EMPLOYABILITY COMPETENCIES: These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

General Outcomes	Specific Outcomes
Students will consistently demonstrate personal discovery and continuous learning.	**Lifelong Learning** *Students will:* • identify learning opportunities related to learning goals, commitments and resources; e.g., – identify opportunities for further education/training – locate needed financial support systems – locate needed personal support systems • practise what has been learned to build competence and confidence and evaluate the application of competencies to learning goals • create a plan that demonstrates continuous learning; e.g., – analyze requirements for graduation and for further education/training – modify a learning plan to reflect requirements and opportunities.
Students will manage change effectively to support their goals.	**Adapting to Change** *Students will:* • prioritize and assign resources to meet commitments and goals • prioritize commitments and goals to achieve a balanced lifestyle • redefine an action plan as situations change; e.g., – use adaptive strategies – redefine personal goals – select personal coping mechanisms • access available and appropriate sources of support • identify opportunities for improvement and innovation; e.g., entrepreneurship.

General Outcomes	Specific Outcomes
Students will prepare themselves for entry-level employment in an occupation that reflects their personal aptitudes and interests.	**Career Development** *Students will:* • analyze elements of job satisfaction; e.g., recognition, environment, pay, benefits, prestige • build personal career paths and networks • analyze how work contributes to societal and economic needs and a sense of responsibility • prepare for employment through community partnership activities and organize and complete specific job tasks effectively and efficiently.

PERSONAL MANAGEMENT

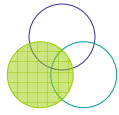| General Outcomes	Specific Outcomes
Students will exhibit self-esteem and confidence through the achievement of personal goals.	**Self-development** *Students will:* • continue to create a long-term self-development plan in which they consider accomplishments and redefine self-development goals • demonstrate entry-level self-presentation appropriate to the activity and role • maintain a high standard of personal ethics when interacting with others.
Students will manage risks to achieve both personal and workplace goals.	**Risk Management** *Students will:* • maintain health and safety procedures; e.g., at home, at school, in the community and in the workplace • monitor success in reducing the impact of hazards on themselves and others • demonstrate concern for the safety of others by exhibiting appropriate behaviour in the workplace • work with others to respond to emergencies • take planned risks to contribute to personal growth.

WORKING WITH OTHERS

General Outcomes	Specific Outcomes

Students will model effective communication skills and strategies in the home, school, community and workplace.	**Interpersonal Communication**
	
	Students will:
	• communicate thoughts and feelings appropriately; e.g.,
	  – listen without interrupting
	  – contribute to be heard
	  – disagree courteously
	  – accept conflicting opinions
	  – use appropriate body language
	• maintain a balance between speaking, listening and responding
	• work together to achieve goals
	• demonstrate the ability to deal constructively with conflict.

Students will promote equity in work and community endeavours.	**Building Community** *Students will:* • demonstrate and model courteous behaviour in daily interactions • demonstrate respect for others and a shared understanding of diverse beliefs, etiquette and styles of interaction • assess their personal contribution to community growth.

Students will demonstrate the ability to complete tasks in a team environment.	**Teamwork**
	
	Students will:
	• assess the effectiveness of group and personal contributions; e.g.,
	  – generate ideas
	  – assess resources
	  – contribute abilities and interests
	  – monitor progress
	  – share responsibility for completion of a task
	• expand their abilities to contribute to team goals.

ACHIEVING RESULTS

General Outcomes	Specific Outcomes

Students will prepare for entry-level employment within an art and design career environment.	**Career Awareness**
	
	Preparation
	
	Students will:
	• assess entry-level competencies
	• recognize opportunities for further education/training
	• select post-secondary opportunities
	• identify local entrepreneurs
	• establish contacts with local businesses/industries
	• present marketable skills and strengths; e.g.,
	  – write a letter of application
	  – prepare a résumé
	  – complete application forms
	  – identify contacts and references
	  – collect evidence of competencies in a portfolio
	• develop a digital portfolio of completed work/projects
	• develop the ability to work independently and as part of a design team to complete a project
	• understand the importance and existence of timelines in the fulfillment of commercial contracts.
	
	Standards
	
	Students will:
	• demonstrate workplace protocols, procedures and standards of conduct; e.g.,
	  – demonstrate appropriate work habits
	  – demonstrate effective human relations techniques in the workplace
	  – practise safety in the workplace
	  – demonstrate acceptable verbal and nonverbal communication skills
	  – practise personal and public hygiene procedures
	  – demonstrate entry-level competency in tools and equipment usage
	  – use supplies correctly
	  – follow good storage practices
	  – demonstrate pride in their work performance
	  – demonstrate a willingness to work
	  – demonstrate respect for others
	  – follow accepted principles and procedures
	  – recognize opportunities for further education/training.

General Outcomes	Specific Outcomes
Students will demonstrate entry-level standards of safe workplace practices and procedures.	**Workplace Health and Safety** *Students will:* • identify and explain the use of safety devices within the workplace • demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB) • demonstrate a prework and postwork hazard assessment • demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials • demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources • model safety consciousness by selecting and wearing personal protective equipment (PPE) appropriate to the specific task • demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste • demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements.
Students will use graphics to communicate a message.	**Graphic Communication** **Orientation** *Students will:* • identify the four types of graphics that are used to communicate a message; i.e., – environmental: for specific interior or exterior environments – informative: to visually present data – illustrative: to give visual forms to a text – promotional: to advertise in a mass media/consumer society • recognize that layout is the organization of visual elements and structure is the arrangement of pieces of information. **Brief** *Students will:* • identify the needs of the target audience • identify the purpose of the communication • create a visual communication that shows a process, location and analysis of data or imparts information to a target audience, using any media format that best illustrates the message.

General Outcomes	Specific Outcomes

	Research
	
	Students will:
	• identify the type of graphic needed to communicate the message
	• identify various technologies that may be used commercially to best illustrate the ideas of the designer.
	
	Ideas
	
	Students will:
	• depict their own characteristics or areas of interest by creating a personal logo, including a pictograph
	• identify a company or individual by designing a business card, letterhead and other promotional materials
	• illustrate an aspect or segment of a text in either a 2-D or a 3-D format; e.g.,
	  – design a product container and label, using an original or adapted idea
	  – produce an advertisement for a type of product or an event; e.g., poster, video commercial, multimedia production or 3-D model
	  – illustrate a design for an interior or exterior space to identify a display unit or concept.
	
	Test
	
	Students will:
	• examine each idea for potential problems
	• suggest improvements or adaptations based on feedback
	• choose the best idea.
	
	Final Solution
	
	Students will:
	• present all solutions to a brief, using an established format of headings, bordered pages and title boxes
	• demonstrate an awareness of ergonomic, environmental, social and legal limitations in all solutions.
	
	Evaluation
	
	Students will:
	  evaluate their own and others' designs, using elements and principles of design as the basis for the critique; e.g., suggest various adaptations and alterations that could improve the illustrated final solution.

Knowledge and Employability (Occupational Component)   Art/Design 30-4 /47
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General Outcomes	Specific Outcomes

Students will develop an understanding of reading and creating blueprints.	**The Built Environment**
	
	Orientation
	
	Students will:
	• discover that the variety of architectural structures depends upon:
	   – climate
	   – available materials
	   – technology
	   – social and economic structures of society
	   – present standards of fashion
	• identify standard symbols used to indicate the features of a structure on a blueprint or plan
	• identify how use of the elements and principles of design affect the appearance and function of an architectural design
	• recognize that function may dictate form in some structures
	• recognize the difference between the functional components and decorative elements of a structure
	• identify environmental considerations when designing a structure.
	
	Brief
	
	Students will:
	• identify the purpose of the structure
	• identify the potential uses of the space
	• consider the location and any environmental aspects.
	
	Research
	
	Students will:
	• identify various structures that match the brief
	• analyze each structure for form, using the elements and principles of design
	• identify any historical or technological trends that influence the design
	• critique each structure, using the criteria established in the brief.

General Outcomes	Specific Outcomes

Ideas

Students will:
- decide on a shape for a structure
- list the rooms contained within the structure and their functions
- arrange criteria in a diagram; e.g.,
  - divide the structure into areas
  - illustrate ideas and scale for effective usage
  - indicate features like walls, windows, doors, walkways and other structural features
  - label the diagram, explaining technical and structural considerations as necessary
  - suggest possible materials and colours to be integrated into the design.

Test

Students will:
- examine each idea for potential problems
- suggest improvements or adaptations based on feedback
- choose the best idea.

Final Solution

Students will:
- present the final solution in technical graphics and coded diagrams; e.g.,
  - make use of scale and proportion
  - use accepted blueprinting techniques and symbols for walls, windows, doors
  - present all views; i.e.,
    - floor plan
    - elevated views
    - axonometric 3-D version using two-point oblique or isomeric perspective
  - indicate texture by graphically describing the materials used
  - enhance the drawing by using colour
  - incorporate, when available, any media or computer-aided depictions
  - make a 3-D model to scale, if applicable.

Evaluation

Students will:
- critique the design by referring back to the brief and suggesting any alterations or improvements; e.g., present the design to someone in the industry for feedback.

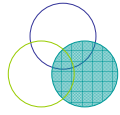| General Outcomes	Specific Outcomes

Students will demonstrate the ability to design various products.	**Product Design**
	
	Orientation
	
	Students will:
	• identify the physical characteristics of a desired product
	• recognize the technical and mechanical requirements of a defined product
	• identify the use of the materials required to produce a designed product
	• identify the methods of illustrating products, including universal symbols and systems of technical graphic illustration
	• identify the media that may be used to simulate materials or textures of a product.
	
	Brief
	
	Students will:
	• design a product to be used for a specific stated purpose; e.g.,
	  – consider ergonomics, environmental effects and the social characteristics of the target audience
	  – render a 2-D, multiview illustration, using the most effective media, to indicate materials and mechanical functions.
	
	Research
	
	Students will:
	• collect examples of similar products that already exist and would fulfill the criteria of the brief
	• analyze each product example for form and function, using as benchmarks the elements and principles of design, materials used and the level of success in satisfying the needs of the target audience
	• discuss historical and technological trends that have influenced their designs
	• use charts, diagrams and pictures of the products, as well as text, to examine examples of existing products
	• visit commercial sites that market product examples and document their findings.

General Outcomes	Specific Outcomes

Ideas

Students will:
- brainstorm how adaptations and combinations of features could be used to invent an original design for a product and display their findings as a list or an idea web
- choose ideas to work with
- describe ideas using text and sketches of how the product would look and function
- evaluate each idea for form and function, considering scale, ergonomics, materials and estimated cost of production and purchase.

Test

Students will:
- choose the best idea
- suggest improvements and adaptations to make the design more effective or versatile
- illustrate their idea using sketches that show various views.

Final Solution

Students will:
- present a final solution using technical graphics and coded diagrams, as well as illustrations that show at least three views; e.g., use any media that would best represent the appearance of the product
- produce a 3-D model.

Evaluation

Students will:
  critique the success of their product design using the criteria stated in the brief; e.g., suggest changes or alterations that may improve the form and function of the design.

General Outcomes	Specific Outcomes

Students will demonstrate the ability to design articles of clothing (optional).	**Clothing Design (Optional)**
	
	Orientation
	
	Students will:
	• identify how the elements of clothing design may be used to:
	   – enhance appearance
	   – create illusion
	   – identify a group of people
	• identify the characteristics of quality clothing construction techniques
	• recognize that the texture of a fabric is determined by how it is constructed and the type of thread or yarn used
	• recognize that colours of clothing may communicate a message or mood
	• recognize that the elements and principles of design are used as a basis to enhance the design of clothing and accessories
	• recognize various types of machines that are used in the clothing industry
	• identify safe-handling techniques for equipment used in the construction of garments
	• identify basic human proportions that are used to illustrate a clothing design.
	
	Brief
	
	Students will:
	• design an article of clothing, outfit or costume for a specific purpose and consider the function of the clothing when establishing the form of the design
	• identify materials that suit the purpose of the garment.
	
	Research
	
	Students will:
	• gather and display examples of clothing design; e.g.,
	   – types of clothing
	   – photographs from magazines or catalogues
	   – sketches
	• state how the form of the garment fits its function and indicate who would wear it
	• display material swatches with labels to identify:
	   – how they were made
	   – what types of fibres were used in their manufacture
	   – their functional aspects
	   – where they might have been manufactured.

General Outcomes	Specific Outcomes

	Ideas
	
	Students will:
	• illustrate ideas based on the design and materials outlined in the brief; e.g.,
	  – use descriptive labelling, simulated textures and experimental colours to clarify ideas
	  – use believable or realistic human proportions and features to illustrate ideas.
	
	Test
	
	Students will:
	• comment on the limitations of the design ideas
	• illustrate various views of the item using a 3-D form
	• experiment with various elements of design; e.g., colour, texture, pattern, emphasis, shape
	• choose the best idea.
	
	Final Solution
	
	Students will:
	• create an extended series of drawings of their final solution
	• display the outfit from at least three views; e.g.,
	  – provide written or oral descriptive details of how the form fits the function
	  – use any media or technology that best illustrates their ideas
	  – produce a prototype of the clothing, if facilities and technical skills are available.
	
	Evaluation
	
	Students will:
	• critique how the final solution fits the brief; e.g., suggest any alterations that would improve the design.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will demonstrate an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed quality standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

COMMUNICATION

General Outcomes	Specific Outcomes
Students will demonstrate effective listening, speaking, reading and writing skills to prepare for employment.	**Listening, Speaking, Reading and Writing** *Students will:* • read, view and interpret occupation-related materials for a specific purpose; e.g., – read related health and safety documents – read terms of employment documents – follow written instructions specific to an occupational area • create text for a specific purpose that clearly communicates information; e.g., – write a résumé – write a job description – submit job application forms • communicate thoughts and ideas and listen to the thoughts and ideas of others to effectively complete a task; e.g., – follow oral instructions – give effective oral instructions when necessary.

THINKING

General Outcomes	Specific Outcomes
Students will research information, use creative thinking skills and use effective problem-solving strategies to solve problems.	**Problem Solving, Decision Making, Finding Information and Creative Thinking** *Students will:* • demonstrate an effective problem-solving model; e.g., – identify the need for a solution to a problem/issue – identify why information is needed; e.g., make decisions, inform, persuade • identify appropriate actions and select and apply information that meets their purposes and needs • evaluate the results in terms of expected outcomes and assess the impact of information on their purpose and audience.

NUMERACY

General Outcomes	Specific Outcomes
Students will demonstrate mathematical operations to effectively solve problems in a meaningful context.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHOLOGY

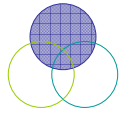| General Outcomes	Specific Outcomes

Students will demonstrate the effective use of information technology to perform daily workplace operations.	**Computer Operations and Computer Applications**
	
	Students will:
	• model and assume personal responsibility for the ethical use of information technologies
	• demonstrate appropriate telephone operations within the workplace; e.g., answer telephone calls appropriately, locate numbers and make telephone calls
	• use computer operations to assist in the completion of daily workplace operations; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• demonstrate procedures for connecting and using audio, video and digital equipment
	• demonstrate procedures for sending and receiving faxes and setting up a fax machine
	• demonstrate procedures for copying and printing documents.

ART/MEDIA COMMUNICATIONS 10-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will develop an awareness of how learning contributes to personal success. • Students will develop an ability to manage change effectively. • Students will explore and discover personal aptitudes and interests related to occupational opportunities.
Personal Management	• Students will develop self-esteem, confidence and the ability to set personal goals and priorities. • Students will identify and understand the risks associated with occupational activities.
Working with Others	• Students will develop communication skills and strategies in an occupational context. • Students will demonstrate respect for the thoughts and opinions of others in the group. • Students will demonstrate positive effort and behaviour toward achieving a group's goals.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will explore a variety of occupations within an art and media communications career environment. • Students will develop safe workplace practices and procedures. • Students will identify the elements and principles of design. • Students will identify the procedures for taking pictures and video images. • Students will identify graphic arts applications and processes.
Ensuring Quality	• Students will develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will enhance their ability to listen, speak, read and write effectively.
Thinking	• Students will develop problem-solving strategies.
Numeracy	• Students will understand the value of numeracy skills in the workplace.
Information Technology	• Students will familiarize themselves with the information technology used in daily workplace operation.

ART/MEDIA COMMUNICATIONS 10-4

> **EMPLOYABILITY COMPETENCIES:** These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

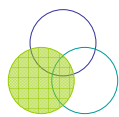| General Outcomes	Specific Outcomes
Students will develop an awareness of how learning contributes to personal success.	**Lifelong Learning** *Students will:* • identify learning preferences and strengths and apply learning styles and strategies appropriate to the situation • set learning goals and identify how formal/informal learning can help them achieve goals • develop an awareness of senior high school courses and work experience and identify educational possibilities; e.g., Registered Apprenticeship Program (RAP), Green Certificate, Career and Technology Studies (CTS) and Career Internship.
Students will develop an ability to manage change effectively.	**Adapting to Change** *Students will:* • identify available support resources and assess potential barriers • prepare an action plan to proactively respond to a particular change or challenge.
Students will explore and discover personal aptitudes and interests related to occupational opportunities.	**Career Development** *Students will:* • create an inventory of personal competencies, interests, goals and work preferences and link this inventory to career options • identify sources of support for investigating and finding work; e.g., Alberta Learning Information Service (ALIS) Web site • describe how work contributes to individual goals • explore the workplace through community partnerships and identify employer and employee expectations, rights and responsibilities.

Knowledge and Employability (Occupational Component)

PERSONAL MANAGEMENT

General Outcomes	Specific Outcomes
Students will develop self-esteem, confidence and the ability to set personal goals and priorities.	**Self-development** *Students will:* • identify personal characteristics, strengths and talents and establish an action plan to build on them • recognize the use of strengths and talents to achieve goals • identify acceptable and appropriate behaviours and present themselves to suit an activity or role; e.g., body language, grooming, clothing, manners • describe personal beliefs about what is right and wrong and assess the consequences of ethical/unethical behaviours.
Students will identify and understand the risks associated with occupational activities.	**Risk Management** *Students will:* • identify current health and safety procedures; e.g., at home, at school, in the community and in the workplace • identify risks that could impact themselves and others and identify hazards in the work environment; e.g., chemical, physical, biological and ergonomic • identify a potential emergency situation and develop strategies for personal emergency responses • identify sources of support when taking risks in their personal lives and in the workplace; e.g., entrepreneurship.

WORKING WITH OTHERS

Students will develop communication skills and strategies in an occupational context.	**Interpersonal Communication**
	
	Students will:
	• demonstrate appropriate communication strategies for communicating thoughts and feelings; e.g.,
	  – listen without interrupting
	  – contribute to be heard
	  – disagree courteously
	  – accept conflicting opinions
	  – use appropriate language and body language
	• develop awareness of verbal and nonverbal communication strategies
	• improve their ability to communicate by working with others
	• communicate common goals and expectations to improve their team's ability to achieve goals
	• identify causes of conflict.

General Outcomes	Specific Outcomes
Students will demonstrate respect for the thoughts and opinions of others in the group.	**Building Community** *Students will:* • identify commonly accepted courteous behaviour • assess and respect how their personal values and beliefs differ from those of others and how those beliefs impact personal behaviour • identify the value of volunteering in community activities; e.g., charity work, community car wash.

Students will demonstrate positive effort and behaviour toward achieving a group's goals.	**Teamwork**
	
	Students will:
	• identify team goals
	• work independently and with others to support team goals; e.g.,
	  – generate ideas
	  – assess resources
	  – contribute abilities and interests
	  – monitor progress
	  – share responsibility for completion of a task
	• establish short- and long-term team goals.

> **OCCUPATIONAL COMPETENCIES:** Students will develop and demonstrate the following competencies to succeed in a specific occupation or career. They will achieve results through a variety of projects/activities as appropriate to enhance their knowledge and skills. Students will ensure the quality of their work through effective task management and will highlight their achievements in a career-based portfolio.

ACHIEVING RESULTS

General Outcomes	Specific Outcomes

Students will explore a variety of occupations within an art and media communications career environment.	**Career Awareness**
	
	Exploration
	
	Students will:
	• identify local opportunities within a career field
	• define and recognize entrepreneurship as a potential career path
	• research employment information; e.g., duties, working conditions, personal characteristics, education, salary.
	
	Standards
	
	Students will:
	• identify workplace protocols, procedures and standards of conduct; e.g.,
	  – clean the entire work area, return tools to designated areas, minimize the waste of materials
	  – identify related health and sanitation standards
	  – display punctuality and come prepared for classroom and laboratory activities
	  – treat the laboratory area with care and pay attention to potential workplace health and safety risks
	  – treat other members of the team with respect
	  – use appropriate language and terminology
	  – wear appropriate dress.

Students will develop safe workplace practices and procedures.	**Workplace Health and Safety**
	
	Students will:
	• identify and demonstrate preventive measures to avoid accidents and injury to themselves and others during procedures; e.g.,
	  – identify safety device locations in the laboratory or classroom; e.g., eyewash station, emergency shut-off, fire extinguisher, emergency exits, telephone
	  – demonstrate the correct procedures for addressing injuries
	  – identify the proper use of tools with regard to other classmates and laboratory conditions

General Outcomes	Specific Outcomes
	− identify personal protective equipment (PPE); e.g., coveralls, proper eyewear, proper footwear − demonstrate proper body position while at a work station − maintain a safe and clean work area − identify and practise the safe use of electrical equipment • demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements • be aware of safety aspects associated with the materials and tools used in artistic activities.
Students will identify the elements and principles of design.	**Elements and Principles of Design** *Students will:* • define the elements and principles of design and their applications • demonstrate effective uses of the elements and principles of design in a visual communication • recognize elements and principles of design in published communications, designs and artworks • apply techniques used in previously published communications to create original artworks • identify a message communicated by visual tools; e.g., − interpret messages from visual images or objects − analyze visual communication using criteria derived from the elements and principles of design • recognize that all elements of a design change depending on viewpoint • identify the positive and negative spatial relationships of a design or object • arrange various images to compose attractive and effective visual communications • design solutions to visual problems using personal experiences and abilities.
Students will identify the procedures for taking pictures and video images.	**Photography and Video** **Photography** *Students will:* • identify the basic camera parts and their functions • identify the various applications of photography • identify the rules of effective composition and how they affect the message • label, analyze and interpret existing published photographs, focusing on: − composition − focal points − elements and principles of design − communicated messages

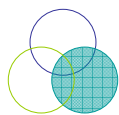| General Outcomes	Specific Outcomes

	• recognize the importance of balancing positive and negative space in a photographic image and construct a design to experiment with positive and negative spatial balances
	• identify the potential social and legal issues involved in capturing and publishing images; e.g.,
	  – Freedom of Information and Protection of Privacy (FOIP)
	  – copyright
	  – cultural restrictions
	  – accepted good taste
	• identify the process of using black-and-white film development to complete photographs on a chosen theme
	• identify safety measures to ensure personal risk is minimized while using photographic tools, equipment and materials
	• recognize that technology continues to advance the methodology of image production
	• display photographs in an effective and attractive manner.
	
	Digital Photography
	
	Students will:
	• identify digital image editing software and its uses
	• identify different aspects of digital cameras and their functions
	• understand the basic theory of digital photography in order to frame a picture
	• identify the process of using digital imagery to develop an image; e.g.,
	  – use the digital camera to create a series of photographs
	  – communicate an intended message or story
	  – experiment with video imaging and editing processes
	• recognize that all images may be altered using various technical processes
	• identify the different digital image formats
	• choose the best format to use when saving/storing digital pictures
	• demonstrate effective digital capture techniques, effective storage of digital images and the composition of a multimedia presentation of digital images.
	
	Video (Digital)
	
	Students will:
	• identify the different components of a video camera and their functions
	• identify different video editing software and their uses
	• demonstrate safe and effective use of a video camera to record a project
	• combine digital still pictures and digital video into a single project
	• understand the software and hardware requirements for capturing, storing, editing and exporting video
	• understand the different video formats and compression tools and use video editing software/hardware to export video to another format.

General Outcomes	Specific Outcomes

Students will identify graphic arts applications and processes.	**Graphic Arts**
	
	Design Process
	
	Students will:
	• identify the six steps of the design process; i.e.,
	  – the brief
	  – research
	  – idea generation
	  – test
	  – final solution
	  – evaluation
	• recognize the effects of various typography styles
	• identify the use of pictographs as universal symbols
	• identify the geometric tools used to illustrate final solutions to the design brief
	• use geometric tools to illustrate various views of the final solution
	• identify and use various computer software programs and hardware to execute or enhance ideas and to communicate and publish intended messages or solutions to the brief
	• identify various layout formats and their uses and develop and use the most effective layout formats to fulfill the brief
	• identify various techniques used to publish original design ideas
	• collect and analyze commercial art forms
	• construct a logo or advertisement using the criteria stated in the brief
	• identify various forms of graphic communication used to summarize or present statistics
	• adapt an existing design to invent an original solution
	• demonstrate the ability to use rendering techniques to indicate surface texture and form of the final solution.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed quality standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

COMMUNICATION

General Outcomes	Specific Outcomes
Students will enhance their ability to listen, speak, read and write effectively.	**Listening, Speaking, Reading and Writing** *Students will:* • read, view and interpret information presented in a variety of forms, including text, videos, graphs, charts, diagrams, manuals • identify a purpose for writing • print or write legibly, spell accurately and apply rules of grammar to construct text • listen and ask questions to expand information and to appreciate the points of view of others.

THINKING

Students will develop problem-solving strategies.	**Problem Solving** *Students will:* • identify and define, and ask relevant questions to clarify, the problem • evaluate the results in terms of expected outcomes.

NUMERACY

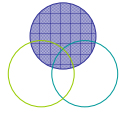|	
Students will understand the value of numeracy skills in the workplace.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion to solve problems in a meaningful context • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHNOLOGY

General Outcomes	Specific Outcomes

Students will familiarize themselves with the information technology used in daily workplace operation.	**Computer Operations**
	
	Students will:
	• identify the most appropriate technology tool for the task; e.g., fax, e-mail, networks, telephone
	• identify appropriate telephone operations, answer telephone calls appropriately, locate numbers and make telephone calls
	• identify basic computer operations; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• identify procedures for connecting and using audio, video and digital equipment
	• identify procedures for sending and receiving faxes and setting up a fax machine
	• identify procedures for copying and printing documents.

ART/MEDIA COMMUNICATIONS 20-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will apply their abilities and interests toward achieving learning goals. • Students will practise the skills and abilities needed to manage change. • Students will orient themselves toward an occupation that reflects their personal aptitudes and interests.
Personal Management	• Students will increase their self-esteem and confidence and enhance their ability to set personal goals and priorities. • Students will understand risks and be accountable for their actions.
Working with Others	• Students will practise effective communication skills and strategies in an occupational context. • Students will demonstrate the ability to understand and work within the culture of a group. • Students will plan and make decisions with others.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will orient themselves toward an occupation within an art and media communications career environment. • Students will demonstrate safe workplace practices and procedures. • Students will identify the procedures for producing digital images. • Students will identify the procedures for producing graphic images. • Students will demonstrate the design skills required to create promotional products. • Students will identify the applications of multimedia projects.
Ensuring Quality	• Students will continue to develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will demonstrate effective listening, speaking, reading and writing skills.
Thinking	• Students will apply creative thinking skills to solve problems.
Numeracy	• Students will apply mathematical concepts to solve occupational problems.
Information Technology	• Students will enhance their performance by using information technology to help complete tasks.

ART/MEDIA COMMUNICATIONS 20-4

 EMPLOYABILITY COMPETENCIES: These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

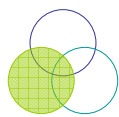| General Outcomes	Specific Outcomes
Students will apply their abilities and interests toward achieving learning goals.	**Lifelong Learning** *Students will:* • relate learning preferences and strengths to formal and informal learning opportunities and identify post-secondary opportunities within the related field • assess learning goals and current competencies, identify competencies needing development and identify and prioritize learning goals • create a pathway of senior high school courses to reflect learning goals • identify educational possibilities; e.g., Registered Apprenticeship Program (RAP), Green Certificate, Career and Technology Studies (CTS) and Career Internship.

Students will practise the skills and abilities needed to manage change.	**Adapting to Change**
	
	Students will:
	• identify goals, responsibilities and commitments
	• assess and reflect on the success of an action plan; e.g.,
	  – create alternative choices to deal with unexpected change
	  – identify stressors in personal environments that they can and cannot change
	• identify the need for personal support and create an inventory of available personal and community sources of support.

Students will orient themselves toward an occupation that reflects their personal aptitudes and interests.	**Career Development** *Students will:* • assess work preferences and nonpreferences (e.g., indoor, outdoor, shift work), assess life/work options and outline career goals and paths • work in and seek out a variety of roles and responsibilities • measure and celebrate personal contributions to workplace goals; e.g., paid, unpaid or volunteer work • orient themselves to the workplace through community partnerships and assess personal performance in terms of workplace expectations.

PERSONAL MANAGEMENT

General Outcomes	Specific Outcomes
Students will increase their self-esteem and confidence and enhance their ability to set personal goals and priorities.	**Self-development** *Students will:* • re-evaluate an action plan to develop strengths and talents • use strengths and talents to achieve personal goals • clarify acceptable and appropriate behaviours for specific activities and roles • act ethically in personal, community and workplace contexts and accept the consequences of their actions.
Students will understand risks and be accountable for their actions.	**Risk Management** *Students will:* • follow health and safety procedures; e.g., at home, at school, in the community and in the workplace • identify potential hazards, take corrective action and develop and practise action plans to ensure safety • practise personal emergency responses • assess their comfort level with, and the consequences of, taking risks.

WORKING WITH OTHERS

General Outcomes	Specific Outcomes

Students will practise effective communication skills and strategies in an occupational context.	**Interpersonal Communication**
	
	Students will:
	• assess the effectiveness of communication strategies used to communicate thoughts and feelings; e.g.,
	  – listen without interrupting
	  – contribute to be heard
	  – disagree courteously
	  – accept conflicting opinions
	  – use appropriate body language
	• assess verbal and nonverbal communication strategies
	• apply social norms to build specific relationships
	• demonstrate the ability to accept praise and/or criticism.

Students will demonstrate the ability to understand and work within the culture of a group.	**Building Community** *Students will:* • interact with others in a courteous manner • accommodate the beliefs of others in work and personal environments and show respect for differences in beliefs, abilities, etiquette and styles of interaction • identify opportunities for participation in community growth.

General Outcomes	Specific Outcomes

Students will plan and make decisions with others.	**Teamwork**
	
	Students will:
	• participate effectively as group members; e.g.,
	   – generate ideas
	   – assess resources
	   – contribute abilities and interests
	   – monitor progress
	   – share responsibility for completion of a task
	• assume various roles within a group; e.g., leadership
	• clarify the expected outcomes of teamwork.

ACHIEVING RESULTS

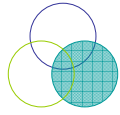| General Outcomes	Specific Outcomes

Students will orient themselves toward an occupation within an art and media communications career environment.	**Career Awareness**
	
	Orientation
	
	Students will:
	• identify entry-level competencies
	• identify post-secondary opportunities
	• recognize entrepreneurial opportunities within the industry
	• introduce themselves to local business/industry operations
	• match their personal interests to their job search; e.g.,
	  – identify sources of support for investigating and finding work
	  – describe entry-level requirements
	  – recognize potential career ladders
	• recognize that the art and media communications industry represents one of Canada's major sources of employment and vocational opportunities and recognize that opportunities will continue to grow as emerging technologies develop
	• identify various career paths available to designers and people skilled in art
	• explore the marketing, displaying and advertising of design products; e.g., locate local businesses that design and produce the type of work under discussion
	• demonstrate knowledge of the diversity of applications and tools available in the industry.
	
	Standards
	
	Students will:
	• develop workplace protocols, procedures and standards of conduct; e.g.,
	  – demonstrate appropriate work habits
	  – use safe and sanitary practices
	  – demonstrate pride in themselves
	  – demonstrate pride in their work performance
	  – show respect for others
	  – respect the property of others.

General Outcomes	Specific Outcomes

Students will demonstrate safe workplace practices and procedures.	**Workplace Health and Safety**
	
	Students will:
	• identify safety device locations and procedures within the workplace environment
	• identify government regulatory bodies that support a safe workplace
	• demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB)
	• demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials
	• demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources
	• select and wear personal protective equipment (PPE) appropriate to the specific task
	• demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste
	• demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements
	• demonstrate adaptability to avoid/correct possible workplace hazards; e.g.,
	  – workplace temperature
	  – noise
	  – computer glare
	  – lighting
	  – posture/wrists
	  – lifting/moving products
	• identify the correct procedures for addressing injuries and identify related documentation
	• identify the consequences of alcohol and drug use on the worker and the workplace
	• develop a safe and clean work area and an ergonomic work station and follow all safety protocols.

General Outcomes	Specific Outcomes
Students will identify the procedures for producing digital images.	**Digital Imagery** *Students will:* • understand the importance of proper posture and ergonomic techniques • demonstrate the safe and effective use of digital cameras • identify various digital image formats and their differences and similarities • identify computer applications used to edit images • identify defects in a digital image • demonstrate the use of appropriate software to correct image defects • demonstrate the ability to use appropriate hardware and software when acquiring a digital image • demonstrate how to organize and store digital images on the computer • create an organized portfolio of their digital images.
Students will identify the procedures for producing graphic images.	**Digital Graphics** **2-D/3-D Images** *Students will:* • identify the differences between 2-D and 3-D images • differentiate between vector and bitmap graphics • create a 2-D vector and bitmap graphic using lines and objects • identify the properties of composite images • use appropriate software to create a 2-D and a 3-D composite image • identify various software applications for use in creating 2-D and 3-D graphics • identify software tools used to manipulate graphics. **Typography** *Students will:* • understand the appropriate use of typography and how to integrate typography into graphics • produce a composite image that integrates graphics and typography.
Students will demonstrate the design skills required to create promotional products.	**Promotional Design** *Students will:* • recognize the importance of 2-D and 3-D digital graphics in the promotion of a product • identify the types of promotion that apply to digital graphics design; e.g., business cards, posters, signs • display an understanding of the properties of different promotional products • identify the target audience • use knowledge and skills to create, using appropriate software, a variety of promotional products for a specific target audience • list and define promotional vocabulary • describe appropriate layout procedures for effective marketing.

General Outcomes	Specific Outcomes

Students will identify the applications of multimedia projects.	**Multimedia Production**
	
	Students will:
	• develop an understanding of multimedia and its uses
	• identify various forms of interactive multimedia applications; e.g.,
	  – Web design
	  – CD/DVD authoring
	• identify appropriate software and hardware for developing multimedia projects; e.g., understand that multimedia software can be interchangeable and can merge with other software applications
	• select an appropriate multimedia application for a specific project
	• create an interactive multimedia project using appropriate hardware and software
	• identify the techniques and equipment used in burning a CD/DVD.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will continue to develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

COMMUNICATION

General Outcomes	Specific Outcomes

Students will demonstrate effective listening, speaking, reading and writing skills.	**Listening, Speaking, Reading and Writing**
	
	Students will:
	• read, view and interpret occupation-related materials; e.g.,
	  − use related occupational terms
	  − identify occupation-related literature
	  − interpret and follow written instructions
	• select and create a text format to suit a purpose and audience, e.g., forms, letters, reports, memos, résumé, and:
	  − describe uses of writing skills in related occupations
	  − write a letter of inquiry
	  − write a letter of thanks
	  − complete job applications
	• listen and present information in a clear, concise manner; e.g.,
	  − listen attentively to organize and classify information and ideas
	  − organize main ideas and key messages with clarity.

THINKING

Students will apply creative thinking skills to solve problems.	**Problem Solving, Decision Making and Creative Thinking** *Students will:* • apply a problem-solving model to identify the problem/issue • identify appropriate actions and develop several alternatives for each promising idea • evaluate the results, in terms of expected outcomes related to the initial problem, and evaluate personal satisfaction with the outcome of the idea; e.g., product/process.

Knowledge and Employability (Occupational Component)
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NUMERACY

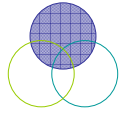| General Outcomes	Specific Outcomes
Students will apply mathematical concepts to solve occupational problems.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion to solve problems in a meaningful context • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHNOLOGY

General Outcomes	Specific Outcomes

Students will enhance their performance by using information technology to help complete tasks.	**Computer Operations and Computer Applications**
	
	Students will:
	• demonstrate appropriate language and etiquette when using information technology
	• demonstrate appropriate telephone operations; e.g., answer telephone calls appropriately, locate numbers and make telephone calls
	• demonstrate basic computer operations to complete a task; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• demonstrate procedures for connecting and using audio, video and digital equipment
	• demonstrate procedures for sending and receiving faxes and setting up a fax machine
	• demonstrate procedures for copying and printing documents.

Knowledge and Employability (Occupational Component)
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ART/MEDIA COMMUNICATIONS 30-4
GENERAL OUTCOMES

Employability Competencies	Students will develop these competencies throughout the learning process and demonstrate them in daily life and the workplace.
Managing Transitions	• Students will consistently demonstrate personal discovery and continuous learning. • Students will manage change effectively to support their goals. • Students will prepare themselves for entry-level employment in an occupation that reflects their personal aptitudes and interests.
Personal Management	• Students will exhibit self-esteem and confidence through the achievement of personal goals. • Students will manage risks to achieve both personal and workplace goals.
Working with Others	• Students will model effective communication skills and strategies in the home, school, community and workplace. • Students will promote equity in work and community endeavours. • Students will demonstrate the ability to complete tasks in a team environment.
Occupational Competencies	**Students will develop and demonstrate the following competencies to succeed in a specific occupation or career.**
Achieving Results	• Students will prepare for entry-level employment within an art and media communications career environment. • Students will demonstrate entry-level standards of safe workplace practices and procedures. • Students will demonstrate the ability to plan and produce a video. • Students will demonstrate the procedures for creating a 3-D model and animation.
Ensuring Quality	• Students will demonstrate an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.
Academic Competencies	**Students will continue to develop these minimum academic competencies that provide a foundation for further learning.**
Communication	• Students will demonstrate effective listening, speaking, reading and writing skills to prepare for employment.
Thinking	• Students will research information, use creative thinking skills and use effective problem-solving strategies to solve problems.
Numeracy	• Students will demonstrate mathematical operations to effectively solve problems in a meaningful context.
Information Technology	• Students will demonstrate the effective use of information technology to perform daily workplace operations.

ART/MEDIA COMMUNICATIONS 30-4

EMPLOYABILITY COMPETENCIES: These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects/activities.

MANAGING TRANSITIONS

General Outcomes	Specific Outcomes
Students will consistently demonstrate personal discovery and continuous learning.	**Lifelong Learning** *Students will:* • identify learning opportunities related to learning goals, commitments and resources; e.g., – identify opportunities for further education/training – locate needed financial support systems – locate needed personal support systems • practise what has been learned to build competence and confidence and evaluate the application of competencies to learning goals • create a plan that demonstrates continuous learning; e.g., – analyze requirements for graduation and for further education/training – modify a learning plan to reflect requirements and opportunities.
Students will manage change effectively to support their goals.	**Adapting to Change** *Students will:* • prioritize and assign resources to meet commitments and goals • prioritize commitments and goals to achieve a balanced lifestyle • redefine an action plan as situations change; e.g., – use adaptive strategies – redefine personal goals – select personal coping mechanisms • access available and appropriate sources of support • identify opportunities for improvement and innovation; e.g., entrepreneurship.

General Outcomes	Specific Outcomes
Students will prepare themselves for entry-level employment in an occupation that reflects their personal aptitudes and interests.	**Career Development** *Students will:* • analyze elements of job satisfaction; e.g., recognition, environment, pay, benefits, prestige • build personal career paths and networks • analyze how work contributes to societal and economic needs and a sense of responsibility • prepare for employment through community partnership activities and organize and complete specific job tasks effectively and efficiently.

PERSONAL MANAGEMENT

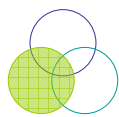| General Outcomes	Specific Outcomes
Students will exhibit self-esteem and confidence through the achievement of personal goals.	**Self-development** *Students will:* • continue to create a long-term self-development plan in which they consider accomplishments and redefine self-development goals • demonstrate entry-level self-presentation appropriate to the activity and role • maintain a high standard of personal ethics when interacting with others.
Students will manage risks to achieve both personal and workplace goals.	**Risk Management** *Students will:* • maintain health and safety procedures; e.g., at home, at school, in the community and in the workplace • monitor success in reducing the impact of hazards on themselves and others • demonstrate concern for the safety of others by exhibiting appropriate behaviour in the workplace • work with others to respond to emergencies • take planned risks to contribute to personal growth.

WORKING WITH OTHERS

General Outcomes	Specific Outcomes
Students will model effective communication skills and strategies in the home, school, community and workplace.	**Interpersonal Communication** *Students will:* • communicate thoughts and feelings appropriately; e.g., – listen without interrupting – contribute to be heard – disagree courteously – accept conflicting opinions – use appropriate body language • maintain a balance between speaking, listening and responding • work together to achieve goals • demonstrate the ability to deal constructively with conflict.
Students will promote equity in work and community endeavours.	**Building Community** *Students will:* • demonstrate and model courteous behaviour in daily interactions • demonstrate respect for others and a shared understanding of diverse beliefs, etiquette and styles of interaction • assess their personal contribution to community growth.
Students will demonstrate the ability to complete tasks in a team environment.	**Teamwork** *Students will:* • assess the effectiveness of group and personal contributions; e.g., – generate ideas – assess resources – contribute abilities and interests – monitor progress – share responsibility for completion of a task • expand their abilities to contribute to team goals.

OCCUPATIONAL COMPETENCIES: Students will develop and demonstrate the following competencies to succeed in a specific occupation or career. They will achieve results through a variety of projects/activities as appropriate to enhance their knowledge and skills. Students will ensure the quality of their work through effective task management and will highlight their achievements in a career-based portfolio.

ACHIEVING RESULTS

General Outcomes	Specific Outcomes

Students will prepare for entry-level employment within an art and media communications career environment.	**Career Awareness**
	
	Preparation
	
	Students will:
	• assess entry-level competencies
	• recognize opportunities for further education/training
	• select post-secondary opportunities
	• identify local entrepreneurs
	• establish contacts with local businesses/industries
	• present marketable skills and strengths; e.g.,
	  – write a letter of application
	  – prepare a résumé
	  – complete application forms
	  – identify contacts and references
	  – collect evidence of competencies in a portfolio.
	
	Standards
	
	Students will:
	• demonstrate workplace protocols, procedures and standards of conduct; e.g.,
	  – demonstrate appropriate work habits
	  – demonstrate effective human relations techniques in the workplace
	  – practise safety in the workplace
	  – demonstrate acceptable verbal and nonverbal communication skills
	  – practise personal and public hygiene procedures
	  – demonstrate entry-level competency in tools and equipment usage
	  – use supplies correctly
	  – follow good storage practices
	  – demonstrate pride in their work performance
	  – demonstrate a willingness to work
	  – demonstrate respect for others
	  – follow accepted principles and procedures
	  – recognize opportunities for further education/training.

General Outcomes	Specific Outcomes
Students will demonstrate entry-level standards of safe workplace practices and procedures.	**Workplace Health and Safety** *Students will:* • identify and explain the use of safety devices within the workplace • demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB) • demonstrate a prework and postwork hazard assessment • demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials • demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources • model safety consciousness by selecting and wearing personal protective equipment (PPE) appropriate to the specific task • demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste • demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements.

Students will demonstrate the ability to plan and produce a video.	**Video Production**
	
	Storyboards
	
	Students will:
	• identify the correct process for creating a video production
	• create a 2-D storyboard
	• develop a concept for a video production
	• understand the importance of alternating images during development; e.g.,
	  – demonstrate the use of varied camera angles and pan and zoom effects
	  – demonstrate differences in lighting for each scene
	• understand the need for smooth transitions from one scene to the next
	• organize storyboard images into a coherent sequence of events
	• present a completed storyboard.
	
	Scripts and Dialogue
	
	Students will:
	• identify the important issues in developing dialogue; e.g., appropriate language usage, subtitles
	• create and proofread a script for dialogue
	• identify the importance of editing dialogue to create an understandable script
	• present the script for final editing.

Knowledge and Employability (Occupational Component)

General Outcomes	Specific Outcomes

Location Scouting

Students will:
- research possible locations for filming
- use a created storyboard to decide what locations may be required
- use a digital camera to scout different location possibilities; e.g.,
  – identify the different positive and negative aspects of each location
  – select the best location to film
- organize the order of locations for filming
- shoot all scenes at a specific location.

Casting

Students will:
- understand the requirements of casting for a video production
- recognize that different productions have different casting needs
- identify the casting needs for the particular production
- select individuals appropriate to the production and assign them roles and scripts.
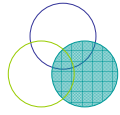
Production

Students will:
- demonstrate safe and responsible use of audiovisual equipment
- identify various forms of finished video productions
- select the best format to use for different video purposes
- produce a short video project, including:
  – storyboards
  – scripts and dialogue
  – location scouting
  – casting
  – editing
- identify video-editing software and its uses
- demonstrate the use of video-editing software to finalize video production; e.g.,
  – manage transitions
  – add music and sound effects
  – add title and credit screens
  – identify various CD/DVD authoring software; e.g., apply knowledge of CD/DVD video authoring, using various methods of copying video.

General Outcomes	Specific Outcomes

Students will demonstrate the procedures for creating a 3-D model and animation.	**3-D Modelling and Animation**
	
	3-D Modelling
	
	Students will:
	• identify the uses of 3-D modelling
	• understand that objects exist in three dimensions; i.e., length, width and depth
	• identify different software applications used in the creation of 3-D animation; e.g., recognize that different applications are used for different forms of modelling
	• select and use appropriate software to create a 3-D model
	• define 3-D graphics
	• define the terminology associated with 3-D modelling; e.g., model, scene, profile, object geometry, working plane, ground plane, orientation axis, object axis, eye point, look-at point and view distance
	• identify specific toolbars, found in software applications, and their functions
	• demonstrate the ability to access and use the built-in help function
	• demonstrate how to explore a 3-D workspace; e.g., find and organize the elements of a scene
	• understand the importance of scene composition; e.g.,
	  – textures and mapping
	  – lighting
	  – landscapes
	• understand various 3-D modelling techniques, including but not limited to:
	  – Non-Uniform Rational B-Splines (NURBS)
	  – polygon construction and polygon counts
	• use the computer to accurately convert a 2-D image to a 2-D image in a 3-D environment
	• demonstrate the ability to convert a 2-D concept into a 3-D computer graphic
	• create a 3-D model.
	
	3-D Animation and Rendering
	
	Students will:
	• define the terminology associated with 3-D animation and rendering; e.g., animation, frame, key frame, track, property, field, start time, end time, time zero, object filter, frames per second, animation and time value, cycle, ambient light, surface colour, luminosity, specular, distant light, intensity, negative lights, mapping and render
	  – understand the uses of animation in various forms of multimedia; e.g., understand that 3-D animation can be integrated into other multimedia applications

General Outcomes	Specific Outcomes
	• identify specific hardware and software requirements for different forms of 3-D animation • create lights and light a 3-D scene • create and apply materials and textures to a 3-D model • animate lights and materials within a 3-D scene • create global effects for a 3-D scene • animate a 3-D model • customize and optimize 3-D objects for rendering and create a final render • understand the various forms of animation output; e.g., select the best form of output file for animation • create a still and an animated file.

ENSURING QUALITY

General Outcomes	Specific Outcomes
Students will demonstrate an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations.	**Task Management** **Outcomes** *Students will:* • read and/or listen to instructions • ask questions to clarify expected outcomes, procedures and timelines. **Decision Making** *Students will:* • identify the parameters of the task • generate and review alternative ideas and their consequences • make a decision or select an idea. **Planning** *Students will:* • identify the steps involved in managing a project • prepare a sample project plan, including budget and timeline • identify available tools, equipment and materials. **Performance Standards** *Students will:* • identify expected standards for a product or service • work to agreed standards and specifications • select and use appropriate tools and technology for a task or project. **Evaluation** *Students will:* • identify opportunities for improving quality • establish expectations and measures for improvements • create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio.

ACADEMIC COMPETENCIES: These are the minimum academic competencies that provide a foundation for further learning. The following outcomes are provided as a reminder to address these academic competencies within the occupational context and to reinforce cross-curricular connections.

COMMUNICATION

General Outcomes	Specific Outcomes

Students will demonstrate effective listening, speaking, reading and writing skills to prepare for employment.	**Listening, Speaking, Reading and Writing**
	
	Students will:
	• read, view and interpret occupation-related materials for a specific purpose; e.g.,
	  – read related health and safety documents
	  – read terms of employment documents
	  – follow written instructions specific to an occupational area
	• create text for a specific purpose that clearly communicates information; e.g.,
	  – write a résumé
	  – write a job description
	  – submit job application forms
	• communicate thoughts and ideas and listen to the thoughts and ideas of others to effectively complete a task; e.g.,
	  – follow oral instructions
	  – give effective oral instructions when necessary.

THINKING

General Outcomes	Specific Outcomes

Students will research information, use creative thinking skills and use effective problem-solving strategies to solve problems.	**Problem Solving, Decision Making, Finding Information and Creative Thinking**
	
	Students will:
	• demonstrate an effective problem-solving model; e.g.,
	  – identify the need for a solution to a problem/issue
	  – identify why information is needed; e.g., make decisions, inform, persuade
	• identify appropriate actions and select and apply information that meets their purposes and needs
	• evaluate the results in terms of expected outcomes and assess the impact of information on their purpose and audience.

NUMERACY

General Outcomes	Specific Outcomes
Students will demonstrate mathematical operations to effectively solve problems in a meaningful context.	**Basic Operations, Patterns and Relationships, Shape and Space, and Statistics and Probability** *Students will:* • apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems • use calculators or computers, to perform calculations involving large and small numbers, when solving problems • apply concepts of rate, ratio, percentage and proportion • demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals • estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area • use metric and imperial units of measure.

INFORMATION TECHNOLOGY

General Outcomes	Specific Outcomes

Students will demonstrate the effective use of information technology to perform daily workplace operations.	**Computer Operations and Computer Applications**
	
	Students will:
	• model and assume personal responsibility for the ethical use of information technologies
	• demonstrate appropriate telephone operations within the workplace; e.g., answer telephone calls appropriately, locate numbers and make telephone calls
	• use computer operations to assist in the completion of daily workplace operations; e.g.,
	  – use basic keyboarding skills
	  – store, organize and retrieve information correctly
	  – locate and select information and ideas using appropriate technology and information systems; e.g., Internet
	  – access, send and retrieve e-mail and attachments
	• demonstrate procedures for connecting and using audio, video and digital equipment
	• demonstrate procedures for sending and receiving faxes and setting up a fax machine
	• demonstrate procedures for copying and printing documents.