Dental Hygiene Program Standard

The approved program standard for the Dental Hygiene program of instruction leading to an Ontario College Advanced Diploma delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 61628)

Ministry of Advanced Education and Skills Development
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Inquiries regarding specific Dental Hygiene programs offered by colleges of applied arts and technology in Ontario should be directed to the relevant college.

Acknowledgements

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I. Introduction

This document is the Program Standard for the Dental Hygiene program of instruction leading to an Ontario College Advanced Diploma delivered by Ontario colleges of applied arts and technology (MTCU funding code 61628).

Development of System-Wide Program Standards

In 1993, the Government of Ontario initiated program standards development with the objectives of bringing a greater degree of consistency to college programming offered across the province, broadening the focus of college programs to ensure graduates have the skills to be flexible and to continue to learn and adapt, and providing public accountability for the quality and relevance of college programs.

The Program Standards and Evaluation Unit of the Ministry of Advanced Education and Skills Development have responsibility for the development, review and approval of system-wide standards for programs of instruction at Ontario colleges of applied arts and technology.

Program Standards

Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- **Vocational standard** (the vocationally specific learning outcomes which apply to the program of instruction in question),
- **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and
- **General education requirement** (the requirement for general education in postsecondary programs of instruction).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program.

Individual colleges of applied arts and technology offering the program of instruction determine the specific program structure, delivery methods and other curriculum matters to be used in assisting students to achieve the outcomes articulated in the standard. Individual colleges also determine whether additional local learning outcomes will be required to reflect specific local needs and/or interests.

The Expression of Program Standards as Vocational Learning Outcomes

Vocational learning outcomes represent culminating demonstrations of learning and achievement. They are not simply a listing of discrete skills, nor broad statements of knowledge and comprehension. In addition, vocational learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved and verified.

Expressing standards as vocational learning outcomes ensures consistency in the outcomes for program graduates, while leaving to the discretion of individual colleges, curriculum matters such as the specific program structure and delivery methods.

The Presentation of the Vocational Learning Outcomes

The **vocational learning outcome** statements set out the culminating demonstration of learning and achievement that the student must reliably demonstrate before graduation.

The **elements of the performance** for each outcome define and clarify the level and quality of performance necessary to meet the requirements of the vocational learning outcome. However, it is the performance of the vocational learning outcome itself on which students are evaluated. The elements of performance are indicators of the means by which the student may proceed to satisfactory performance of the vocational learning outcome. The elements of performance do not stand alone but rather in reference to the vocational learning outcome of which they form a part.

The Development of a Program Standard

In establishing the standards development initiative, the Government determined that all postsecondary programs of instruction should include vocational skills coupled with a broader set of essential skills. This combination is considered critical to ensuring that college graduates have the skills required to be successful both upon graduation from the college program and throughout their working and personal lives.

A program standard is developed through a broad consultation process involving a range of stakeholders with a direct interest in the program area, including employers, professional associations, universities, secondary schools and program graduates working in the field, in addition to students, faculty and administrators at the colleges themselves. It represents a consensus of

participating stakeholders on the essential learning that all program graduates should have achieved.

Updating the Program Standard

The Ministry of Advanced Education and Skills Development will undertake regular reviews of the vocational learning outcomes for this program to ensure that the Dental Hygiene Program Standard remains appropriate and relevant to the needs of students and employers across the Province of Ontario. To confirm that this document is the most up-to-date release, please contact the Ministry of Advanced Education and Skills Development at the address or email address noted on the inside cover page.

II. Vocational Standard

All graduates of Dental Hygiene programs have achieved the eight vocational learning outcomes (VLOs) listed in the following pages, in addition to achieving the essential employability skills (EES) learning outcomes and meeting the general education (GE) requirement.

Preamble

The Dental Hygiene program provides students with the knowledge, skills and practice required to function as a dental hygienist* in different practice settings within the province. Successful completion of the program results in the conferring of an Ontario College Advanced Diploma. The eight vocational learning outcomes articulate a range of fundamental skills necessary for an entry-level position, as a *dental hygienist**.

To practice as a *dental hygienist** in Ontario, the graduates must successfully complete all registration requirements, as set by the College of Dental Hygienist* of Ontario (CDHO). The CDHO regulates the practice of dental hygiene in Ontario in accordance with the Regulated Health Professions Act, 1991 and the Dental Hygiene Act, 1991.

The graduate *dental hygienist** is a self-regulated practitioner who performs a variety of roles including oral-health therapist, educator, and patient advocate. In all roles and practice settings, the *dental hygienist** works with *client's**, uses *evidence-based practice**, and bases all decisions, recommendations, judgments, therapeutic and preventative interventions on current dental hygiene *research** and theory.

Once they are registered with the CDHO, graduates are eligible to provide dental hygiene services in accordance with relevant *legislation** and scope of practice. All Registered *Dental Hygienists** in Ontario are required to participate in the Quality Assurance Program as mandated by the CDHO. They must also practice according to the CDHO Code of Ethics and Standards of Practice.

*Dental hygienists** have career opportunities to work independently, interdependently and collaboratively with health professionals *clients**, families, caregivers and communities in a variety of practice environments, such as clinical practice, community and public health, institutions, and long-term care and other health-care facilities. In the Province of Ontario, *dental hygienists** are able to establish their own clinical practice or associate with other health care providers according to the requirements set out by the CDHO).

*See Glossary

Synopsis of the Vocational Learning Outcomes

Dental Hygiene (Ontario College Advanced Diploma)

The graduate has reliably demonstrated the ability to

1. Practice in a professional and *competent** manner within the defined scope of practice and consistent with current regulations and standards of practice.
2. Evaluate the *client's** oral health status using *determinants of health** and risk *analysis** to identify needs, justify treatment decisions and provide appropriate referrals to other health care professionals, as required.
3. Design, implement and evaluate a range of primary, interceptive, therapeutic, preventive, and on-going oral health care services to meet the unique needs of *clients**.
4. Analyze oral health issues in need of *advocacy** identify networks and promote actions that will support change and facilitate access to care.
5. Identify, select, implement and evaluate quality assurance standards and protocols which contribute to a safe and effective working environment.
6. Establish and maintain professional and inter-professional relationships which contribute to *client*-care safety and positive health-care outcomes.
7. Facilitate the development of specific oral health *attitudes**, knowledge, skills, and behaviours, in *client's**, by selecting and utilizing principles of teaching and learning.
8. Develop and present a model for a dental hygiene practice that addresses relevant business principles, current *legislation** and standards of practice.

*See Glossary

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

The Vocational Learning Outcomes

1. The graduate has reliably demonstrated the ability to

   practice in a professional and *competent** manner within the defined scope of practice and consistent with current regulations and standards of practice.

Elements of the Performance

- adhere to relevant *legislation**, practice standards, and codes of *ethics**
- maintain confidentiality of *client** *information**, records, and documents, including and not limited to paper-based, electronic and verbal forms
- be accountable for own behaviour and decisions in the practice environment
- engage in learning activities that include self and peer reflection to promote professional *competence**
- recognize professional limitations and consult with other professionals as required
- evaluate one's own role as a *dental hygienist** in the provision of the *client's** *oral health services and programs**
- identify and implement strategies to enhance professional *competence**
- advocate for the *client's** right to safety, privacy, confidentiality, self-determination, and informed consent
- develop and use time management and organizational skills to accomplish personal and professional goals
- apply new knowledge, services, and/or technology to support optimum *client** outcomes
- engage in community service activities and affiliations with professional organizations

*See Glossary

2. The graduate has reliably demonstrated the ability to

evaluate the *client's** oral health status using *determinants of health** and risk *analysis** to identify needs, justify treatment decisions and provide appropriate referrals to other health care professionals as required.

Elements of the Performance

- establish a comprehensive profile using recognized methods to collect and assess *data** that relates to the *client's** oral health condition, knowledge, and practices
- establish a comprehensive profile using recognized methods to collect and assess *data** that relates to the *client's** general health and *determinants of health**
- collect, document and review current and historical *client** *information**, special consideration, or precautions relevant to the provision of *oral health services and program*s*
- incorporate the *determinants of health** and oral health into the *analysis** phase of the *assessment** process
- analyze *information** generated by observation, experience, reflection, reasoning, and communication as a guide action
- determine the *client's** oral health prognosis, given the *client's** knowledge, history, and oral health practices, as well as their general health and *determinants of health**
- refer the *client** to other professionals as required and in accordance with *legislation**
- evaluate *assessment** *data** to determine the *client's** need for present and future *oral health services and programs**

*See Glossary

3.   The graduate has reliably demonstrated the ability to

    design, implement and evaluate a range of primary, interceptive, therapeutic, preventive, and on-going oral health care services to meet the unique needs of *clients**.

Elements of the Performance

- design a *dental hygiene care plan** or program, using assessment data*, a client-centered approach, best practices and the best available resources
- include the *client** as an active participant in the *planning** of *oral health services and programs**
- support an atmosphere that enhances *client** participation in *planning** oral *health services and programs**
- determine appropriate oral health care services and programs including preventive and *therapeutic interventions** that respect the *client's** needs, beliefs, *values**, abilities, and resources*; and are *culturally relevant**
- determine and prioritize the *client's** needs through a collaborative process with *clients** and, when needed, in *collaboration** with substitute decision makers and/ or other health professionals
- develop a *dental hygiene care plan** that includes the sequence of delivery for *oral health services and programs** and the identification of appropriate equipment, supplies and human resources
- use an evidence-based decision making approach to support and justify the selection of dental hygiene interventions and services
- document objectively and accurately the processes and outcomes related to the provision of oral health services, programs according to current practice
- facilitate informed decision making for all *clients** by explaining the *evidence** underpinning recommendations and the knowledge base of professional interventions
- explain to the *client** the advantages, disadvantages, related to the implementation of the dental hygiene cli*, as an integral part of obtaining informed consent before the implementation of dental hygiene services and programs
- provide effective oral health services that are within the dental hygiene scope of practice
- select, and where appropriate, design evaluation* methods to monitor preventative and therapeutic oral health interventions and oral health and programs* to ensure their effectiveness and efficiency
- evaluate the effectiveness of the services and programs with respect to the *client's** oral health
- monitor and evaluate the *client's** satisfaction with *oral health services and programs**
- modify *oral health services and programs* *according to ongoing evaluation* results

*See Glossary

4.   The graduate has reliably demonstrated the ability to

analyze oral health issues in need of *advocacy**, identify networks and promote actions that will support change and facilitate access to care.

Elements of the Performance

- use appropriate oral health indices for the identification and monitoring of high-risk individuals and groups
- provide i*nformation** about oral health and access to oral health care for *clients**, other professionals, and the public
- promote *social responsibility** by leading or supporting community partners in their efforts to advocate for oral *health programs** and policies
- recognize political, social and economic issues affecting the individual and the community and the role of governments and community partners in promoting oral health
- contribute to actions that will support change and facilitate access to care
- *collaborate** with community, health care professionals, and other partners to achieve *health promotion** goals for individuals and communities
- select and include in the plan or program appropriate *health promotion** strategies and interventions for individuals and communities
- identify barriers to and *resources* * required for the provision of optimal *oral health services and programs** for the *client**

*See Glossary

5. The graduate has reliably demonstrated the ability to

identify, select, implement and evaluate quality assurance standards and protocols which contribute to a safe and effective *working environment**.

Elements of the Performance

- apply health and safety *legislation** and standards relevant to the practice setting
- employ *Standard Precautions**
- apply principles of *client **and practitioner safety
- maintain stationary and portable equipment and instruments in good working order, according to manufacturer's directions and current health and safety standards
- handle and store materials and supplies according to the manufacturer's directions
- identify potential risks, anticipate reactions that may occur during dental hygiene care, and, if necessary, implement emergency response
- practise the safe management, storage, and disposal of hazardous substances and wastes, according to recognized guidelines and regulations
- document health and safety incidents in accordance with relevant health and safety *legislation** and standards
- use all equipment, instruments, materials, and supplies according to manufacturer's directives
- keep current on issues, research* and best practice related to safety

*See Glossary

6. The graduate has reliably demonstrated the ability to

establish and maintain professional and inter-professional relationships which contribute to *client**care safety and positive health care outcomes.

Elements of the Performance

- *collaborate** with the *client** and other professionals to provide oral health services and program
- determine the need for further oral health services*, programs* or referral in *collaboration** with the *client** and other health professionals
- support the *client** in achieving oral health goals and objectives, through *collaborative relationships** with the *client** and other professionals
- implement ongoing professional strategies to improve the health and safety of the *client** and health care professionals
- consult with other health care professionals and knowledge experts as appropriate, to inform conclusions about the *client's** or community's needs
- *collaborate** with other health care professionals, as appropriate, to ensure an integrated plan or program
- establish and maintain communication with other health professionals who are part of the *client's** circle of care
- respect and acknowledge the expertise and contributions of all health care professionals
- provide relevant oral health *information** to colleagues and other health professionals
- practise co-operatively and effectively within oral health and *interprofessional health care teams* and settings
- *collaborate** with other professionals and participate in interprofessional learning opportunities
- support colleagues in demonstrating, developing and maintaining *competence**
- seek opportunities to participate in mentorships
- evaluate one's ability to work in a team
- participate collaboratively as a health team member to support the *client's** achievement of expected healthcare outcomes
- resolve conflicts in a professional manner
- integrate the concept of *client**/family/community-centered care within dental hygiene practice
- integrate discipline specific language to support professional and inter-professional communication

*See Glossary

7.	The graduate has reliably demonstrated the ability to

facilitate the development of specific oral health *attitudes**, knowledge, skills, and behaviours in *clients** by selecting and utilizing principles of teaching and learning.

Elements of the Performance

- interview the *client** to gain feedback to inform the *assessment** process,
- determine the *client's**oral health knowledge, beliefs, *attitudes**, skills and perceived barriers and include these in the needs *analysis**
- use appropriate and effective communication techniques and the principles of *health literacy** when working with *clients**, substitute decision makers, families, and/or agents of the *client**,
- use literature, visuals, and audio materials to aid, if appropriate, in the discussion of the *assessment** findings and oral conditions,
- apply educational theories, theoretical frameworks, communication , and psycho-social principles to initiate behavioural change at an individual and community level

*See Glossary

8.   The graduate has reliably demonstrated the ability to

develop and present a model for a dental hygiene practice that addresses relevant business principles, current *legislation** and standards of practice.

Elements of the Performance

- collect, process, organize, store and retrieve business and financial *information** according to relevant *legislation** and regulations
- manage equipment, supplies and human *resources* * required to deliver effective *oral health services and programs** that benefit the *client**
- maintain all records and documents so they are comprehensible, legible, organized, accessible and retrievable
- use a critical review process to determine the appropriateness of integrating new knowledge, services and technology into practice
- incorporate new knowledge, interventions, technology and practice guidelines into practice
- investigate events that occur within the practice setting as part of the strategy for ongoing quality improvements
- recognize and avoid conflicts of interest
- protect the integrity, privacy and security of *client** records
- establish protocols and policies for the practice environment(as part of the practice model*) that are consistent with legislative requirements related to workplace health and safety, workplace violence, human rights and accessible *client** services for those with disabilities, and use of personal health *information** and privacy
- create written policies and protocols (as part of the practice model*) for health and safety, infection control, managing hazardous waste, emergency response, obtaining *client** consent, workplace violence
- develop job descriptions and employment contracts (as part of the practice model*) that are consistent with responsibilities of the *dental hygienist** as a regulated health care professional
- promote actions that encourage shared workplace *values**, respect and communication
- promote a dental hygiene *practice model** that is based on established business principles and relevant *legislation**

*See Glossary

Glossary

advocacy: intervention such as speaking or writing in favour of a particular issue or cause, policy, individual or group of people. In the health field, advocacy is assumed to be in the public interest and directed towards good or desirable ends, whereas lobbying by a special interest group may or may not be in the public interest. Advocacy often aims to enhance the health of disadvantaged groups such as First Nations communities, people living in poverty or persons with HIV/AIDS.

analysis: the examination and evaluation of relevant information in order to select the best course of action from among various alternatives. This requires the integration of information from a variety of sources.

assessment: a formal method of evaluating a system or a process, preferably quantitative but sometimes necessarily qualitative, often with both qualitative and quantitative components.

attitude: a relatively stable belief or feeling about a concept, person or object. Attitudes can often be inferred by observing behaviours; related to definition of values.

care plan: an organizational framework for the provision of services and programs. A care plan reflects the client assessment, current theory and research in health and disease, and the proposed and implemented preventive and therapeutic interventions and services.

client: a recipient of oral health services. This term is broad and inclusive and may refer to an individual of any age or gender, a family, a group, and/or a community. The client, as a consumer of oral health services, will be unique with diverse needs, demands, and definitions of wellness, motivations, and resources. The client is assumed to be seeking out a broad range of oral health services that are effective and efficient.

collaborate: to work together and refers to the dental hygienist and the client and/or other health professionals working together to achieve a common goal[s].

collaboration: the process of the dental hygienist working together with the client and/or other health professionals to achieve common goals.

collaborative relationship: an alliance of the dental hygienist with the client and/or health professionals to develop a single, integrated and comprehensive approach based on the client's needs, resources and barriers, respective oral health requirements and health services and programs.

competence: the knowledge, skills, attitudes and judgment required of the

dental hygienist in order to provide quality oral health services and programs. Competence is verified through the practitioner's performance in the practice environment.

competent: the dental hygienist behaves in a manner that is consistent with the knowledge, skills, attitudes and judgment required to provide quality oral health services and programs.

culturally-relevant (and appropriate): Recognizing, understanding and applying attitudes and practices that are sensitive to and appropriate for people with diverse cultural socioeconomic and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities.

data: factual information, such as measurements or statistics, used as a basis for reasoning, discussion, or calculation.

dental hygienist: a registered oral health professional who performs a variety of roles including clinical therapy, health promotion, education, administration and research* in a variety of practice environments. In all roles and practice environments, the dental hygienist works collaboratively with the client and other health professionals and, using a problem-solving framework, bases all decisions, judgments and interventions on current evidence based research and theory. As a registrant of a self-regulated profession, a dental hygienist must practise safely, ethically and effectively for the promotion of the oral health and well-being of the public in Ontario.

dental hygiene care plan: is a written blueprint that directs the dental hygienist and the client as they work together to meet the client's goals for oral health. The plan increases the likelihood that the health professionals will work collaboratively to deliver client-focused, goal-oriented, individualized services/programs to the client. The treatment plan facilitates the monitoring of client progress and ensures continuity of services/programs and communication among health professionals.

determinants of health: Definable entities that cause, are associated with, or induce health outcomes. Public health is fundamentally concerned with action and advocacy to address the full range of potentially modifiable determinants of health – not only those which are related to the actions of individuals, such as health behaviours and lifestyles, but also factors such as income and social status, education, employment and working conditions, access to appropriate health services, and the physical environments. These, in combination, create different living conditions which impact on health.

ethics: The branch of philosophy dealing with distinctions between right and wrong, with the moral consequences of human actions. Much of modern ethical thinking is based on concepts of human rights, individual freedom and autonomy,

on doing good and not harming. The concept of equity, or equal consideration for every individual, is paramount. Finding a balance between the public health requirement for access to information and the individual's right to privacy and to confidentiality of personal information may also be a source of tension.

evidence: Information such as analyzed data, published research* findings, results of evaluations, prior experience, expert opinions, any or all of which may be used to reach conclusions on which decisions are based.

evidence-based practice: is dental hygiene practice supported by a scientific body of knowledge that facilitates clinical decision making and evaluation of dental hygiene services/programs using objective outcome measures.

health literacy: ability of individuals to access and use health information to make appropriate health decisions and maintain basic health.

(health) planning: A set of practices and procedures that are intended to enhance the efficiency and effectiveness of health services and to improve health outcomes. This important activity … commonly comprises short-term, medium-term, and long-range planning. Important considerations are resource allocation, priority setting, distribution of staff and physical facilities, planning for emergencies and ways to cope with extremes of demand and unforeseen contingencies, and preparation of budgets for future fiscal periods.

health program: A description or plan of action for an event or sequence of actions or events over a period that may be short or prolonged. More formally, an outline of the way a system or service will function, with specifics such as roles and responsibilities, expected expenditures, outcomes, etc. A health program is generally long term and often multifaceted, whereas a health project is a short-term and usually narrowly focused activity.

health promotion: The process of enabling people to increase control over, and to improve their health. It not only embraces actions directed at strengthening the skills and capabilities of individuals, but also action directed towards changing social, environmental and economic conditions so as to alleviate their impact on public and individual health. The Ottawa Charter for Health Promotion (1986) describes five key strategies for health promotion: build healthy public policy; create supportive environments for health; strengthen community action for health; develop personal skills; and re-orient health services.

information: Facts, ideas, concepts and data that have been recorded, analyzed, and organized in a way that facilitates interpretation and subsequent action.

interprofessional health care teams: to improve client outcomes within healthcare, two or more professions working as a team, with a common purpose,

commitment and mutual respect.

legislation: the relevant laws enacted by the provincial and federal governments. Examples of such laws include Regulated Health Professions Act, Healing Arts Radiation Protection Act, Dental Hygiene Act, and the Dentistry Act.

oral health services and programs: broad range of care offered by health practitioners. Oral health services and programs are designed to achieve the desired goals and objectives related to the attainment and maintenance of optimal oral health and general health. Oral health services and programs are client centred; that is, they are individualized according to client need and resources. These services and programs may be preventive and therapeutic.

practice model: refers to the organizational structures, policies and resources in place that are consistent with legal, professional and ethical responsibilities and promote safety, respect, and support for all persons within the practice setting. A dental hygiene practice can be viewed as a traditional model within dental practice setting or an independent dental hygiene practice.

research: Activities designed to develop or contribute to knowledge, e.g., theories, principles, relationships, or the information on which these are based. Research may be conducted simply by observation and inference, or by the use of experiment, in which the researcher alters or manipulates conditions in order to observe and study the consequences of doing so. Qualitative research aims to do in-depth exploration of a group or issue, and the methods used often include focus groups, interviews, life histories, etc.

resources: available and feasible supports that enable dental hygiene care to be delivered.

social responsibility: an ethic of service that involves undertaking actions that advances the common good.

standard precautions: measures designed to protect client, health professionals, and their families from exposure to infectious elements. Standards and guidelines for universal precaution protocols are developed by a number of provincial, federal, and international authorities and must be in accordance with current legislation. These precautions include surface disinfecting, caring for and sterilizing instruments and equipment, proper hand washing, using barriers (for example, gloves, glasses, and body coverings), and correct handling of sharps (for example, instruments and needles) that have been in contact with body fluids, and safe disposal of hazardous waste.

values: the beliefs, traditions and social customs held dear and honoured by individuals and collective society. Moral values are deeply believed, change little over time and are often grounded in religious faith. They include beliefs about the

sanctity of life, the role of families in society, and protection from harm of infants, children and other vulnerable people. Social values are more flexible and may change as individuals undergo experience. These may include beliefs about the status and roles of women in society, attitudes towards use of alcohol, tobacco and other substances. Values can affect behaviour and health either beneficially or harmfully.

working environment: a setting in which people work. This comprises not merely the physical environment and workplace hazards, but also the social, cultural and psychological setting that may help to induce harmony among workers, or the opposite — tension, friction, distrust and animosity which can interfere with well-being and aggravate risks of injury.

III. Essential Employability Skills

All graduates of the Dental Hygiene program of instruction must have reliably demonstrated the essential employability skills learning outcomes listed on the following pages, in addition to achieving the vocational learning outcomes and meeting the general education requirement.

Context

Essential Employability Skills (EES) are skills that, regardless of a student's program or discipline, are critical for success in the workplace, in day-to-day living and for lifelong learning.

The teaching and attainment of these EES for students in, and graduates from, Ontario's colleges of applied arts and technology are anchored in a set of three fundamental assumptions:

- these skills are important for every adult to function successfully in society today;
- our colleges are well equipped and well positioned to prepare graduates with these skills;
- these skills are equally valuable for all graduates, regardless of the level of their credential, whether they pursue a career path, or they pursue further education.

Skill Categories

To capture these skills, the following six categories define the essential areas where graduates must demonstrate skills and knowledge.

- Communication
- Numeracy
- Critical Thinking & Problem Solving
- Information Management
- Interpersonal
- Personal

Application and Implementation

In each of the six skill categories, there are a number of defining skills, or sub skills, identified to further articulate the requisite skills identified in the main skill categories. The following chart illustrates the relationship between the skill categories, the defining skills within the categories and learning outcomes to be achieved by graduates from all postsecondary programs of instruction that lead to an Ontario College credential.

EES may be embedded in General Education or vocational courses, or developed through discrete courses. However these skills are developed, all graduates with Ontario College credentials must be able to reliably demonstrate the essential skills required in each of the six categories.

Skill Category	Defining Skills: Skill areas to be demonstrated by graduates:	Learning Outcomes: The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:
Communication	• Reading • Writing • Speaking • Listening • Presenting • Visual literacy	1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience. 2. respond to written, spoken or visual messages in a manner that ensures effective communication.
Numeracy	• Understanding and applying mathematical concepts and reasoning • Analyzing and using numerical data • Conceptualizing	1. execute mathematical operations accurately.
Critical Thinking & Problem Solving	• Analyzing • Synthesizing • Evaluating • Decision making • Creative and innovative thinking	1. apply a systematic approach to solve problems. 2. use a variety of thinking skills to anticipate and solve problems.

Skill Category	**Defining Skills:** Skill areas to be demonstrated by graduates:	**Learning Outcomes:** The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:
Information Management	• Gathering and managing information • Selecting and using appropriate tools and technology for a task or a project • Computer literacy • Internet skills	1. locate, select, organize and document information using appropriate technology and information systems. 2. analyze, evaluate and apply relevant information from a variety of sources.
Interpersonal	• Teamwork • Relationship management • Conflict resolution • Leadership • Networking	1. show respect for the diverse opinions, values, belief systems and contributions of others. 2. interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
Personal	• Managing self • Managing change and being flexible and adaptable • Engaging in reflective practices • Demonstrating personal responsibility	1. manage the use of time and other resources to complete projects. 2. take responsibility for one's own actions, decisions and their consequences.

IV. General Education Requirement

All graduates of the Dental Hygiene program must have met the general education requirement described on the following pages, in addition to achieving the vocational and essential employability skills learning outcomes.

Requirement

The General Education Requirement for programs of instruction is stipulated in the Credentials Framework (Appendix A in the Minister's Binding Policy Directive Framework for Programs of Instruction).

In programs of instruction leading to either an Ontario College Diploma or an Ontario College Advanced Diploma, it is required that graduates have been engaged in learning that exposes them to at least one discipline outside their main field of study and increases their awareness of the society and culture in which they live and work. This will typically be accomplished by students taking 3 to 5 courses (or the equivalent) designed discretely and separately from vocational learning opportunities.

This general education learning would normally be delivered using a combination of required and elective processes.

Purpose

The purpose of General Education in the Ontario college system is to contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; who are able to establish meaning through this consciousness; and who, as a result, are able to contribute thoughtfully, creatively and positively to the society in which they live and work.

General Education strengthens students' essential employability skills, such as critical analysis, problem solving and communication, in the context of an exploration of topics with broad-based personal and/or societal importance.

Themes

The themes listed below will be used to provide direction to colleges in the development and identification of courses that are designed to fulfil the General Education Requirement for programs of instructions.

Each theme provides a statement of Rationale and offers suggestions related to more specific topic areas that could be explored within each area. These suggestions are neither prescriptive nor exhaustive. They are included to provide guidance regarding the nature and scope of content that would be judged as meeting the intent and overall goals of General Education.

1. Arts in Society:

Rationale:

The capacity of a person to recognize and evaluate artistic and creative achievements is useful in many aspects of his/her life. Since artistic expression is a fundamentally human activity, which both reflects and anticipates developments in the larger culture, its study will enhance the student's cultural and self-awareness.

Content:

Courses in this area should provide students with an understanding of the importance of visual and creative arts in human affairs, of the artist's and writer's perceptions of the world and the means by which those perceptions are translated into the language of literature and artistic expression. They will also provide an appreciation of the aesthetic values used in examining works of art and possibly, a direct experience in expressing perceptions in an artistic medium.

2. Civic Life:

Rationale:

In order for individuals to live responsibly and to reach their potential as individuals and as citizens of society, they need to understand the patterns of human relationships that underlie the orderly interactions of a society's various structural units. Informed people will have knowledge of the meaning of civic life in relation to diverse communities at the local, national and global level and an awareness of international issues and the effects of these on Canada, as well as Canada's place in the international community.

Content:

Courses in this area should provide students with an understanding of the meaning of freedoms, rights and participation in community and public life, in addition to a working knowledge of the structure and function of various levels of government (municipal, provincial, national) in a Canadian and/or in an international context. They may also provide an historical understanding of major political issues affecting relations between the various levels of government in Canada and their constituents.

3.   Social and Cultural Understanding:

Rationale:

Knowledge of the patterns and precedents of the past provide the means for a person to gain an awareness of his or her place in contemporary culture and society. In addition to this awareness, students will acquire a sense of the main currents of their culture and that of other cultures over an extended period of time in order to link personal history to the broader study of culture.

Content:

Courses in this area are those that deal broadly with major social and cultural themes. These courses may also stress the nature and validity of historical evidence and the variety of historical interpretation of events. Courses will provide the students with a view and understanding of the impact of cultural, social, ethnic or linguistic characteristics.

4.   Personal Understanding:

Rationale:

Educated people are equipped for life-long understanding and development of themselves as integrated physiological and psychological entities. They are aware of the ideal need to be fully functioning persons: mentally, physically, emotionally, socially, spiritually and vocationally.

Content:

Courses in this area will focus on understanding the individual: his or her evolution; situation; relationship with others; place in the environment and universe; achievements and problems; and his or her meaning and purpose. They will also allow students the opportunity to study institutionalized human social behaviour in a systematic way. Courses fulfilling this requirement may be oriented to the study of the individual within a variety of contexts.

5. Science and Technology:

Rationale:

Matter and energy are universal concepts in science, forming a basis for understanding the interactions that occur in living and non-living systems in our universe. Study in this area provides an understanding of the behaviour of matter that provides a foundation for further scientific study and the creation of broader understanding about natural phenomena.

Similarly, the various applications and developments in the area of technology have an increasing impact on all aspects of human endeavour and have numerous social, economic and philosophical implications. For example, the operation of computers to process data at high speed has invoked an interaction between machines and the human mind that is unique in human history. This and other technological developments have a powerful impact on how we deal with many of the complex questions in our society.

Content:

Courses in this area should stress scientific inquiry and deal with basic or fundamental questions of science rather than applied ones. They may be formulated from traditional basic courses in such areas of study as biology, chemistry, physics, astronomy, geology or agriculture. As well, courses related to understanding the role and functions of computers (e.g., data management and information processing) and assorted computer-related technologies should be offered in a non-applied manner to provide students with an opportunity to explore the impact of these concepts and practices on their lives.