# **Course Descriptions and Prerequisites**

### Drama, Grade 11, Open (ADA3O)

This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script Original works, and critically analyze the processes involved in producing drama works. Students will develop a variety of skills related to collaboration and the presentation of drama works.

Prerequisite: None

### Drama – Film/Video Studies, Grade 11, (ADV3M)

This course challenges students to explore film as an art form, visual composition, means of expression, and cultural influence. Theories of composition and techniques learned in grade 11 are applied towards understanding film in-depth with historical lectures and studio assignments. A focus on the development and history of cinema, with emphasis on 20th Century American film, and the technical innovations and influences on our modern day society will be covered. Students learning will include viewing films, creating storyboards and short film projects, as well as analyzing, understanding and evaluating the roles of directors, cinematographers, actors, and screenwriters in written assignments. A large emphasis is placed on collaborative and group assignments giving students an opportunity to discover the many roles involved in film production. Some technical experience is welcome but not necessary. *Prerequisite*: None

# Film/Video: The History of Hollywood, Grade 11/12 (ADV3M/4M)

This course explores the history of Hollywood from its origins to modern day. By examining the evolution of popular movie storytelling, genres and their conventions, the studio and star systems, stylistic and technological changes and the business of filmmaking, students will learn twenty-first centuries.

Prerequisite: None

#### Drama – Film/Video, Grade 11, Open (ADV3O)

This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script original works, and critically analyze the processes involved in producing dramatic works. Students will develop a variety of skills related to collaboration and the presentation of dramatic works. This course focuses on Film/Video.

Prerequisite: None

#### Music, Grade 11, Open (AMU3O)

This course develops students' musical literacy through performance and the preparation and presentation of music productions. Students will perform works at a level consistent with previous experience. Independently and collaboratively, students will use current technology and the creative and critical analysis processes to plan, produce, present, and market musical productions. Students will respond to, reflect on, and analyze music from various genres and periods, and they will develop skills transferable to other aspects of their life and their careers. *Prerequisite*: None

### Media Arts, Grade 11, University/College Preparation (ASM3M)

This course focuses on the development of media arts skills through the production of art works involving traditional and emerging technologies, tools, and techniques such as new media, computer animation, and web environments. Students will explore the evolution of media arts as an extension of traditional art forms, use the creative process to produce effective media art works, and critically analyze the unique characteristics of this art form. Students will examine the role of media artists in shaping audience perceptions of identity, culture, and values.

Prerequisite: Media Arts, Grade 10, Open

#### Media Arts, Grade 12, University/College Preparation (ASM4M)

This course emphasizes the refinement of media arts skills through the creation of a thematic body of work by applying traditional and emerging technologies, tools, and techniques such as multimedia, computer animation, installation art, and performance art. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in either career or postsecondary education applications. Students will critically analyze the role of media artists in shaping audience perceptions of identity, culture, and community values. *Prerequisite*: Media Arts, Grade 11, University/College Preparation

### Visual Arts, Grade 11, University/College Preparation (AVI3M)

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g. photography, video, computer graphics, information design). *Prerequisite*: Visual Arts, Grade 9 or 10, Open

# Visual Arts, Grade 11, Open (AVI3O)

This course focuses on studio activities in one or more of the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context. *Prerequisite*: None

# Visual Arts, Grade 12, University/College Preparation (AVI4M)

This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes, and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts.

Prerequisite: Visual Arts, Grade 11, University/College Preparation

#### Visual Arts: Film & Video, Grade 11, University/College Preparation (AWR3M)

Students will learn about film and video as an expressive art form. There will be a focus on 19<sup>th</sup> century developments and the invention of motion picture. Contemporary film and video will be included. Expectations are organized into four categories of knowledge and skills; Knowledge and Understanding, Thinking, Communication and Application. *Prerequisite:* None

#### Financial Accounting Fundamentals, Grade 11, University/College (BAF3M)

This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting. *Prerequisite*: None

### International Business Fundamentals, Grade 12, University/College (BBB4M)

This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business effectively. This course prepares students for postsecondary programs in business, including international business, marketing, and management.

Prerequisite: None

#### Entrepreneurship: The Venture, Grade 11, College (BDI3C)

This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a school-based or student-run business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs. *Prerequisite*: None

#### Entrepreneurship: The Enterprising Person, Grade 11, Open (BDP3O)

This course examines the importance of enterprising employees in today's changing business environment. Students will learn about the skills and attributes of enterprising employees, the distinguishing features of their work environments, and the challenges and rewards of becoming an enterprising person. Students will also have an opportunity to demonstrate and develop enterprising skills by planning and organizing a school or community event. *Prerequisite*: None

#### Entrepreneurship: Venture Planning in an Electronic Age, Grade 12, College (BDV4C)

This course provides students with the opportunity to develop and apply entrepreneurial skills through the creation of a venture plan that capitalizes on the potential of e-commerce. Students will research and identify an opportunity for a venture. They will then complete the components of a venture plan that includes a website. *Prerequisite*: None

### Marketing: Goods, Services, Events, Grade 11, College (BMI3C)

This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumer buying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice.

Prerequisite: None

# Business Leadership: Management Fundamentals, Grade 12, University/College (BOH4M)

This course focuses on the development of leadership skills used in managing a successful business. Students will analyze the role of a leader in business, with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility are also emphasized.

Prerequisite: None

# Information and Communication Technology: The Digital Environment, Grade 11, Open (BTA3O)

This course prepares students for the digital environment. Using a hands-on approach, students will further develop information and communication technology skills through the use of common business software applications. The concept and operation of e-business will be explored, and students will design and create an e-business website. The skills developed in this course will prepare students for success in the workplace and/or postsecondary studies. *Prerequisite*: None

# Information and Communication Technology: Multimedia Solutions, Grade 12, College (BTX4C)

This course provides students with the opportunity to apply their information and communication technology skills while working in a team environment. Through a project-based approach, students will have opportunities to integrate common business software applications and apply multimedia techniques. Students will further develop their understanding of electronic business and e-commerce environments. The skills acquired in this course will prepare students for success in postsecondary studies and in their future careers.

*Prerequisite*: Information and Communication Technology: The Digital Environment, Grade 11, Open (BTA3O)

# The Americas: Geographic Patterns and Issues, Grade 11, University/College (CGD3M)

This course investigates the geographic systems and patterns of the Americas, focusing on questions arising from the growing interdependence of the countries in the region. Students will examine diverse environmental, economic, and cultural factors influencing the different countries and their peoples, and the interactions among them. Students will use a variety of geotechnologies and inquiry and communication methods to investigate trends and issues and communicate their findings.

Prerequisite: Grade 9 Geography of Canada, Academic or Applied

# Physical Geography: Patterns, Processes and Interactions, Grade 11, University/College (CGF3M)

This course examines the major patterns of physical geography and the powerful forces that affect them. Students will investigate the dynamic nature of the earth, the evolving relationship between the planet and its people, and the factors that limit our ability to predict the changes that will occur. Students will use a wide range of geotechnologies and inquiry methods to investigate the distribution and interaction of the elements of their physical environment and to communicate their findings.

Prerequisite: Grade 9 Geography of Canada, Academic or Applied

# Travel and Tourism: A Regional Geographic Perspective, Grade 11, Open (CGG3O)

This course focuses on travel and tourism as the vehicle for studying selected world regions. Using a variety of geotechnologies and inquiry and communication methods, students will conduct and present case studies that develop their understanding of the unique characteristics of selected world regions; the environmental, cultural, economic, and political factors that influence travel and tourism; and the impact of the travel industry on communities and environments around the world.

Prerequisite: Grade 9 Geography of Canada, Academic or Applied

# The Environment and Resource Management, Grade 12, University/College (CGR4M)

This course investigates the complexity and fragility of ecosystems and the pressures human activities place on them. Students will examine ecological processes, the principles of sustainability, and strategies for resource management, with a focus on the challenges of environmental degradation and resource depletion. Students will use geotechnologies and skills of geographic inquiry to explain and evaluate various approaches to achieving a more sustainable relationship between people and their environment.

*Prerequisite*: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities

# World Geography: Urban Patterns and Interactions, Grade 12, College (CGU4C)

This course examines cities around the world and the social, political, cultural, environmental, and economic factors that shape them. Students will study urban structures and systems, the impact of migrations on cities, and the impact of cities on the environment. Students will use geotechnologies and apply geographic concepts and inquiry methods to analyze issues and problems related to urban development and to formulate potential solutions.

*Prerequisite*: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities

# History 11: Origins & Citizenship, Grade 11, Open (CHE3O)

This course focuses on the history of people who came to Canada from a specific country or region. Students will explore historical developments and events in the group's country of origin, the factors that influenced the decision of members of this group to emigrate, their historical experiences in Canada, and their contributions to Canadian identity and heritage. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating various aspects of the group's history.

*Prerequisite:* Canadian History since World War I, Grade 10, Academic or Applied, or the locally developed compulsory course (LDCC) in Canadian history

# Canadian History and Politics Since 1945, Grade 11, College (CHH3C)

This course examines the local, national, and global forces that have shaped Canada since 1945 and highlights the political, social, and economic issues facing the country today. Students will expand their political understanding through an investigation of Canada's efforts in areas such as social justice and human rights, multiculturalism, and international relations. Students will develop their skills in historical research, analysis, and communication to deepen their historical and political awareness and present their own points of view. *Prerequisite*: Grade 10 Canadian History Since World War I, Academic or Applied

# Canada: History, Identity and Culture, Grade 12, University (CHI4U)

This course traces the history of Canada, with a focus on the evolution of our national identity and culture as well as the identity and culture of various groups that make up Canada. Students will explore various developments and events, both national and international, from precontact to the present, and will examine various communities in Canada and how they have contributed to identity and heritage in Canada. Students will investigate the development of culture and identity, including national identity, in Canada and how and why they have changed throughout the country's history. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate the people, events, and forces that have shaped Canada.

*Prerequisite:* Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

# Adventures in World History, Grade 12, Workplace (CHM4E)

This course examines significant developments and events in world history from earliest times to the present. Students will explore a variety of social, cultural, economic, and political developments in different regions of the world and during different periods. In addition to investigating how conflict, religion, work, and technology have helped shape people's lives, students will examine the contributions of some significant individuals to our global heritage. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating a variety of human experiences in world history.

*Prerequisite:* Canadian History since World War I, Grade 10, Academic or Applied, or the locally developed compulsory course (LDCC) in Canadian history

# World History: The West and the World, Grade 12, College (CHY4C)

This course explores the history of the world since the sixteenth century, emphasizing the interaction between the emerging West and other regions of the world. Students will learn about a variety of economic, social, and political systems and the changes they have undergone over time. Students will apply their developing skills of historical inquiry to understand and communicate ideas about the forces that have formed our modern world. *Prerequisite*: Any university, university/college, or college preparation course in Canadian and

world studies, English, or social sciences and humanities

# Canadian & International Law, Grade 12, College (CLN4C)

This course provides a foundation for students who wish to pursue a career that requires an understanding of law. Students will explore the importance of law, analyzing contemporary legal issues and their relevance to daily life. They will investigate the requirements for various law-related careers as well as legal responsibilities in the workplace. Students will apply the concepts of legal thinking and the legal studies inquiry process to investigate their rights and responsibilities, legal processes and structures, and the role of law in a changing society.

Prerequisite: Civics and Citizenship, Grade 10, Open

### Understanding Canadian Law, Grade 11, Workplace (CLU3E)

This course gives students practical information about legal issues that directly affect their lives. Students will examine the need for laws in society, the roots of Canada's legal system, the rights and freedoms that people in Canada enjoy, and the basic elements of criminal law and dispute resolution. Through experiences such as mock trials, debates, and case studies, students will apply inquiry and communication skills to develop and express opinions on legal topics of interest to them.

*Prerequisite*: Grade 10 Canadian History Since World War I, Academic or Applied (With the approval of the ministry, a locally developed Grade 10 course in Canadian history may also serve as the prerequisite.)

### Understanding Canadian Law, Grade 11, University/College (CLU3M)

This course explores Canadian law with a focus on legal issues that are relevant to people's everyday lives. Students will investigate fundamental legal concepts and processes to gain a practical understanding of Canada's legal system, including the criminal justice system. Students will use critical-thinking, inquiry, and communication skills to develop informed opinions on legal issues and apply this knowledge in a variety of ways and settings, including case analysis, legal research projects, mock trials, and debates.

Prerequisite: Grade 10 Canadian History Since World War I, Academic or Applied

### Politics in Action: Making Change, Grade 11, Open (CPC3O)

This course enables students to develop plans for change in the local, national, and/or global community. Students will explore various issues, investigating their causes as well as their impact, and determining where change is needed, and why. They will examine the effectiveness of various problem-solving strategies used by individuals and groups that have brought about and/or are attempting to bring about political change in democratic societies. In addition, students will analyze the role and perspectives of governments and other stakeholders in relation to issues of political importance and will consider factors affecting their own and others' political engagement. Students will apply the concepts of political thinking and the political inquiry process as they investigate various issues of political importance and develop a plan of action to address a selected issue.

Prerequisite: Civics and Citizenship, Grade 10, Open

#### Media Studies, Grade 11, Open (EMS3O)

This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analyzing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing.

Prerequisite: Grade 10 English, Academic or Applied

#### English, Grade 11, College (ENG3C)

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course.

Prerequisite: Grade 10 English, Applied (ENG2D, ENG2P)

#### English, Grade 11, Workplace (ENG3E)

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course.

Prerequisite: Grade 10 English, Applied

#### English, Grade 11, University (ENG3U)

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course. *Prerequisite*: Grade 10 English, Academic

### English, Grade 12, College (ENG4C)

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace. *Prerequisite*: Grade 11 English, College Preparation (ENG3C)

#### English, Grade 12, Workplace (ENG4E)

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyze informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship.

Prerequisite: Grade 11 English, Workplace Preparation

#### English, Grade 12, University (ENG4U)

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace.

Prerequisite: Grade 11 English, University Preparation

# Presentation and Speaking Skills, Grade 11, Open (EPS3O)

This course emphasizes the knowledge and skills required to plan and make effective presentations and to speak effectively in both formal and informal contexts, using such forms as reports, speeches, debates, panel discussions, storytelling, recitations, interviews, and multimedia presentations. Students will research and analyze the content and characteristics of convincing speeches and the techniques of effective speakers; design and rehearse presentations for a variety of purposes and audiences; select and use visual and technological aids to enhance their message; and assess the effectiveness of their own and others' presentations.

Prerequisite: Grade 10 English, Academic or Applied

# ESL, Level 4, Open (ESLDO)

This course prepares students to use English with increasing fluency and accuracy in classroom and social situations and to participate in Canadian society as informed citizens. Students will develop the oral-presentation, reading, and writing skills required for success in all school subjects. They will extend listening and speaking skills through participation in discussions and seminars; study and interpret a variety of grade-level texts; write narratives, articles, and summaries in English; and respond critically to a variety of print and media texts. *Prerequisite*: ESL Level 3 or equivalent

# ESL, Level 5, Open (ESLEO)

This course provides students with the skills and strategies they need to make the transition to college and university preparation courses in English and other secondary school disciplines. Students will be encouraged to develop independence in a range of academic tasks. They will participate in debates and lead classroom workshops; read and interpret literary works and academic texts; write essays, narratives, and reports; and apply a range of learning strategies and research skills effectively. Students will further develop their ability to respond critically to print and media texts.

Prerequisite: ESL Level 4 or equivalent

# The Writer's Craft, Grade 12, College (EWC4C)

This course emphasizes knowledge and skills related to the craft of writing. Students will investigate models of effective writing; use a workshop approach to write a variety of works; and make considered decisions for improving the quality of their writing. They will also complete a creative or analytical independent study project, and investigate opportunities for publication and for writing careers.

Prerequisite: Grade 11 English, College Preparation

# The Writer's Craft, Grade 12, University (EWC4U)

This course emphasizes knowledge and skills related to the craft of writing. Students will analyze models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers.

Prerequisite: English, Grade 11, University Preparation

# Advanced Learning Strategies: Skills for Success After Secondary School, Grade 11, Open (GLE3O)

This course improves students' learning and personal-management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal-management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals. *Prerequisite*: Recommendation of principal

### Navigating the Workplace, Grade 12, Open (GLN4O)

This course provides students with opportunities to develop the workplace essential skills and work habits required for success in all types of workplaces. Students will explore occupations and careers of interest through participation in real workplace experiences. They will make plans for continued learning and work, work with others to design learning experiences, and investigate the resources and support required to make a smooth transition to their post-secondary destination.

Prerequisite: None

# Advanced Learning Strategies: Skills for Success After Secondary School, Grade 12, Open (GLS4O)

This course improves students' learning and personal-management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal-management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals. *Prerequisite*: None

# Leadership and Peer Support, Grade 11, Open (GPP3O)

This course prepares students to act in leadership and peer support roles. They will design and implement a plan for contributing to their school and/or community; develop skills in communication, interpersonal relations, teamwork, and conflict management; and apply those skills in leadership and/or peer support roles – for example, as a student council member or a peer tutor. Students will examine group dynamics and learn the value of diversity within groups and communities.

Prerequisite: None

# Designing Your Future, Grade 11, Open (GWL3O)

This course prepares students to make successful transitions to postsecondary destinations as they investigate specific postsecondary options based on their skills, interests, and personal characteristics. Students will explore the realities and opportunities of the workplace and examine factors that affect success, while refining their job-search and employability skills. Students will develop their portfolios with a focus on their targeted destination and develop an action plan for future success.

Prerequisite: None

#### Introduction to Psychology, Grade 12, Dual Credit (HBB4T)

This is a dual credit course. Students will attend Durham College two days a week and will have supervised study at Continuing Education. Transportation is provided. Students receive a total of two (2) high school credits and one (1) college credit with this program. Students must make an appointment with a guidance counsellor and apply to be accepted into this program.

### Nutrition & Health, Grade 12, College (HFA4C)

This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health.

*Prerequisite:* Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

# Food & Culture, Grade 11, College/University (HFC3M)

This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will explore the origins of and developments in diverse food traditions. They will demonstrate the ability to cook with ingredients and equipment from a variety of cultures, compare food-related etiquette in many countries and cultures, and explain how Canadian food choices and traditions have been influenced by other cultures. Students will develop practical skills and apply social science research methods while investigating foods and food practices from around the world.

Prerequisite: None

# Food and Healthy Living, Grade 12 (HFL4E)

This course focuses on the fundamental food needs of young adults. Students will learn how to stock a kitchen, make nutritious food choices, and accommodate the food needs of others. Through a range of practical experiences, they will develop skills needed in food preparation for personal use and for employment in the food industry. They will also learn about dining etiquette in different contexts and about responsible consumer practices. Students will use social science research methods to investigate issues related to food preparation and nutrition. *Prerequisite:* None

#### Dynamics of Human Relationships, Grade 11, Open (HHD3O)

This course focuses on helping students understand the individual and group factors that contribute to healthy relationships. Students will examine the connections between their own self-concept and their interpersonal relationships. They will learn and practice strategies for developing and maintaining healthy relationships with friends, family, and community members, as well as with partners in intimate relationships. Students will use research and inquiry skills to investigate topics related to healthy relationships. *Prerequisite:* None

# Issues in Human Growth and Development,

# Grade 12, University/College (HHG4M)

This course offers a multidisciplinary approach to the study of human development throughout the life cycle, with particular emphasis on enhancing growth and development. Students will examine how early brain and child development are linked to lifelong learning, health, and well-being, and will develop child-care and human-relationship skills through practical experience in a community setting. This course also refines students' skills used in researching and investigating issues related to human growth and development.

*Prerequisite*: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies

# Families in Canada, Grade 12, College (HHS4C)

This course enables students to develop an understanding of social science theories as they apply to individual development, the development of intimate relationships, and family and parent-child relationships. Students will explore a range of issues relating to the development of individuals and families in contemporary Canadian society as well as in other cultures and historical periods. They will develop the investigative skills required to conduct research on individuals, intimate relationships, and parent-child roles and relationships in Canada.

*Prerequisite*: Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

# Individuals and Families in a Diverse Society,

# Grade 12, University/College (HHS4M)

This course applies current theories and research from the disciplines of anthropology, psychology, and sociology to the study of individual development, family behaviour, intimate and parent-child relationships, and the ways in which families interact within the diverse Canadian society. Students will learn the interpersonal skills required to contribute to the well-being of families, and the investigative skills required to conduct and evaluate research about individuals and families.

*Prerequisite*: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies

# Individuals and Families in a Diverse Society, Grade 12, University (HHS4U)

This course enables students to draw on sociological, psychological, and anthropological theories and research to analyze the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships.

*Prerequisite*: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies

#### Personal Life Management, Grade 12, Open (HIP4O)

This course focuses on preparing students for living independently and working successfully with others. Students will learn to manage their personal resources to meet their basic needs for food, clothing, and housing. They will also learn their personal, legal and financial responsibilities and develop and apply interpersonal skills in order to make wise and responsible personal and occupational choices. Students will apply research and inquiry skills while investigating topics related to personal life management. The course emphasizes the achievement of expectations through practical experiences. *Prerequisite:* None

#### Managing Personal and Family Resources, Grade 11, College (HIR3C)

This course explores how to use human, material, and community resources effectively, and how to make informed choices with respect to clothing purchases, finance, food and nutrition, housing, and transportation. Students will learn about the dynamics of human interaction; how to make responsible choices in their transition to postsecondary education and careers; and strategies to enable them to manage time, talent, and money effectively. This course also introduces students to skills used in researching and investigating resource management. *Prerequisite*: None

### Living Spaces and Shelter, Grade 11, Open (HLS3O)

This course analyses how different types of living spaces and forms of shelter meet people's physical, social, emotional, and cultural needs and reflect society's values, established patterns of living, and economic and technological developments. Students will learn how to make practical decisions about where to live and how to create functional and pleasing environments, and will explore occupational opportunities related to housing and design. They will also learn skills used in researching and investigating living accommodations and housing. *Prerequisite*: None

# Fashion, Grade 11, College (HNC3C)

This course introduces students to the world of fashion. Students will gain an understanding of theories related to fashion trends and of how culture, media, fashion cycles, retailing, and social and environmental factors influence fashion trends and consumer behaviour. Students will use various tools, technologies, and techniques safely and correctly to create fashion items. In addition, students will apply knowledge of fibers, fabrics, and the elements and principles of design when creating and assessing fashion-related products. Students will develop research skills as they investigate topics related to fashion. *Prerequisite:* None

#### Raising Healthy Children, Grade 11, Open (HPC3O)

This course focuses on the skills and knowledge needed to promote the positive and healthy nurturing of children, with particular emphasis on the critical importance of the early years to human development. Students will learn how to meet the developmental needs of young children, communicate and discipline effectively, and guide early behaviour. They will have practical experiences with infants, toddlers, and preschoolers, and will learn skills in researching and investigating questions relating to parenting. *Prerequisite*: None

#### Working with School Age Children, Grade 12, College (HPD4C)

This course prepares students for occupations involving school-age children and adolescents. Students will study a variety of theories about child behaviour and development, and will have opportunities for research and observation and for practical experiences with older children. Students will become familiar with occupational opportunities and requirements related to working with older children and adolescents. They will develop research skills used in investigating child and adolescent behaviour and development.

*Prerequisite:* Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

#### Living and Working With Children, Grade 11, College (HPW3C)

This course focuses on the well-being of children in families and community settings. Students will study child behaviour and child development in the context of relationships with parents and others in the community, and will learn through research and by observing and interacting with children. This course prepares students for further study of children, familiarizes them with occupational opportunities related to working with children, and introduces them to skills used in researching and investigating children's behaviour in response to others. *Prerequisite*: None

#### Church and Culture, Grade 12, University/College (HRE4M)

This course assists students in their development of the skills and knowledge necessary to live lives of full maturity. Within the Catholic faith tradition it is believed that this growth towards human maturity is best served when students are able to define themselves authentically in relation to their God, to other people and to their world. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships, and sexuality. Students will demonstrate a knowledge of the prophetic tradition in Scripture, become familiar with the social teachings of the Catholic Church, explore contemporary notions of spirituality and prayer, and recognize the importance, power and potential of the human person in relation to morality and personal choices concerning future life paths. This course enables students to explore the moral principles of the Church and how these principles relate to them as individuals, and to contemporary culture as a whole. Students explore the role played by the Christian Scriptures, prayer, ritual, and the sacraments as they discern and live out their Christian vocation in their lives. This course also introduces students to skills used in researching and investigating contemporary moral issues and the guiding principles and teachings of the Roman Catholic Church. Prerequisite: None

#### Religion, Grade 11, Open (HRE3O)

This course enables students to study world religions and belief traditions in local, Canadian, and global contexts. Students will explore aspects of the human quest for meaning and will examine world religions and belief traditions as exemplified in various sacred teachings and principles, rites, and passages. They will also study the interaction throughout history between society and various belief traditions, and will have opportunities to develop research and inquiry skills related to the study of world religions and belief traditions. *Prerequisite:* None

# World Religions: Beliefs, Issues, and Religious Traditions, Grade 11, University/College (HRT3M)

This course enables students to discover what others believe and how they live, and to appreciate their own unique heritage. Students will learn about the teachings and traditions of a variety of religions, the connections between religion and the development of civilizations, the place and function of religion in human experience, and the influence of a broad range of religions on contemporary society. This course also introduces students to skills used in researching and investigating world religions.

Prerequisite: None

# Challenge and Change in Society, Grade 12, University/College (HSB4M)

This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will analyze cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends.

*Prerequisite*: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies

### World Cultures, Grade 12, University/College (HSC4M)

This course examines the nature of culture; how cultural identities are acquired, maintained, and transformed; and theories used to analyze cultures. Students will explore world cultures, with an emphasis on the analysis of religious and spiritual beliefs, art forms, and philosophy. They will study the contributions and influence of a range of cultural groups and will critically analyse issues facing ethno-cultural groups within Canada and around the world. Students will develop and apply research skills and will design and implement a social action initiative relating to cultural diversity. *Prerequisite:* Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

# Gender Studies, Grade 11, University/College (HSE3M)

This course enables students to develop an understanding of historical and contemporary issues relating to equity, diversity, and social justice in a variety of contexts. Students will explore the nature of diversity and power relations in Canada and how social norms shape individual identity. They will learn about social activism and how to address situations that involve discrimination, harassment, and denial of rights. Students will develop and apply research skills and will design and implement a social action initiative relating to an equity, diversity, or social justice issue.

Prerequisite: None

# Introduction to Anthropology, Psychology, and Sociology, Grade 11, College (HSP3C)

This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. Students will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines.

Prerequisite: None

# Introduction to Anthropology, Psychology, and Sociology, Grade 11, University/College (HSP3M)

This course introduces the theories, questions, and issues that are the major concerns of anthropology, psychology, and sociology. Students will develop an understanding of the way social scientists approach the topics they study and the research methods they employ. Students will be given opportunities to explore theories from a variety of perspectives and to become familiar with current thinking on a range of issues that have captured the interest of classical and contemporary social scientists in the three disciplines. *Prerequisite*: None

### Philosophy: The Big Questions, Grade 11, University/College (HZB3M)

This course encourages exploration of philosophy's big questions, such as: What is a meaningful life? What separates right from wrong? What constitutes knowledge? What makes something beautiful? What is a just society? Students will develop critical thinking and philosophical reasoning skills as they identify and analyze the responses of philosophers to the big questions and formulate their own responses to them. Students will explore the relevance of philosophical questions to society and to their everyday life. They will develop research and inquiry skills as they investigate various topics in philosophy.

Prerequisite: None

# Introduction to Anthropology, Psychology, and Sociology, Grade 11, University (HSP3U)

This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines. *Prerequisite*: The Grade 10 academic course in English, or the Grade 10 academic history course (Canadian and world studies)

#### Interdisciplinary Studies, Grade 11, Open (IDP3O)

This course will help students combine the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research, students will analyze the connections among diverse subjects and disciplines; develop information literacy skills in analyzing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. *Prerequisite*: The prerequisite for each of the courses in the package

# Foundations for College Mathematics, Grade 12, College (MAP4C)

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

*Prerequisite*: Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation (MBF3C, MCF3M)

### Foundations for College Mathematics, Grade 11, College (MBF3C)

This course enables students to broaden their understanding of mathematics as a problem solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analyzing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. *Prerequisite*: Foundations of Mathematics, Grade 10, Applied (MPM2D, MFM2P)

# Functions and Applications, Grade 11, University/College (MCF3M)

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

*Prerequisite*: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied

# Functions, Grade 11, University (MCR3U)

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics, Grade 10, Academic

# Mathematics for College Technology, Grade 12, College (MCT4C)

This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs.

*Prerequisite*: Functions and Applications, Grade 11, University/College Preparation, or Functions, Grade 11, University Preparation

#### Calculus and Vectors, Grade 12, University (MCV4U)

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in threedimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a universitylevel calculus, linear algebra, or physics course.

*Prerequisite*: Note: Advanced Functions, Grade 12, University Preparation, must be taken prior to or concurrently with Calculus and Vectors.

#### Mathematics of Data Management, Grade 12, University (MDM4U)

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analyzing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

*Prerequisite*: Functions, Grade 11, University Preparation, or Functions and Applications, Grade 11, University/College Preparation

#### Mathematics for Work and Everyday Life, Grade 11, Workplace (MEL3E)

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

*Prerequisite*: Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied, or a Grade 10 Mathematics LDCC (locally developed compulsory credit) course (MPM1D, MFM1P)

#### Mathematics for Work and Everyday Life, Grade 12, Workplace (MEL4E)

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation

#### Advanced Functions, Grade 12, University (MHF4U)

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

*Prerequisite*: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation

# Ontario Secondary School Literacy Course, Grade 11, Open (OLC3O)

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

*Prerequisite*: Eligibility requirement: Students who have been eligible to write the OSSLT at least twice and who have been unsuccessful at least once are eligible to take the course.

### Ontario Secondary School Literacy Course, Grade 12, Open (OLC4O)

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*Prerequisite*: Eligibility requirement: Students who have been eligible to write the OSSLT at least twice and who have been unsuccessful at least once are eligible to take the course. (Students who have already met the literacy requirement for graduation may be eligible to take the course under special circumstances, at the discretion of the principal.)

#### Fitness & Health, Grade 11, Open (PAI3O)

This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills and will be given opportunities to practice goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety. *Prerequisite*: None

#### Recreation and Healthy Active Living Leadership, Grade 12, (PLF4M)

This course enables students to explore the benefits of lifelong participation in active recreation and healthy leisure and to develop the leadership and coordinating skills needed to plan, organize, and safely implement recreational events and other activities related to healthy, active living. Students will also learn how to promote the benefits of healthy, active living to others through mentoring and assisting them in making informed decisions that enhance their wellbeing. The course will prepare students for university programs in physical education and health and kinesiology and for college and university programs in recreation and leisure management, fitness and health promotion, and fitness leadership.

Prerequisite: Any health and physical education course

#### Wellness & Nutrition, Grade 12, Dual Credit (PPJ4T)

This is a dual credit course. Students will attend Durham College two days a week and will have supervised study at Continuing Education. Transportation is provided. Students receive a total of two (2) high school credits and one (1) college credit with this program. Students must make an appointment with a guidance counsellor and apply to be accepted into this program.

### Healthy Active Living Education, Grade 11, Open (PPL3O)

This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills and will be given opportunities to practice goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety. *Prerequisite*: None

#### Healthy Active Living Education, Grade 12, Open (PPL4O)

This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others.

Prerequisite: None

# Health for Life, Grade 11, College (PPZ3C)

This course enables students to examine the factors that influence their own health practices and behaviours as well as those factors that contribute to the development of healthy communities. It emphasizes the concept of wellness, which addresses all aspects of well-being – physical, cognitive, emotional, spiritual, and social – and promotes healthy eating, physical activity, and building and maintaining a positive sense of self. Students will develop the skills necessary to make healthy choices and create a personal wellness plan. They will also design initiatives that encourage others to lead healthy, active lives. The course prepares students for college programs in health sciences, fitness, wellness and health promotion.

Prerequisite: None

#### Kinesiology, Grade 12, University (PSK4U)

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration. *Prerequisite*: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education

### Biology, Grade 11, College (SBI3C)

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields. *Prerequisite*: Grade 10 Science, Academic or Applied (SNC2D, SNC2P)

### Biology, Grade 11, University (SBI3U)

This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation. *Prerequisite*: Grade 10 Science, Academic

#### Biology, Grade 12, University (SBI4U)

This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.

Prerequisite: Grade 11 Biology, University Preparation

# Chemistry, Grade 11, University (SCH3U)

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment.

Prerequisite: Grade 10 Science, Academic

### Chemistry, Grade 12, College (SCH4C)

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.

Prerequisite: Grade 10 Science, Academic or Applied (SNC2D, SNC2P)

### Chemistry, Grade 12, University (SCH4U)

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

Prerequisite: Grade 11 Chemistry, University Preparation

### Science, Grade 12, Workplace (SNC4E)

This course provides students with fundamental science knowledge and workplace skills needed to prepare them for success beyond secondary school. Students will explore hazards in the workplace, chemicals in consumer products, disease and its prevention, electricity at home and at work, and nutritional science. Emphasis is placed on current topics in science and relevant, practical activities that develop students' literacy and mathematical literacy skills and enhance their scientific literacy.

*Prerequisite*: Grade 10 Science, Applied, or a Grade 10 locally developed compulsory credit (LDCC) course in science

# Science, Grade 12, University/College (SNC4M)

This course enables students, including those pursuing postsecondary programs outside the sciences, to increase their understanding of science and contemporary social and environmental issues in health-related fields. Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The course focuses on the theoretical aspects of the topics under study and helps refine students' scientific investigation skills.

*Prerequisite*: Grade 10 Science, Academic, or any Grade 11 university, university/college, or college preparation course in science

#### Physics, Grade 11, University (SPH3U)

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment. *Prerequisite*: Grade 10 Science, Academic

### Physics, Grade 12, College (SPH4C)

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.

Prerequisite: Grade 10 Science, Academic or Applied

#### Physics, Grade 12, University (SPH4U)

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, qualitatively and quantitatively, data related to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.

Prerequisite: Grade 11 Physics, University Preparation

### Environmental Science, Grade 11, Workplace (SVN3E)

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy.

*Prerequisite*: Grade 9 Science, Academic or Applied, or a Grade 9 or 10 locally developed compulsory credit (LDCC) course in science

#### Environmental Science, Grade 11, University/College (SVN3M)

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas. *Prerequisite*: Grade 10 Science, Academic or Applied

#### Computer Engineering Technology, Grade 11, University/College (TEJ3M)

This course examines computer systems and control of external devices. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, robotics, programming, and networks, and will build systems that use computer programs and interfaces to control and/or respond to external devices. Students will develop an awareness of related environmental and societal issues, and will learn about college and university programs leading to careers in computer technology. *Prerequisite*: None

### Hospitality and Tourism, Grade 11, College (TFJ3C)

This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry. *Prerequisite*: None

### Hospitality and Tourism, Grade 12, College (TFJ4C)

This course enables students to further develop knowledge and skills related to the various sectors of the tourism industry. Students will demonstrate advanced food preparation and presentation skills; increase health and wellness knowledge; develop tourism administration and management skills; design and implement a variety of events or activities; and investigate principles and procedures that contribute to high-quality customer service. Students will expand their awareness of health and safety issues, environmental and societal issues, and career opportunities in the tourism industry.

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

### Hospitality, Grade 11, College (TFT3C)

This course helps students understand the features, trends, and guidelines of the hospitality industry, as well as learn the basic requirements of serving customers. Students will acquire skills related to preparing and presenting food, evaluating facilities, controlling inventory, and marketing special events. They will also learn about economic and environmental impacts, health and safety standards, and career opportunities related to the hospitality industry. *Prerequisite:* None

#### Child Development and Gerontology, Grade 12, College (TOJ4C)

This course enables students to examine the stages of child development and the aging process. Students will study the processes of disease and factors contributing to health and well-being in early and later life, and will develop skills required to meet the needs of children and older adults (care skills). Students will also learn about legislation governing the care of children and older adults; evaluate social and recreational activities, programs, and services for improving quality of life; and develop an awareness of health and safety issues, environmental and social issues, and career opportunities related to child care and gerontology. *Prerequisite*: None

# Health Care, Grade 11, College (TPJ3C)

This course enables students to develop their understanding of basic health care procedures, including the safe use of appropriate instruments, equipment, and materials. Students will focus on health care fundamentals, including health care terminology and the anatomical features and physiology of some major body systems. Students will develop an awareness of health and safety issues in the health care field, environmental and societal issues related to health care, professional practice standards, and career opportunities in the field. *Prerequisite*: None

#### Health Care, Grade 11, University/College (TPJ3M)

This course enables students to develop their understanding of basic health care procedures, including the safe use of appropriate instruments, equipment, and materials. Students will focus on health care fundamentals, including the anatomical features and physiology of the major body systems and the factors that affect homeostasis in the human body. Students will develop an awareness of health and safety issues in the health care field, analyze environmental and societal issues related to health care, and learn about professional practice standards and career opportunities in the field.

Prerequisite: None

#### Health Care: Support Services, Grade 12, Workplace (TPJ4E)

This course enables students to develop the basic skills needed for careers in a range of health care support services. Students will practice and apply a variety of clinical procedures and infection control skills as they learn about principles of infection control, service excellence, and the nature of the health care industry. Students will also investigate workers' health and safety issues, environmental and societal issues related to health care, and career opportunities in the field.

Prerequisite: None