

2011

The Ontario Curriculum
Grades 9 to 12

Course Descriptions and Prerequisites



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Introduction

This document contains the course descriptions for all courses in Grades 9 to 12, along with course lists (including course codes) and prerequisite charts, in the following subjects/disciplines:

- the arts
- business studies
- Canadian and world studies
- classical studies and international languages
- computer studies
- English
- English as a second language and English literacy development
- French as a second language
- guidance and career education
- health and physical education
- interdisciplinary studies
- mathematics
- Native languages
- Native studies
- science
- social sciences and humanities
- technological education

The purpose of this document is to assist students, with the help of their parents and guidance counsellors, in selecting the courses that will put them on the right path to their postsecondary destination. The course descriptions are standard, one-paragraph descriptions that summarize what students will learn in each course. The descriptions are gathered here in a separate section for each discipline, and each section is introduced by a course list and a prerequisite chart. (A prerequisite is a course deemed essential for the successful understanding and completion of a subsequent course.) The prerequisite charts diagram the relationships among courses.

The policy regarding prerequisites is stated as follows in *Ontario Secondary Schools, Grades 9 to 12: Program and Diploma Requirements, 1999* (section 5.3.3):

Courses in Grades 11 and 12 may have prerequisites as a requirement for enrolment. All prerequisite courses will be identified in ministry curriculum policy documents, and no courses apart from these may be identified as prerequisites. Schools must provide parents and students with clear and accurate information on prerequisites.

If a parent or an adult student requests that a prerequisite be waived, the principal will determine whether or not the prerequisite should be waived. A principal may also initiate consideration of whether a prerequisite should be waived. The principal will make his or her decision in consultation with the parent or adult student and appropriate school staff. In cases where the parent or adult student disagrees with the decision of the principal, the parent or adult student may ask the appropriate supervisory officer to review the matter.

This document will be updated in subsequent years to reflect changes in courses and course codes resulting from the cyclical review of the Ontario curriculum. The present document accurately reflects the Ontario curriculum as of December 2010, and indicates the year of release of the curriculum for each discipline at the start of every section.

The Arts (2010)

Courses in the Arts, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisite
Dance				
9	Dance	Open	ATC1O	None
10	Dance	Open	ATC2O	None
11	Dance	University/College	ATC3M	Grade 9 or 10 Dance, Open
11	Dance	Open	ATC3O	None
12	Dance	University/College	ATC4M	Grade 11 Dance, University/College
12	Dance	Workplace	ATC4E	Grade 11 Dance, Open
Drama				
9	Drama	Open	ADA1O	None
10	Drama	Open	ADA2O	None
11	Drama	University/College	ADA3M	Grade 9 or 10 Drama, Open
11	Drama	Open	ADA3O	None
12	Drama	University/College	ADA4M	Grade 11 Drama, University/College
12	Drama	Workplace	ADA4E	Grade 11 Drama, Open
Integrated Arts and Exploring and Creating in the Arts				
9 or 10	Integrated Arts	Open	ALC1O/2O	None
11 or 12	Exploring and Creating in the Arts	Open	AEA3O/4O	Any Grade 9 or 10 arts course
Media Arts				
10	Media Arts	Open	ASM2O	None
11	Media Arts	University/College	ASM3M	Grade 10 Media Arts, Open
11	Media Arts	Open	ASM3O	None
12	Media Arts	University/College	ASM4M	Grade 11 Media Arts, University/College
12	Media Arts	Workplace	ASM4E	Grade 11 Media Arts, Open

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisite
Music				
9	Music	Open	AMU1O	None
10	Music	Open	AMU2O	None
11	Music	University/College	AMU3M	Grade 9 or 10 Music, Open
11	Music	Open	AMU3O	None
12	Music	University/College	AMU4M	Grade 11 Music, University/College
12	Music	Workplace	AMU4E	Grade 11 Music, Open
Visual Arts				
9	Visual Arts	Open	AVI1O	None
10	Visual Arts	Open	AVI2O	None
11	Visual Arts	University/College	AVI3M	Grade 9 or 10 Visual Arts, Open
11	Visual Arts	Open	AVI3O	None
12	Visual Arts	University/College	AVI4M	Grade 11 Visual Arts, University/College
12	Visual Arts	Workplace	AVI4E	Grade 11 Visual Arts, Open

Courses that focus on a particular area of a subject should be assigned the appropriate code from the list of Common Course Codes posted on the Ministry of Education's website, at www.Ontario.ca/edu.

Course Descriptions for the Arts

Dance

Dance, Grade 9, Open

(ATC1O)

This course gives students the opportunity to explore their technical and compositional skills by applying the elements of dance and the tools of composition in a variety of performance situations. Students will generate movement through structured and unstructured improvisation, demonstrate an understanding of safe practices with regard to themselves and others in the dance environment, and identify the function and significance of dance within the global community.

Prerequisite: None

Dance, Grade 10, Open

(ATC2O)

This course emphasizes the development of students' technique and creative skills relating to the elements of dance and the tools of composition in a variety of performance situations. Students will identify responsible personal and interpersonal practices related to dance processes and production, and will apply technologies and techniques throughout the process of creation to develop artistic scope in the dance arts.

Prerequisite: None

Dance, Grade 11, University/College Preparation

(ATC3M)

This course emphasizes the development of students' artistry, improvisational and compositional skills, and technical proficiency in dance genres from around the world. Students will apply dance elements, techniques, and tools in a variety of ways, including performance situations; describe and model responsible practices related to the dance environment; and reflect on how the study of dance affects personal and artistic development.

Prerequisite: Dance, Grade 9 or 10, Open

Dance, Grade 11, Open

(ATC3O)

This course emphasizes the development of students' movement vocabulary relating to dance genres from around the world, and of their understanding of the elements of dance and the tools of composition in a variety of performance situations. Students will research and explain how physical, intellectual, and artistic skills developed in dance can be applied in a wide range of careers. They will apply tools and techniques throughout the process of creation and presentation, and reflect on how studies in the dance arts affect personal identity.

Prerequisite: None

Dance, Grade 12, University/College Preparation

(ATC4M)

This course emphasizes the development of students' technical proficiency, fluency in the language of movement in dance genres from around the world, and understanding of dance science. Students will explain the social, cultural, and historical contexts of dance; apply the creative process through the art of dance in a variety of ways; and exhibit an understanding of the purpose and possibilities of continuing engagement in the arts as a lifelong learner.

Prerequisite: Dance, Grade 11, University/College Preparation

Dance, Grade 12, Workplace Preparation (ATC4E)

This course enables students to develop performance and interpersonal skills through the study of dance. Students will apply the elements of dance and the tools of composition to develop a physical vocabulary that can be used to create and communicate through dance. Students will research and explain how physical, intellectual, and artistic skills developed in the dance arts are transferable to a wide range of careers and workplace environments. They will develop an understanding of practices associated with healthy living, the benefits of self-discipline, and the importance of continuing engagement in the arts.

Prerequisite: Dance, Grade 11, Open

Drama

Drama, Grade 9, Open (ADA1O)

This course provides opportunities for students to explore dramatic forms and techniques, using material from a wide range of sources and cultures. Students will use the elements of drama to examine situations and issues that are relevant to their lives. Students will create, perform, discuss, and analyse drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

Prerequisite: None

Drama, Grade 10, Open (ADA2O)

This course provides opportunities for students to explore dramatic forms, conventions, and techniques. Students will explore a variety of dramatic sources from various cultures and representing a range of genres. Students will use the elements of drama in creating and communicating through dramatic works. Students will assume responsibility for decisions made in the creative and collaborative processes and will reflect on their experiences.

Prerequisite: None

Drama, Grade 11, University/College Preparation (ADA3M)

This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences.

Prerequisite: Drama, Grade 9 or 10, Open

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 analyse 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, Grade 12, University/College Preparation (ADA4M)

This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other texts and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures, and will analyse how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school.

Prerequisite: Drama, Grade 11, University/College Preparation

Drama, Grade 12, Workplace Preparation (ADA4E)

This course requires students to create, present, and analyse a variety of dramatic works relevant to the workplace. Students will build trust and collaborative skills and develop self-confidence through hands-on experience and project-based learning in drama activities. Students will also explore skills related to the study of drama that can be applied in the workplace.

Prerequisite: Drama, Grade 11, Open

Integrated Arts and Exploring and Creating in the Arts

Integrated Arts, Grade 9 or 10, Open (ALC1O/ALC2O)

This course integrates two or more of the arts (dance, drama, media arts, music, and visual arts), giving students the opportunity to produce and present integrated art works created individually or collaboratively. Students will demonstrate innovation as they learn and apply concepts, styles, and conventions unique to the various arts and acquire skills that are transferable beyond the classroom. Students will use the creative process and responsible practices to explore solutions to integrated arts challenges.

Prerequisite: None

Exploring and Creating in the Arts, Grade 11 or 12, Open (AEA3O/AEA4O)

This course offers students the opportunity to explore connections between dance, drama, media arts, music, and/or visual arts. Students will use the creative process individually and/or collaboratively to produce integrated art works that draw on various disciplines, and they will critically analyse art works and determine how interpreting these works affects their own development. Students will develop responsible practices that are transferable beyond the classroom. They will explore solutions to integrated arts challenges and discover that art is everywhere, influencing and reflecting society.

Prerequisite: Any Grade 9 or 10 arts course

Media Arts

Media Arts, Grade 10, Open (ASM2O)

This course enables students to create media art works by exploring new media, emerging technologies such as digital animation, and a variety of traditional art forms such as film, photography, video, and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process. Students will develop the skills necessary to create and interpret media art works

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 analyse 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 11, Open (ASM3O)

This course enables students to create media art works using available and emerging technologies such as computer animation, digital imaging, and video, and a variety of media. Students will explore the elements and principles of media arts, the connections between contemporary media art works and traditional art forms, and the importance of using responsible practices when engaged in the creative process. Students will develop the skills necessary to create and interpret media art works

Prerequisite: None

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 analyse the role of media artists in shaping audience perceptions of identity, culture, and community values.

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

Media Arts, Grade 12, Workplace Preparation (ASM4E)

This course focuses on a practical approach to a variety of media arts challenges related to the interests of the student and provides students with opportunities to examine media arts in relation to the world of work. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in postsecondary work experiences. Students will critically analyse the role of media artists in shaping audience perceptions of identity, culture, and community values, particularly within the context of the workplace.

Prerequisite: Media Arts, Grade 11, Open

Music

Music, Grade 9, Open**(AMU1O)**

This course emphasizes the creation and performance of music at a level consistent with previous experience and is aimed at developing technique, sensitivity, and imagination. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop an understanding of the conventions and elements of music and of safe practices related to music, and will develop a variety of skills transferable to other areas of their life.

Prerequisite: None

Music, Grade 10, Open**(AMU2O)**

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop their understanding of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures.

Prerequisite: None

Music, Grade 11, University/College Preparation**(AMU3M)**

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analysing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers.

Prerequisite: Music, Grade 9 or 10, Open

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 analyse music from various genres and periods, and they will develop skills transferable to other aspects of their life and their careers.

Prerequisite: None

Music, Grade 12, University/College Preparation**(AMU4M)**

This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyse how to apply skills developed in music to their life and careers.

Prerequisite: Music, Grade 11, University/College Preparation

Music, Grade 12, Workplace Preparation (AMU4E)

This course provides students with the fundamental knowledge and skills needed to succeed in the music workplace. Students will, at a level consistent with previous experience, perform appropriate musical works. Independently and collaboratively, students will use current technology and the creative and critical analysis processes to plan, produce, and market music presentations that reflect a broad spectrum of workplace contexts. In addition, students will explore ethical and safe practices related to music.

Prerequisite: Music, Grade 11, Open

Visual Arts

Visual Arts, Grade 9, Open (AVI1O)

This course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements and principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.

Prerequisite: None

Visual Arts, Grade 10, Open (AVI2O)

This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary, and historical context.

Prerequisite: None

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, Grade 12, Workplace Preparation (AVI4E)

This course focuses on a practical approach to a variety of art and design projects related to the workplace. Students will use the creative process to produce a traditional and/or digital portfolio of their work in a variety of media. Students may focus on various aspects of visual arts, including advertising, ceramics, fashion design, graphic arts, jewellery design, and/or web design.

Prerequisite: Visual Arts, Grade 11, Open

Business Studies (2006)

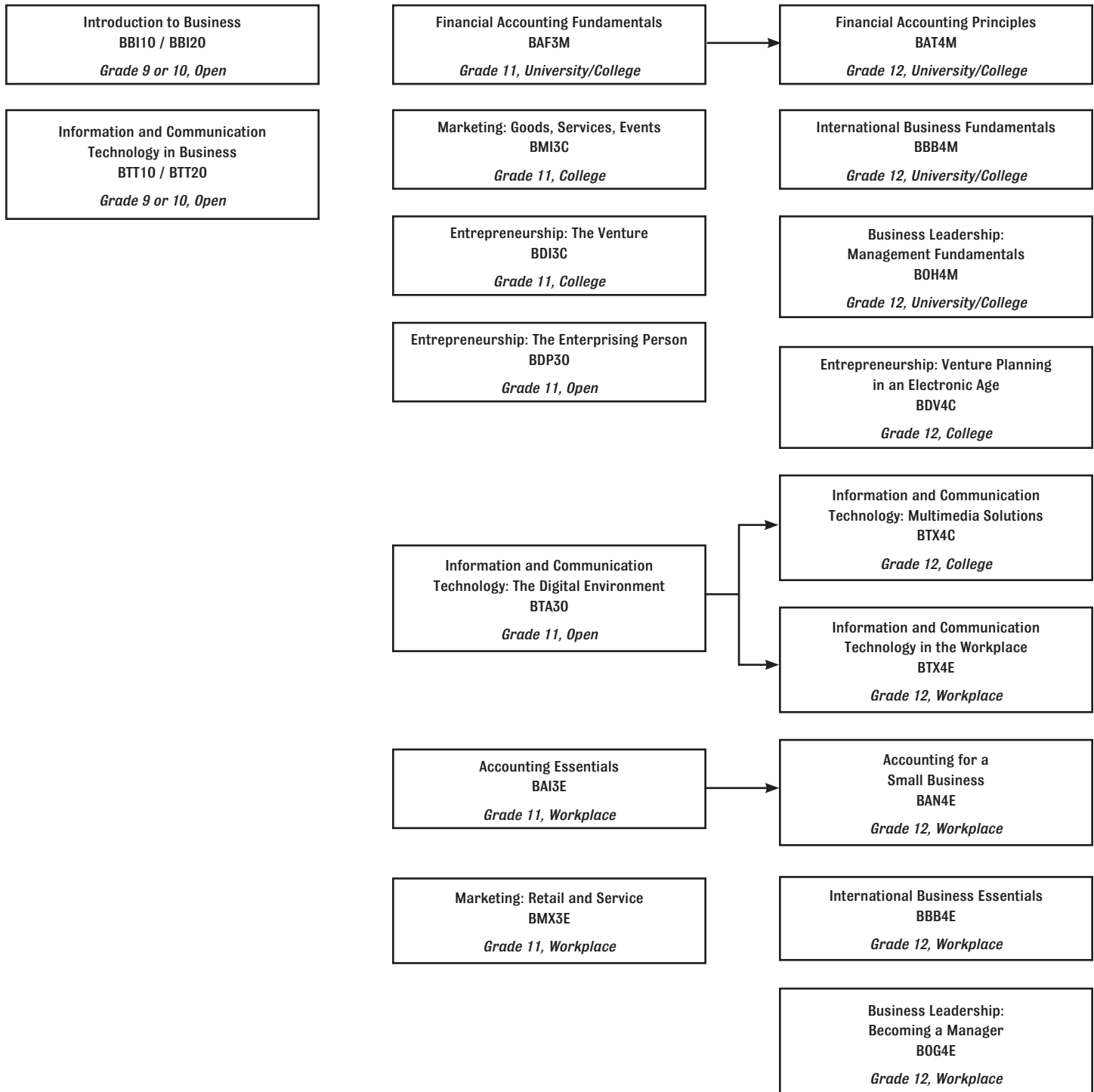
Courses in Business Studies, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
Business Studies				
9	Information and Communication Technology in Business	Open	BTT1O	None
9	Introduction to Business	Open	BBI1O	None
10	Information and Communication Technology in Business	Open	BTT2O	None
10	Introduction to Business	Open	BBI2O	None
Accounting				
11	Financial Accounting Fundamentals	University/College	BAF3M	None
11	Accounting Essentials	Workplace	BA,na	BA,na or 11F or 11A or 11B or 11C or 11D or 11E or 11F or 11G or 11H or 11I or 11J or 11K or 11L or 11M or 11N or 11O or 11P or 11Q or 11R or 11S or 11T or 11U or 11V or 11W or 11X or 11Y or 11Z

Grade	Course Name	Course Type	Course Code	Prerequisites
Information and Communication Technology				
11	Information and Communication Technology: The Digital Environment	Open	BTA3O	None
12	Information and Communication Technology: Multimedia Solutions	College	BTX4C	Information and Communication Technology: The Digital Environment, Grade 11, Open
12	Information and Communication Technology in the Workplace	Workplace	BTX4E	Information and Communication Technology: The Digital Environment, Grade 11, Open
International Business				
12	International Business Fundamentals	University/College	BBB4M	None
12	International Business Essentials	Workplace	BBB4E	None
Marketing				
11	Marketing: Goods, Services, Events	College	BMI3C	None
11	Marketing: Retail and Service	Workplace	BMX3E	None
Business Leadership				
12	Business Leadership: Management Fundamentals	University/College	BOH4M	None
12	Business Leadership: Becoming a Manager	Workplace	BOG4E	None

Prerequisite Chart for Business Studies, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Business Studies

Business Studies

Information and Communication Technology in Business, Grade 9, Open

(BTT1O)

This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skills, and current issues related to the impact of information and communication technology.

Prerequisite: None

Introduction to Business, Grade 9, Open

(BBI1O)

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

Prerequisite: None

Information and Communication Technology in Business, Grade 10, Open

(BTT2O)

This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skills, and current issues related to the impact of information and communication technology.

Prerequisite: None

Introduction to Business, Grade 10, Open

(BBI2O)

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

Prerequisite: None

Accounting

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

Accounting Essentials, Grade 11, Workplace (BAI3E)

This course introduces students to the accounting cycle of a service business. Students will use computer applications software to record business transactions and to prepare financial statements. Students will also investigate banking and cash management, decision making, ethical behaviour, and career opportunities in the field of accounting.

Prerequisite: None

Financial Accounting Principles, Grade 12, University/College (BAT4M)

This course introduces students to advanced accounting principles that will prepare them for postsecondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations.

Prerequisite: Financial Accounting Fundamentals, Grade 11, University/College Preparation

Accounting for a Small Business, Grade 12, Workplace (BAN4E)

This course further develops students' understanding of the fundamentals of accounting by having them examine each component of the accounting cycle, with an emphasis on a merchandising business. Students will use computer applications software to learn how accounting is practised in the workplace. Students will acquire an understanding of payroll systems, inventory, specialized journals, subsidiary ledgers, income tax reporting, and budgeting.

Prerequisite: Accounting Essentials, Grade 11, Workplace Preparation

Entrepreneurship

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

Information and Communication Technology

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

Information and Communication Technology in the Workplace, Grade 12, Workplace (BTX4E)

This course provides students with the opportunity to further develop essential workplace skills in information and communication technology while working in a team environment. Using a project-based approach, students will focus on integrating software applications and applying multimedia software features. Students will expand their understanding of electronic business and e-commerce environments and workplace ethics. This course will prepare students for a successful transition from secondary school to the workplace.

Prerequisite: Information and Communication Technology: The Digital Environment, Grade 11, Open

International Business

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

International Business Essentials, Grade 12, Workplace (BBB4E)

This course provides an introduction to international business. Students will explore the economic relationships that Canada has developed with other nations, and the impact of these relationships on productivity, prices, and variety of goods. This course also introduces students to a variety of career opportunities in international business.

Prerequisite: None

Marketing

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

Marketing: Retail and Service, Grade 11, Workplace (BMX3E)

This course focuses on marketing activities in the retail and service sectors. Students will examine trends and global influences on marketing decisions, and will learn about the importance of customer service in developing a customer base and maintaining customer loyalty. Through hands-on learning, students will develop personal selling and information technology skills that will prepare them for a variety of marketing-related positions in the workplace.

Prerequisite: None

Business Leadership

**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 analyse 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

Business Leadership: Becoming a Manager, Grade 12, Workplace**(BOG4E)**

This course helps students prepare for managerial positions in their future careers. Students will focus on the development of core skills required to become a successful manager, including operations management, inventory control, marketing, financial planning, scheduling, and communication. Students will also explore the management challenges of hiring, training, and motivating employees, and complying with legal requirements.

Prerequisite: None

Canadian and World Studies (2005)

Courses in Canadian and World Studies, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
Civics				
10	Civics	Open	CHV2O	None
Economics				
11	The Individual and the Economy	University/College	CIE3M	Grade 10 Canadian History Since World War I, Academic or Applied
11	Making Economic Choices	Workplace	CIC3E	Grade 10 Canadian History Since World War I, Academic or Applied
12	Analysing Current Economic Issues	University	CIA4U	Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Geography				
9	Geography of Canada	Academic	CGC1D	None
9	Geography of Canada	Applied	CGC1P	None
11	The Americas: Geographic Patterns and Issues	University/College	CGD3M	Grade 9 Geography of Canada, Academic or Applied
11	Physical Geography: Patterns, Processes, and Interactions	University/College	CGF3M	Grade 9 Geography of Canada, Academic or Applied
11	Geographics: The Geographer's Toolkit	Workplace	CGT3E	Grade 9 Geography of Canada, Academic or Applied
11	Travel and Tourism: A Regional Geographic Perspective	Open	CGG3O	Grade 9 Geography of Canada, Academic or Applied
12	Canadian and World Issues: A Geographic Analysis	University	CGW4U	Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
12	World Geography: Human Patterns and Interactions	University	CGU4U	Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
12	The Environment and Resource Management	University/College	CGR4M	Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities

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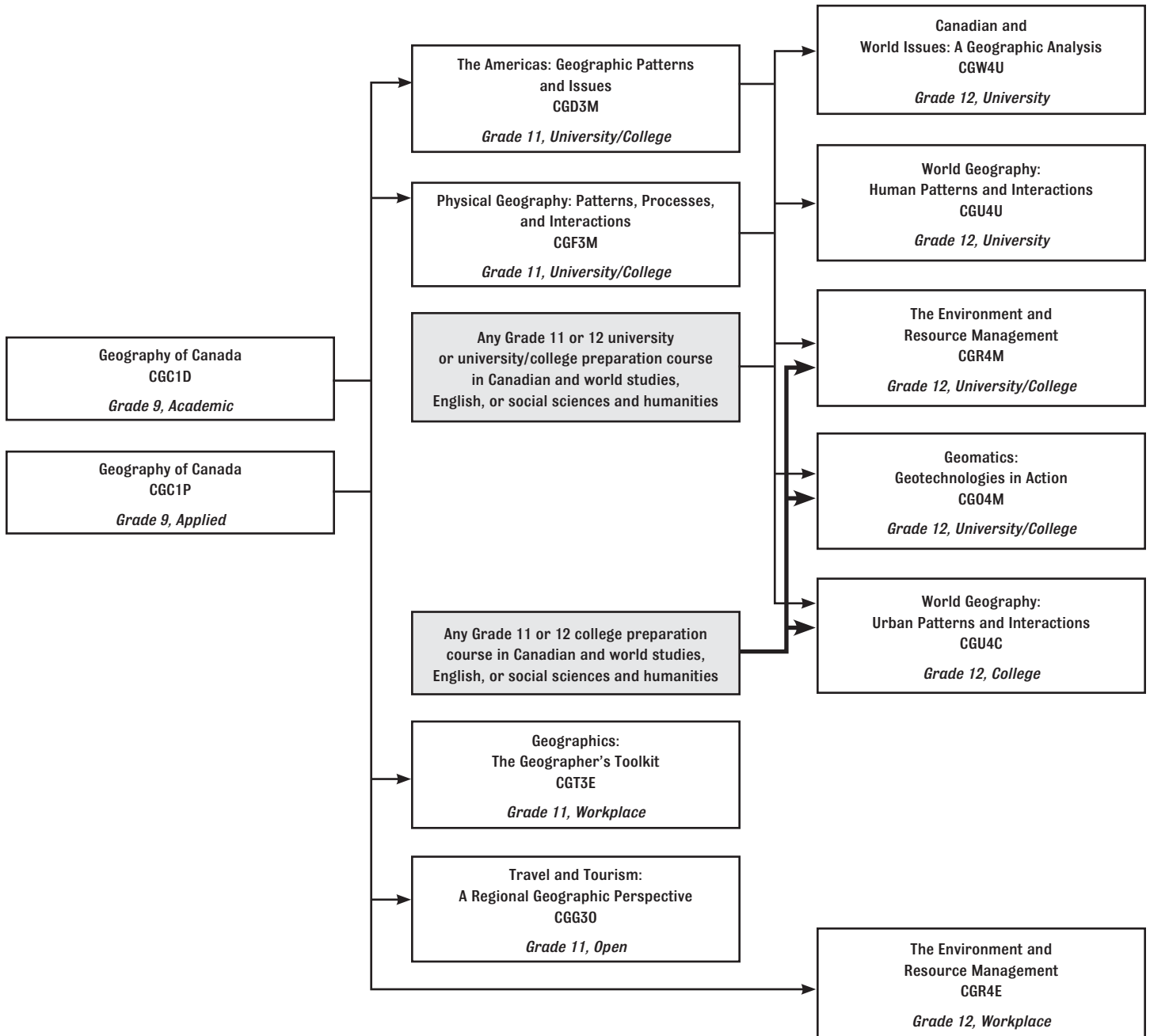
Grade	Course Name	Course Type	Course Code	Prerequisites
12	Geomatics: Geotechnologies in Action	University/College	CGO4M	Any university, university/ college, or college preparation course in Canadian and world studies, English, or social sciences and humanities
12	World Geography: Urban Patterns and Interactions	College	CGU4C	Any university, university/ college, or college preparation course in Canadian and world studies, English, or social sciences and humanities
12	The Environment and Resource Management	Workplace	CGR4E	Grade 9 Geography of Canada, Academic or Applied
History				
10	Canadian History Since World War I	Academic	CHC2D	None
10	Canadian History Since World War I	Applied	CHC2P	None
11	American History	University	CHA3U	Grade 10 Canadian History Since World War I, Academic or Applied
11	World History to the Sixteenth Century	University/College	CHW3M	Grade 10 Canadian History Since World War I, Academic or Applied
11	Canadian History and Politics Since 1945	College	CHH3C	Grade 10 Canadian History Since World War I, Academic or Applied
11	Canadian History and Politics Since 1945	Workplace	CHH3E	Grade 10 Canadian History Since World War I, Academic or Applied
11	World History Since 1900: Global and Regional Perspectives	Open	CHT3O	Grade 10 Canadian History Since World War I, Academic or Applied
12	Canada: History, Identity, and Culture	University	CHI4U	Any university or university/ college preparation course in Canadian and world studies, English, or social sciences and humanities
12	World History: The West and the World	University	CHY4U	Any university or university/ college preparation course in Canadian and world studies, English, or social sciences and humanities
12	World History: The West and the World	College	CHY4C	Any university, university/ college, or college preparation course in Canadian and world studies, English, or social sciences and humanities
12	Adventures in World History	Workplace	CHM4E	Grade 10 Canadian History Since World War I, Academic or Applied

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
Law				
11	Understanding Canadian Law	University/College	CLU3M	Grade 10 Canadian History Since World War I, Academic or Applied
11	Understanding Canadian Law	Workplace	CLU3E	Grade 10 Canadian History Since World War I, Academic or Applied
12	Canadian and International Law	University	CLN4U	Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Politics				
11	Canadian Politics and Citizenship	Open	CPC3O	Grade 10 Canadian History Since World War I, Academic or Applied
12	Canadian and World Politics	University	CPW4U	Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

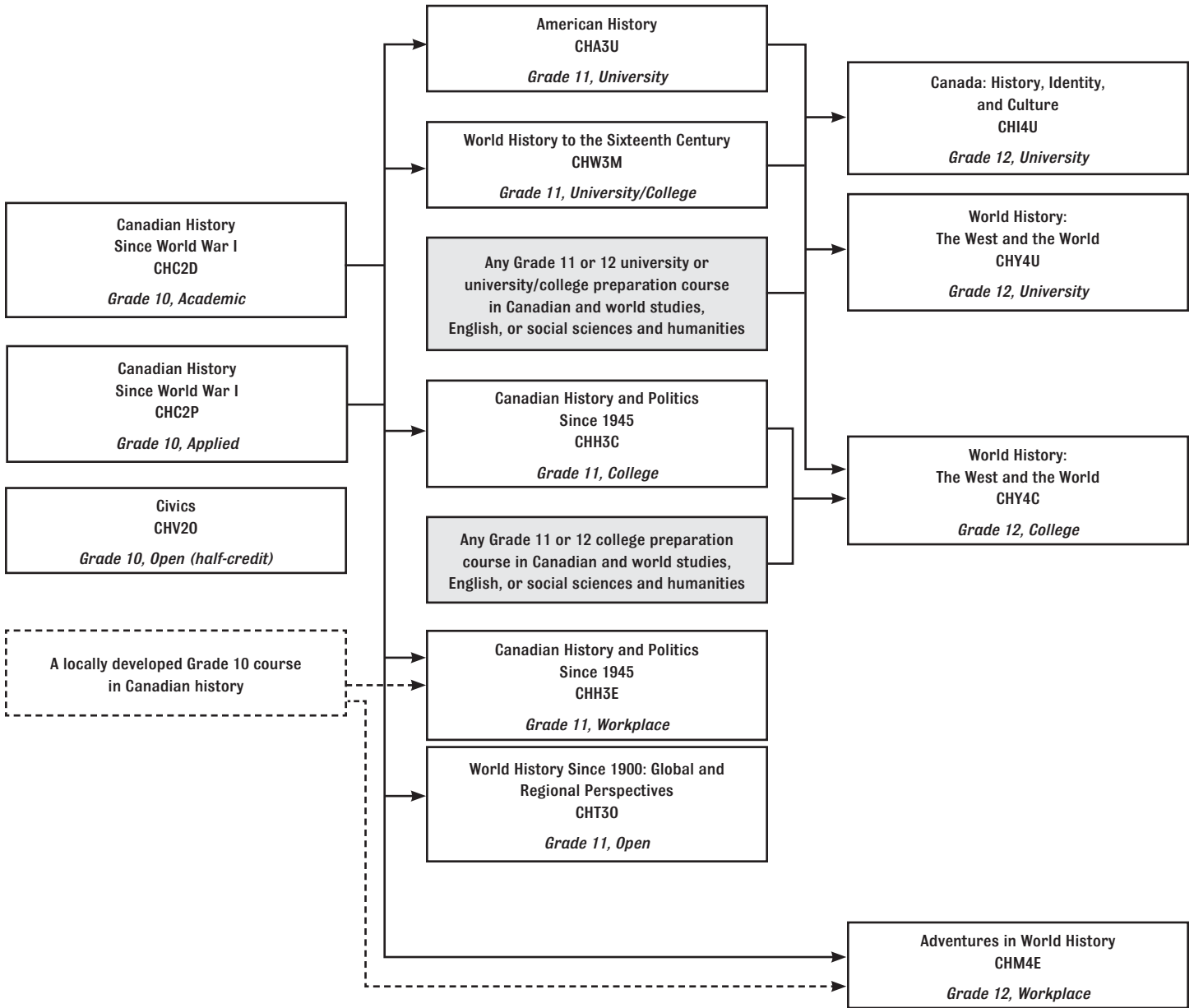
Prerequisite Chart for Canadian and World Studies, Grades 9–12 – Geography

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



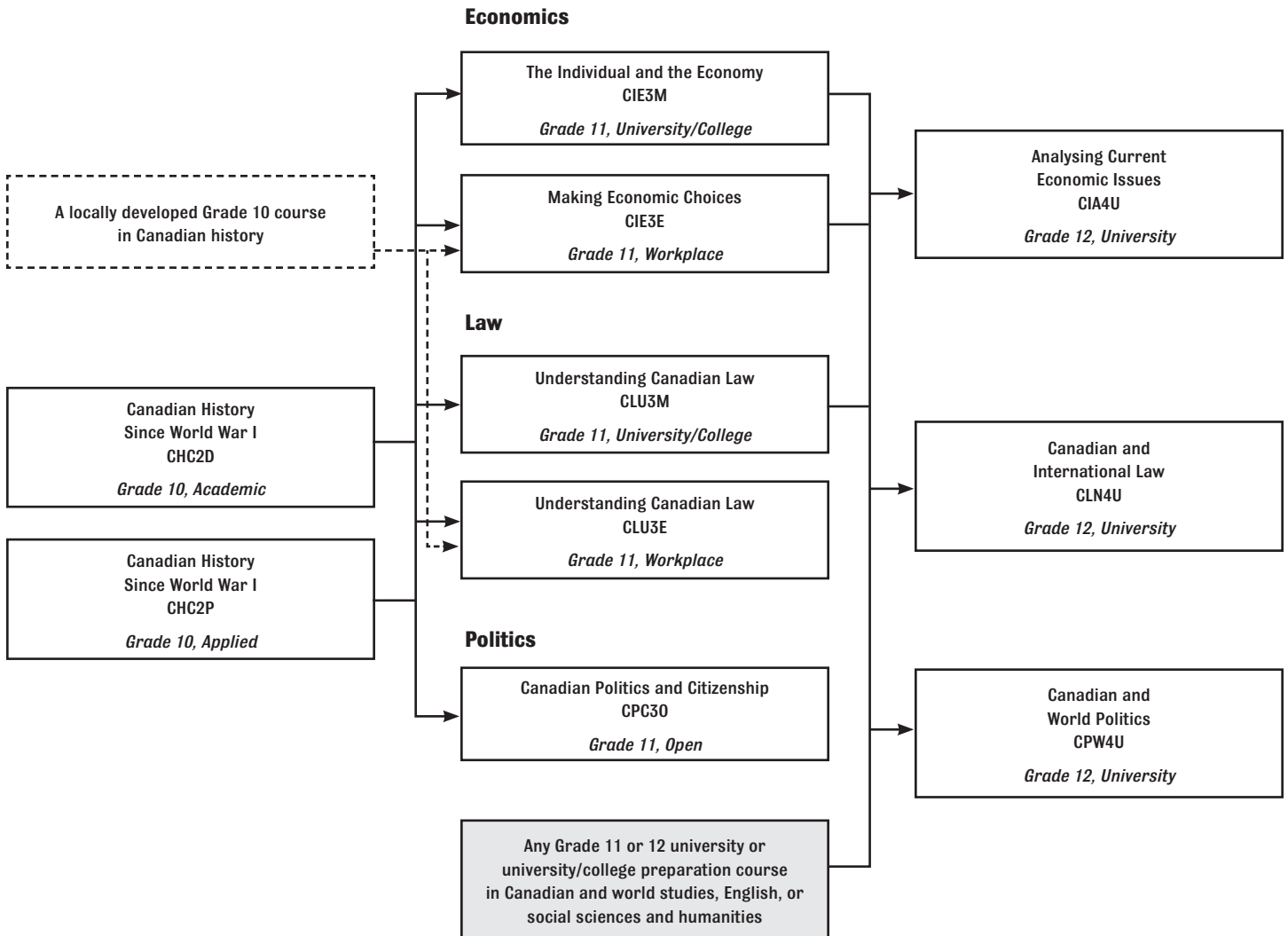
Prerequisite Chart for Canadian and World Studies, Grades 9–12 – History

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Prerequisite Chart for Canadian and World Studies, Grades 9–12 – Economics, Law, and Politics

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Canadian and World Studies

Civics

Civics, Grade 10, Open

(CHV2O)

This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others' ideas about civics questions and learn how to think critically about public issues and react responsibly to them.

Prerequisite: None

Economics

The Individual and the Economy, Grade 11, University/College

(CIE3M)

This course examines the changing Canadian economy and helps students develop an understanding of their own role as economic agents. Students will apply economic models and concepts to assess the roles of the various stakeholders in the Canadian economy and analyse the interactions among them. Students will consider the economic behaviour of the individual as consumer, contributor, and citizen in a mixed economy and will apply economic inquiry, critical-thinking, and communication skills to make and defend informed economic decisions.

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

Making Economic Choices, Grade 11, Workplace

(CIC3E)

This course encourages students to examine the economic choices they make as consumers and contributors in a mixed economy. Students will become familiar with sources of economic information and indicators of economic performance, such as rates of inflation, interest, and unemployment. Students will gain practical experience of how to apply their knowledge to make informed economic decisions and improve their economic well-being.

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

Analysing Current Economic Issues, Grade 12, University

(CIA4U)

This course investigates the nature of the competitive global economy and explores how individuals and societies can gain the information they need to make appropriate economic decisions. Students will learn about the principles of microeconomics and macroeconomics, apply economic models and concepts to interpret economic information, assess the validity of statistics, and investigate marketplace dynamics. Students will use economic inquiry and communication skills to analyse current economic issues, make informed judgements, and present their findings.

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

Geography

Geography of Canada, Grade 9, Academic (CGC1D)

This course explores Canada's distinct and changing character and the geographic systems and relationships that shape it. Students will investigate the interactions of natural and human systems within Canada, as well as Canada's economic, cultural, and environmental connections to other countries. Students will use a variety of geotechnologies and inquiry and communication methods to analyse and evaluate geographic issues and present their findings.

Prerequisite: None

Geography of Canada, Grade 9, Applied (CGC1P)

This course focuses on geographic issues that affect Canadians today. Students will draw on personal and everyday experiences as they learn about Canada's distinct and changing character and the natural and human systems and global influences that shape the country. Students will use a variety of geotechnologies and inquiry and communication methods to examine practical geographic questions and communicate their findings.

Prerequisite: None

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

Geographics: The Geographer's Toolkit, Grade 11, Workplace (CGT3E)

This course focuses on giving students practical experiences with geotechnologies and related skills. Students will engage in image interpretation, desktop mapping, analysis using geographic information systems (GIS), use of the global positioning system (GPS), and data collection and

**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

**Canadian and World Issues: A Geographic Analysis,
Grade 12, University** (CGW4U)

This course examines the global challenges of creating a sustainable and equitable future, focusing on current issues that illustrate these challenges. Students will investigate a range of topics, including cultural, economic, and geopolitical relationships, regional disparities in the ability to meet basic human needs, and protection of the natural environment. Students will use geotechnologies and skills of geographic inquiry and analysis to develop and communicate balanced opinions about the complex issues facing Canada and a world that is interdependent and constantly changing.

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

**World Geography: Human Patterns and Interactions,
Grade 12, University** (CGU4U)

This course examines how humans interact with their natural environments and with each other. Students will study the influence of spatial, political, economic, and social factors on settlement patterns, human migration, cultural change, globalization, and environmental trends. Students will use geotechnologies and skills of geographic inquiry and analysis to extend their knowledge of human geography and to identify and explain current trends and patterns, and predict future ones.

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

**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

**Geomatics: Geotechnologies in Action,
Grade 12, University/College**

(CGO4M)

This course gives students experience in using geotechnologies to develop solutions to real-world problems involving physical and human geography. Students will extend their knowledge of geomatics in the areas of cartography, geographic information systems (GIS), the global positioning system (GPS), and remote sensing. Students will develop critical-thinking and communication skills as they apply geotechnologies and geographic inquiry methods to devise and present ways of improving conditions for people and the 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 analyse 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

**The Environment and Resource Management,
Grade 12, Workplace**

(CGR4E)

This course examines the influence of human activities on the natural environment. Students will study ecosystem structures and processes, the ecological impact of human activities, and methods of responsible resource management. Students will apply geotechnologies and geographic inquiry methods to develop and present practical solutions to environmental and resource management

Canadian History Since World War I, Grade 10, Applied (CHC2P)

This course explores some of the pivotal events and experiences that have influenced the development of Canada's identity as a nation from World War I to the present. By examining how the country has responded to economic, social, and technological changes and how individuals and groups have contributed to Canadian culture and society during this period, students will develop their ability to make connections between historical and current events. Students will have opportunities to formulate questions, locate information, develop informed opinions, and present ideas about the central issues and events of the period.

Prerequisite: None

American History, Grade 11, University (CHA3U)

This course traces the social, economic, and political development of the United States from colonial times to the present. Students will examine issues of diversity, identity, and culture that have influenced the country's social and political formation and will consider the implications of its expansion into a global superpower. Students will use critical-thinking and communication skills to determine causal relationships, evaluate multiple perspectives, and present their own points of view.

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

World History to the Sixteenth Century, Grade 11, University/College (CHW3M)

This course investigates the history of humanity from earliest times to the sixteenth century. Students will analyse diverse societies from around the world, with an emphasis on the political, cultural, and economic structures and historical forces that have shaped the modern world. They will apply historical inquiry, critical-thinking, and communication skills to evaluate the influence of selected individuals, groups, and innovations and to present their own conclusions.

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

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

Canadian History and Politics Since 1945, Grade 11, Workplace (CHH3E)

This course traces the most significant changes in Canadian society since 1945 and connects them to the issues facing the country today. Students will learn about the social, economic, and political forces that affect their lives, covering topics such as multiculturalism, labour relations, technological change, equity issues, and globalization. Through their investigation of the connections between historical developments and current issues, students will strengthen their critical-thinking and communication skills in preparation for the workplace.

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.)

**World History Since 1900: Global and Regional Perspectives,
Grade 11, Open (CHT3O)**

This course focuses on the major events and issues in world history from 1900 to the present. Students will investigate the causes and effects of global and regional conflicts and the responses of individuals and governments to social, economic, and political changes. Students will use critical-thinking and communication skills to formulate and test points of view, draw conclusions, and present their findings about the challenges that have faced and continue to face people in various parts of the world.

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

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

This course explores the challenges associated with the formation of a Canadian national identity. Students will examine the social, political, and economic forces that have shaped Canada from the pre-contact period to the present and will investigate the historical roots of contemporary issues from a variety of perspectives. Students will use critical-thinking and communication skills to consider events and ideas in historical context, debate issues of culture and identity, and present their own views.

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

World History: The West and the World, Grade 12, University (CHY4U)

This course investigates the major trends in Western civilization and world history from the sixteenth century to the present. Students will learn about the interaction between the emerging West and other regions of the world and about the development of modern social, political, and economic systems. They will use critical-thinking and communication skills to investigate the historical roots of contemporary issues and present their conclusions.

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

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

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

This course explores a variety of human experiences in world history from earliest times to the present. Students will learn about a wide range of societies and cultures, examining such things as systems of government, technological developments, work, art, and religion. Students will apply methods of research and inquiry to examine human societies in many different times and places and to communicate points of view about their findings.

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.)

Law

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

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.)

Canadian and International Law, Grade 12, University (CLN4U)

This course examines elements of Canadian and international law in social, political, and global contexts. Students will study the historical and philosophical sources of law and the principles and practices of international law and will learn to relate them to issues in Canadian society and the wider world. Students will use critical-thinking and communication skills to analyse legal issues, conduct independent research, and present the results of their inquiries in a variety of ways.

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

Politics

Canadian Politics and Citizenship, Grade 11, Open (CPC3O)

This course explores the role of politics in people's lives and the importance of being an active citizen in a democratic society. Students will examine the ways in which individuals and groups participate in the political process, the ways in which they can influence political decision making and public policy, and the effectiveness of political systems and institutions in meeting societal needs. Students will apply inquiry and communication skills to analyse and report on political issues, events, and trends of interest to them.

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

Canadian and World Politics, Grade 12, University**(CPW4U)**

This course examines Canadian and world politics from a variety of perspectives. Students will investigate the ways in which individuals, groups, and states work to influence domestic and world events, the role of political ideologies in national and international politics, and the dynamics of international cooperation and conflict resolution. Students will apply critical-thinking and communication skills to develop and support informed opinions about current political conflicts, events, and issues.

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

Classical Studies and International Languages (2000)

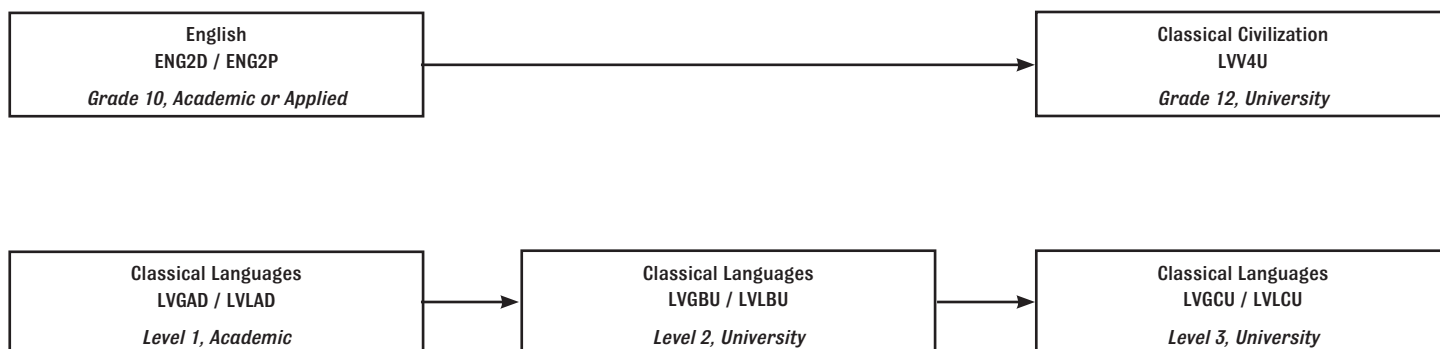
Classical Languages / Classical Studies

Courses in Classical Languages / Classical Studies, Grades 9 to 12

Level / Grade	Course Name	Course Type	Course Code	Prerequisites
Level 1	Ancient Greek	Academic	LVGAD	None
Level 1	Latin	Academic	LVLAD	None
Level 2	Ancient Greek	University	LVGBU	Level 1 Classical Languages, Ancient Greek, Academic
Level 2	Latin	University	LVLBU	Level 1 Classical Languages, Latin, Academic
Level 3	Ancient Greek	University	LVGCU	Level 2 Classical Languages, Ancient Greek, University
Level 3	Latin	University	LVLCU	Level 2 Classical Languages, Latin, University
Grade 12	Classical Civilization	University	LVV4U	Grade 10 English, Academic or Applied

Prerequisite Chart for Classical Languages / Classical Studies

This chart maps out all the courses in the classical languages / classical studies program and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Classical Languages / Classical Studies

Ancient Greek, Level 1, Academic

(LVGAD)

This course introduces students to the achievements of the classical world through the study of ancient Greek. Students will learn vocabulary and grammar essential for reading and translating classical texts. English is the language of instruction. Through a variety of enrichment activities, such as presentations, debates, and dialogues, students will explore such aspects of life in the ancient world as trade, commerce, education, entertainment, and social customs while improving their language skills.

Prerequisite: None

Latin, Level 1, Academic

(LVLAD)

This course introduces students to the achievements of the classical world through the study of Latin. Students will learn vocabulary and grammar essential for reading and translating classical texts. English is the language of instruction. Through a variety of enrichment activities, such as presentations, debates, and dialogues, students will explore such aspects of life in the ancient world as trade, commerce, education, entertainment, and social customs while improving their language skills.

Prerequisite: None

Ancient Greek, Level 2, University

(LVGBU)

This course provides students with opportunities to continue their exploration of the achievements of the ancient world through the study of ancient Greek. Students will read and translate more complex passages in the classical language and will learn the vocabulary and grammar essential for these activities. English is the language of instruction. Through a variety of methods, such as dramatizations, presentations, and hands-on activities, students will investigate aspects of the culture and beliefs of the ancient world, including science, religion, and customs.

Prerequisite: Level 1 Classical Languages, Ancient Greek, Academic

Latin, Level 2, University

(LVLBU)

This course provides students with opportunities to continue their exploration of the achievements of the ancient world through the study of Latin. Students will read and translate more complex passages in the classical language and will learn the vocabulary and grammar essential for these activities. English is the language of instruction. Through a variety of methods, such as dramatizations, presentations, and hands-on activities, students will investigate aspects of the culture and beliefs of the ancient world, including science, religion, and customs.

Prerequisite: Level 1 Classical Languages, Latin, Academic

Ancient Greek, Level 3, University**(LVGCU)**

This course provides students with opportunities to further develop their knowledge of the achievements of the ancient world through the study of ancient Greek. Students will read and translate a broad selection of classical prose and poetry and will learn the vocabulary and grammar essential for these activities. English is the language of instruction. Through a variety of enrichment activities, such as contests, seminars, and re-enactments, students will explore elements of the civilization of the ancient world, such as engineering, architecture, politics, and literature.

Prerequisite: Level 2 Classical Languages, Ancient Greek, University Preparation

Latin, Level 3, University**(LVLCU)**

This course provides students with opportunities to further develop their knowledge of the achievements of the ancient world through the study of Latin. Students will read and translate a broad selection of classical prose and poetry and will learn the vocabulary and grammar essential for these activities. English is the language of instruction. Through a variety of enrichment activities, such as contests, seminars, and re-enactments, students will explore elements of the civilization of the ancient world, such as engineering, architecture, politics, and literature.

Prerequisite: Level 2 Classical Languages, Latin, University Preparation

Classical Civilization, Grade 12, University**(LVV4U)**

This course allows students to explore the beliefs and achievements of the classical world, which have shaped Western thought and civilization. Students will investigate such aspects of classical culture as its mythology, art, literature, and philosophy, as well as elements of ancient Greek and Latin, through a variety of activities such as dramatizations, audio-visual presentations, and discussions. By reading classical authors in English and examining archaeological evidence, students will enhance both their communication skills and their ability to think critically and creatively.

Prerequisite: Grade 10 English, Academic or Applied

International Languages

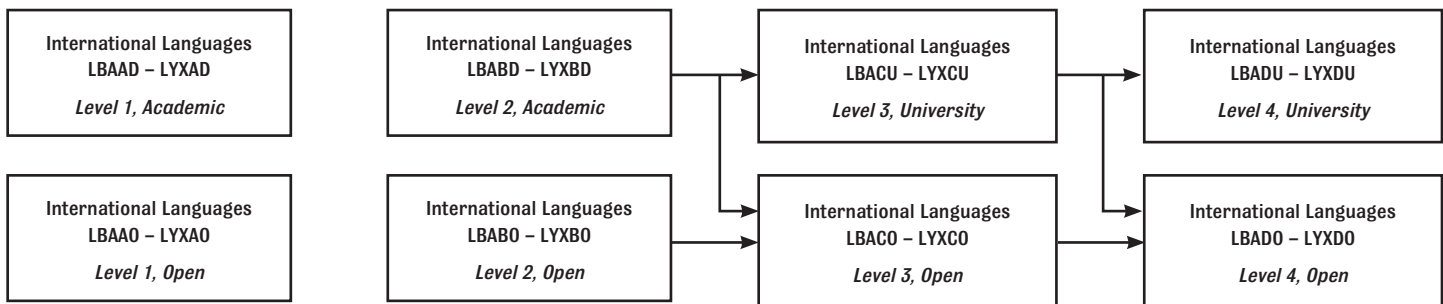
Courses in International Languages, Grades 9 to 12

Level	Course Name	Course Type	Course Code	Prerequisites
Level 1	International Languages	Academic	LBAAD – LYXAD	None
Level 1	International Languages	Open	LBAAO – LYXAO	None
Level 2	International Languages	Academic	LBABD – LYXBD	None
Level 2	International Languages	Open	LBABO – LYXBO	None
Level 3	International Languages	University	LBACU – LYXCU	Level 2 International Languages, Academic
Level 3	International Languages	Open	LBACO – LYXCO	Level 2 International Languages, Academic or Open
Level 4	International Languages	University	LBADU – LYXDU	Level 3 International Languages, University
Level 4	International Languages	Open	LBADO – LYXDO	Level 3 International Languages, University or Open

Course codes for International Languages courses that focus on a particular language can be found in the list of Common Course Codes on the Ministry of Education's website, at www.Ontario.ca/edu.

Prerequisite Chart for International Languages

This chart maps out all the courses in the international language program and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Note: Prerequisites for Level 2 International Languages, Academic or Open, will be determined by school boards, depending on the structure of their international language program.

Course Descriptions for International Languages

International Languages, Level 1, Academic (LBAAD – LYXAD)

This course is designed to enable students to begin to communicate with native speakers of the language of study. Students will use simple language and read age- and language-appropriate passages for various purposes. They will explore aspects of the culture of countries where the language under study is spoken, including social customs and the arts, by participating in cultural events and activities involving both print and technological resources.

Prerequisite: None

International Languages, Level 1, Open (LBAAO – LYXAO)

This course introduces students to language elements they will need to begin to communicate with native speakers. Students will participate in practical activities in which they can apply their knowledge and skills, and will begin to explore careers that require knowledge of the language of study. They will explore aspects of the culture of countries where the language under study is spoken, including social customs, music, and food, by participating in cultural events and activities involving both print and technological resources.

Prerequisite: None

International Languages, Level 2, Academic (LBABD – LYXBD)

This course provides students with the language learning experiences that will enable them to communicate in the language of study. Students will continue to develop and apply their speaking skills in a variety of contexts, and will participate in activities that will improve their reading comprehension and writing skills. They will also continue to explore aspects of the culture of countries where the language under study is spoken by taking part in community sponsored events and activities involving both print and technological resources. Although students will continue to expand their vocabulary and repertoire of language structures, the language they will use at this level will still be simple.

Prerequisite: None

International Languages, Level 2, Open (LBABO – LYXBO)

This course provides students with opportunities to further develop their oral communication skills in the language of study, increase their confidence in using the language in practical situations, and continue to investigate related career opportunities. Students will be involved in activities that promote the use of the language in real-life situations. They will also continue their exploration of the culture of countries where the language under study is spoken. Although students will continue to expand their vocabulary and repertoire of language structures, the language they will use at this level will still be simple.

Prerequisite: None

International Languages, Level 3, University**(LBACU – LYXCU)**

This course offers students opportunities to further develop their knowledge of the international language and to enhance their communication skills. Students will use increasingly sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of literature, and continue to explore aspects of the culture of countries where the language is spoken through a variety of print and technological resources.

Prerequisite: Level 2 International Languages, Academic

International Languages, Level 3, Open**(LBACO – LYXCO)**

This course provides students with opportunities to further develop their communication skills in the international language and increase their confidence in applying them in a variety of practical situations, including contexts related to future employment. Students will engage in a variety of activities and use resources that will allow them to use the language in various real-life situations. They will also continue to explore aspects of the culture of countries where the language is spoken, and investigate careers that require facility in the language.

Prerequisite: Level 2 International Languages, Academic or Open

International Languages, Level 4, University**(LBADU – LYXDU)**

This course prepares students for university studies in the international language. Students will enhance their ability to use the language with clarity and precision, and will develop the language skills needed to engage in sustained conversations and discussions, understand and evaluate information, read diverse materials for both study and pleasure, and write clearly and effectively. Students will also have opportunities to add to their knowledge of the culture of countries where the language is spoken through the use of community

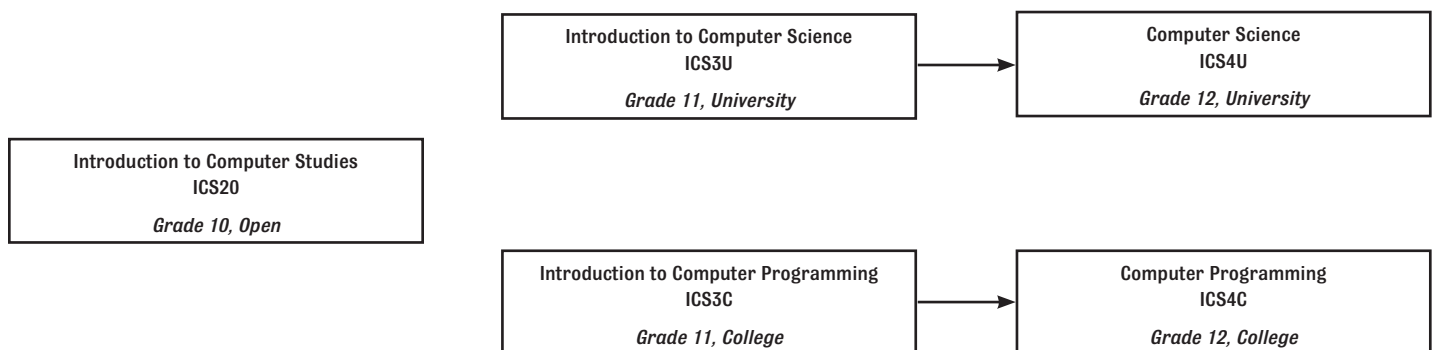
Computer Studies (2008)

Courses in Computer Studies, Grades 10 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
10	Introduction to Computer Studies	Open	ICS2O	None
11	Introduction to Computer Science	University	ICS3U	None
11	Introduction to Computer Programming	College	ICS3C	None
12	Computer Science	University	ICS4U	Introduction to Computer Science, Grade 11, University Preparation
12	Computer Programming	College	ICS4C	Introduction to Computer Programming, Grade 11, College Preparation

Prerequisite Chart for Computer Studies, Grades 10–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them.



Course Descriptions for Computer Studies

Introduction to Computer Studies, Grade 10, Open (ICS2O)

This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

Prerequisite: None

Introduction to Computer Science, Grade 11, University (ICS3U)

This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields.

Prerequisite: None

Introduction to Computer Programming, Grade 11, College (ICS3C)

This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields.

Prerequisite: None

Computer Science, Grade 12, University (ICS4U)

This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.

Prerequisite: Introduction to Computer Science, Grade 11, University Preparation

Computer Programming, Grade 12, College

(ICS4C)

This course further develops students' understanding of computer programming and problem-solving skills. It includes the study of algorithms, data structures, and the design and development of computer programs. Students will also learn about the history and evolution of computer programming languages and the impact of programming on society.

English (2007)

Courses in English, Grades 9 to 12

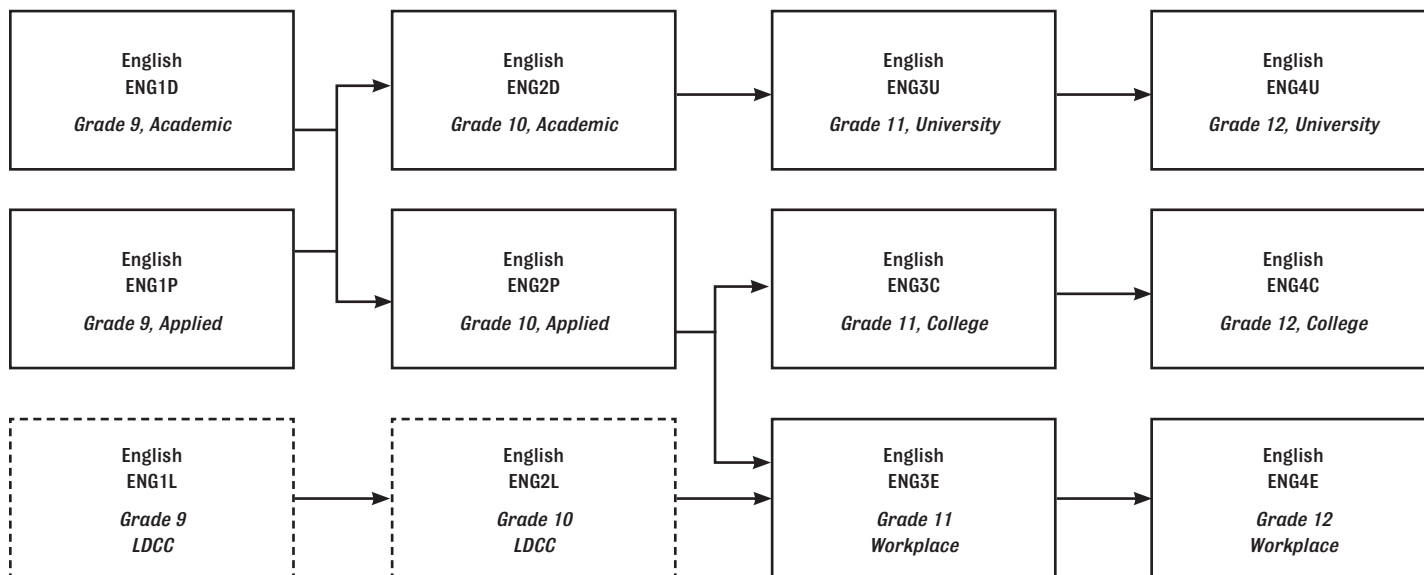
Grade	Course Name	Course Type	Course Code	Prerequisites
9	English	Academic	ENG1D	None
9	English	Applied	ENG1P	None
10	English	Academic	ENG2D	Grade 9 English, Academic or Applied
10	English	Applied	ENG2P	Grade 9 English, Academic or Applied
10	Literacy Skills: Reading and Writing	Open	ELS2O	Grade 9 English, Academic or Applied, or a Grade 9 English LDCC (locally developed compulsory credit) course
11	English	University	ENG3U	Grade 10 English, Academic
11	English	College	ENG3C	Grade 10 English, Applied
11	English	Workplace	ENG3E	Grade 10 English, Applied
11	Canadian Literature	University/College	ETC3M	Grade 10 English, Academic or Applied
11	Media Studies	Open	EMS3O	Grade 10 English, Academic or Applied
11	Presentation and Speaking Skills	Open	EPS3O	Grade 10 English, Academic or Applied
12	English	University	ENG4U	Grade 11 English, University
12	English	College	ENG4C	Grade 11 English, College
12	English	Workplace	ENG4E	Grade 11 English, Workplace
12	Studies in Literature	University	ETS4U	Grade 11 English, University
12	The Writer's Craft	University	EWC4U	Grade 11 English, University
12	Studies in Literature	College	ETS4C	Grade 11 English, College
12	The Writer's Craft	College	EWC4C	Grade 11 English, College
12	Business and Technological Communication	Open	EBT4O	Grade 11 English, University, College, or Workplace
11 or 12	Ontario Secondary School Literacy Course	Open	OLC3O/ OLC4O	For eligibility requirements, see note below.

Note: A student who has been eligible to write the Ontario Secondary School Literacy Test (OSSLT) at least twice and who has been unsuccessful at least once is eligible to enrol in the Ontario Secondary School Literacy Course (OSSLC). A student may be permitted to take the OSSLC before he or she has had a second opportunity to take the OSSLT, if the principal determines that it is in the best educational interests of the student to do so. Under special circumstances, and at the discretion of the principal, a student who has already met the literacy requirement for graduation purposes may be eligible to take the course. A mature student may enrol directly in the OSSLC without first attempting the OSSLT (for the definition of the term *mature student*, see Policy/Program Memorandum No. 127, "The Secondary School Literacy Graduation Requirement", August 7, 2009).

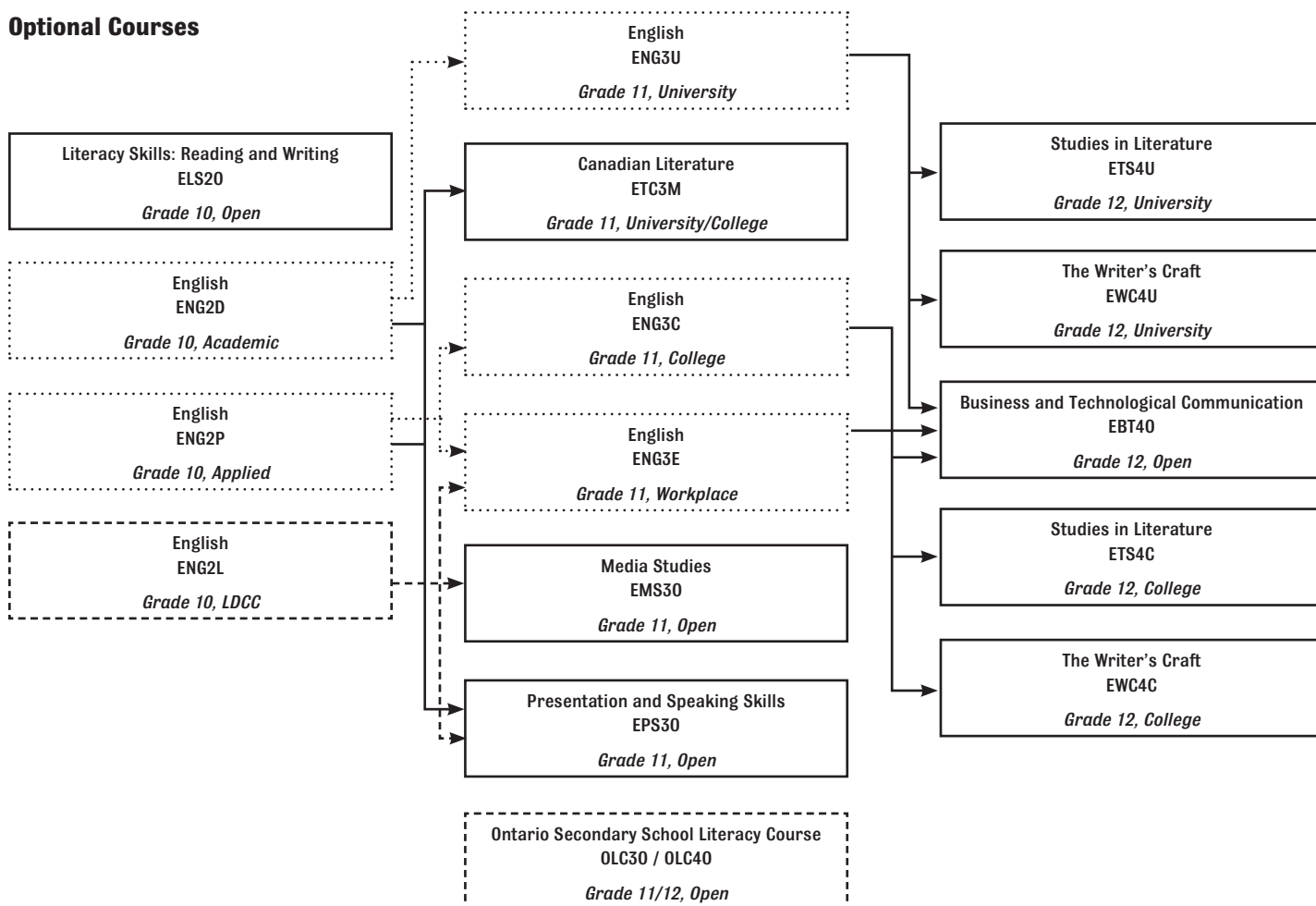
Prerequisite Charts for English, Grades 9–12

These charts map out all the courses in the discipline and show the links between courses and the possible prerequisites for them. They do not attempt to depict all possible movements from course to course.

Compulsory Courses



Optional Courses



Note: Dotted lines represent compulsory courses. Dashed lines represent courses that are not outlined in the curriculum document.

Course Descriptions for English

English, Grade 9, Academic (ENG1D)

This course is designed to develop the oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.

Prerequisite: None

English, Grade 9, Applied (ENG1P)

This course is designed to develop the key oral communication, reading, writing, and media literacy skills students need for success in secondary school and daily life. Students will read, interpret, and create a variety of informational, literary, and graphic texts. An important focus will be on identifying and using appropriate strategies and processes to improve students' comprehension of texts and to help them communicate clearly and effectively. The course is intended to prepare students for the Grade 10 applied English course, which leads to college or workplace preparation courses in Grades 11 and 12.

Prerequisite: None

English, Grade 10, Academic (ENG2D)

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, 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 the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course.

Prerequisite: Grade 9 English, Academic or Applied

English, Grade 10, Applied (ENG2P)

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory Grade 11 college or workplace preparation course.

Prerequisite: Grade 9 English, Academic or Applied

Literacy Skills: Reading and Writing, Grade 10, Open (ELS2O)

This course is designed to help students strengthen essential reading and writing skills, providing them with the extra literacy support they need in order to graduate. Students will read informational, graphic, and literary texts, with a focus on locating information, identifying main ideas and supporting details, building vocabulary, and consolidating skills in the application of key comprehension strategies. The course will also help students develop core learning strategies.

Prerequisite: Grade 9 English, Academic or Applied, or a Grade 9 English LDCC (locally developed compulsory credit) course

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 analyse 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 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

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

Canadian Literature, Grade 11, University/College (ETC3M)

This course emphasizes the study and analysis of literary texts by Canadian authors for students with a special interest in Canadian literature. Students will study the themes, forms, and stylistic elements of a variety of literary texts representative of various time periods and of the diverse cultures and regions of Canada, and will respond personally, critically, and creatively to them.

Prerequisite: Grade 10 English, Academic or Applied

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 analysing 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

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 analyse 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

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. (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.)

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 analyse 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

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 analyse 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

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 analyse 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

Studies in Literature, Grade 12, University (ETS4U)

This course is for students with a special interest in literature and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyse a range of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also assess critical interpretations, write analytical essays, and complete an independent study project.

Prerequisite: Grade 11 English, University Preparation

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

This course emphasizes knowledge and skills related to the craft of writing. Students will analyse 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: Grade 11 English, University Preparation

Studies in Literature, Grade 12, College (ETS4C)

This course is for students with a special interest in literature. The course may focus on themes, genres, time periods, or countries. Students will study a variety of forms and stylistic elements of

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

Business and Technological Communication, Grade 12, Open (EBT4O)

This course emphasizes practical writing and communication skills that are needed in the world of business and technology. Students will analyse the characteristics of effective models of business and technical communications; gather information to write reports, business letters, memos, manuals, instructions, and brochures; and integrate graphics and text, using technology appropriately for formatting and presentation.

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English as a Second Language and English Literacy Development (2007)

Courses in English as a Second Language, Grades 9 to 12

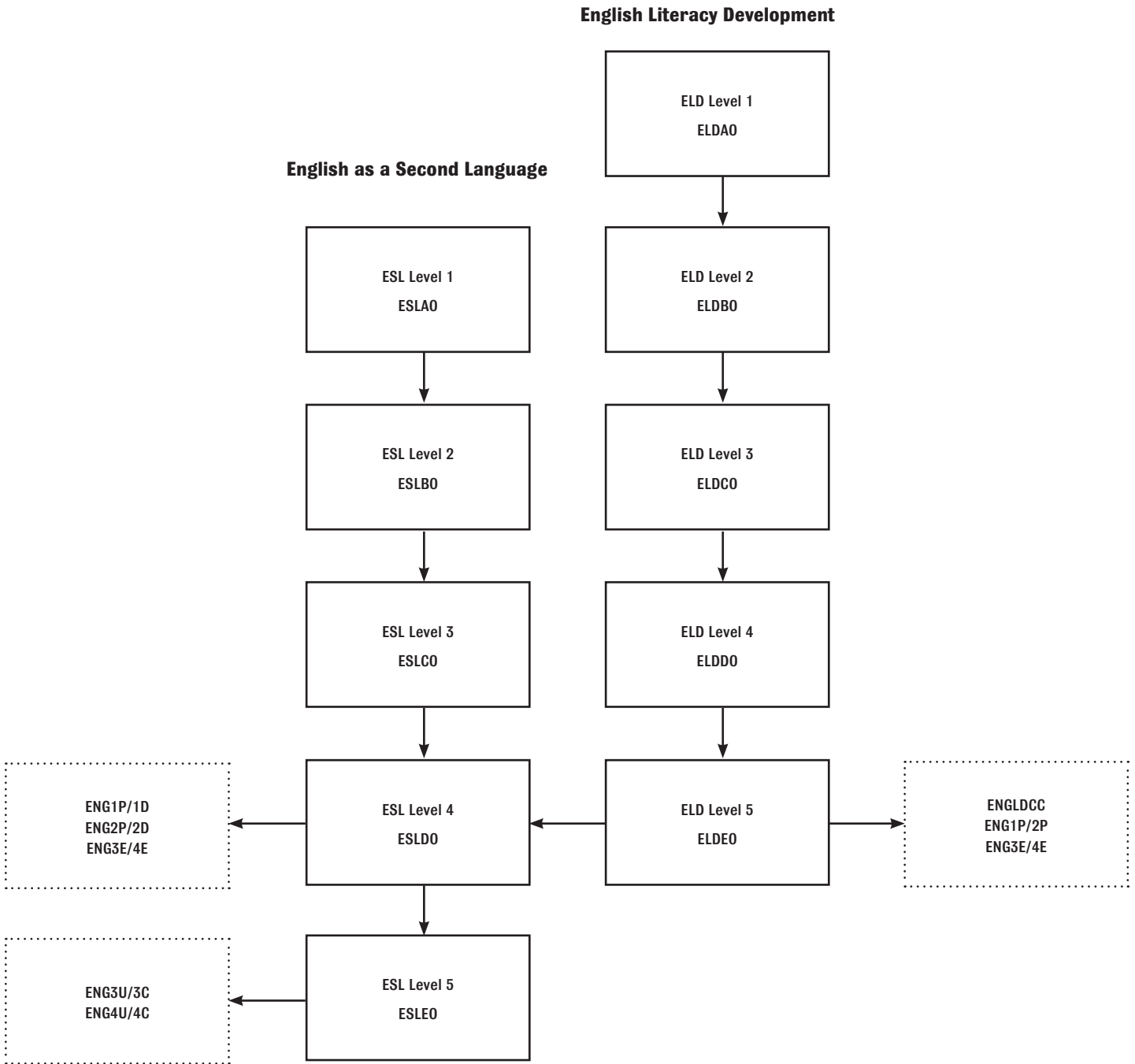
Level	Course Name	Course Type	Course Code	Prerequisites
Level 1	ESL Level 1	Open	ESLAO	None
Level 2	ESL Level 2	Open	ESLBO	ESL 1 or equivalent
Level 3	ESL Level 3	Open	ESLCO	ESL 2 or equivalent
Level 4	ESL Level 4	Open	ESLDO	ESL 3 or equivalent
Level 5	ESL Level 5	Open	ESLEO	ESL 4 or equivalent

Courses in English Literacy Development, Grades 9 to 12

Level	Course Name	Course Type	Course Code	Prerequisites
Level 1	ELD Level 1	Open	ELDAO	None
Level 2	ELD Level 2	Open	ELDBO	ELD 1 or equivalent
Level 3	ELD Level 3	Open	ELDCO	ELD 2 or equivalent
Level 4	ELD Level 4	Open	ELDDO	ELD 3 or equivalent
Level 5	ELD Level 5	Open	ELDEO	ELD 4 or equivalent

Pathways to English

The chart below shows how most English language learners may progress through their ESL and/or ELD courses and into mainstream English courses. Not all students will follow this sequence exactly, and individual students may vary in the rate at which they progress through the levels.



English as a Second Language

ESL, Level 1, Open

(ESLAO)

This course builds on students' previous education and language knowledge to introduce them to the English language and help them adjust to the diversity in their new environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes. They will engage in short conversations using basic English language structures and simple sentence patterns; read short adapted texts; and write phrases and short sentences. The course also provides students with the knowledge and skills they need to begin to adapt to their new lives in Canada.

Prerequisite: None

ESL, Level 2, Open

(ESLBO)

This course extends students' listening, speaking, reading, and writing skills in English for everyday and academic purposes. Students will participate in conversations in structured situations on a variety of familiar and new topics; read a variety of texts designed or adapted for English language learners; expand their knowledge of English grammatical structures and sentence patterns; and link English sentences to compose paragraphs. The course also supports students' continuing adaptation to the Ontario school system by expanding their knowledge of diversity in their new province and country.

Prerequisite: ESL Level 1 or equivalent

ESL, Level 3, Open

(ESLCO)

This course further extends students' skills in listening, speaking, reading, and writing in English for a variety of everyday and academic purposes. Students will make short classroom oral presentations; read a variety of adapted and original texts in English; and write using a variety of text forms. As well, students will expand their academic vocabulary and their study skills to facilitate their transition to the mainstream school program. This course also introduces students to the rights and responsibilities inherent in Canadian citizenship, and to a variety of current Canadian issues.

Prerequisite: ESL Level 2 or equivalent

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 texts.

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

English Literacy Development

ELD, Level 1, Open**(ELDAO)**

ELD, Level 4, Open**(ELDDO)**

This course extends students' literacy skills and ability to apply learning strategies effectively, and teaches them how to use community resources to enhance lifelong learning. Students will communicate with increased accuracy and fluency for a variety of academic and everyday purposes; perform a variety of guided reading, writing, and viewing tasks; and use media and community resources to complete guided-research projects. This course further develops the critical thinking skills students will need to participate in Canadian society as informed citizens.

Prerequisite: ELD Level 3 or equivalent

ELD, Level 5, Open**(ELDEO)**

This course provides students with skills and strategies that will allow them to continue their education successfully and pursue pathways to employment that may involve apprenticeship and/or cooperative education programs. Students will communicate orally and in writing on a variety of topics; perform a variety of independent reading and writing tasks; interpret and create media texts; and use a range of media and community resources. This course also expands the critical thinking skills students will need in order to contribute to Canadian society as informed citizens.

Prerequisite: ELD Level 4 or equivalent

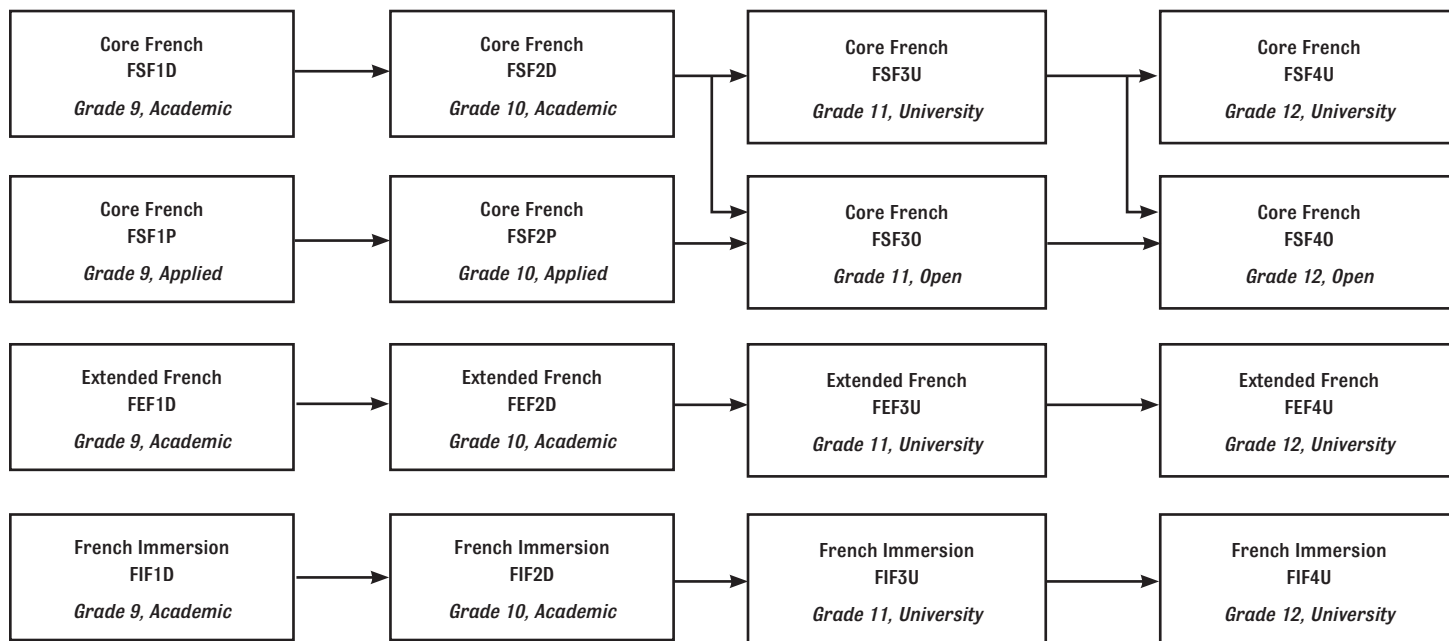
French as a Second Language (1999–2000)

Courses in French as a Second Language, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
9	Core French	Academic	FSF1D	Minimum of 600 hours of French instruction, or equivalent
9	Core French	Applied	FSF1P	Minimum of 600 hours of French instruction, or equivalent
9	Extended French	Academic	FEF1D	Minimum of 1260 hours of instruction in French, or equivalent
9	French Immersion	Academic	FIF1D	Minimum of 3800 hours of instruction in French, or equivalent
10	Core French	Academic	FSF2D	Grade 9 Core French, Academic or Applied
10	Core French	Applied	FSF2P	Grade 9 Core French, Academic or Applied
10	Extended French	Academic	FEF2D	Grade 9 Extended French or French Immersion
10	French Immersion	Academic	FIF2D	Grade 9 French Immersion
11	Core French	University	FSF3U	Grade 10 Core French, Academic
11	Core French	Open	FSF3O	Grade 10 Core French, Academic or Applied
11	Extended French	University	FEF3U	Grade 10 Extended French
11	French Immersion	University	FIF3U	Grade 10 French Immersion
12	Core French	University	FSF4U	Grade 11 Core French, University
12	Core French	Open	FSF4O	Grade 11 Core French, Open or University
12	Extended French	University	FEF4U	Grade 11 Extended French
12	French Immersion	University	FIF4U	Grade 11 French Immersion

Prerequisite Chart for French as a Second Language, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them.



Notes:

- The prerequisite for Grade 9 Extended French is the elementary Extended French program or the elementary French Immersion program, or equivalent.
- The prerequisite for Grade 9 French Immersion is the elementary French Immersion program, or equivalent.
- Students who have successfully completed elementary Extended French or French Immersion programs and do not wish to pursue further studies in these programs should be considered for advanced placement in the Core French program, if they demonstrate the necessary knowledge and skills.

Course Descriptions for French as a Second Language

Core French, Grade 9, Academic (FSF1D)

This course emphasizes the further development of oral communication, reading, and writing skills. Students will build on and apply their knowledge of French while exploring a variety of themes, such as relationships, social trends, and careers. Thematic readings, which include a selection of short stories, articles, and poems, will serve as stepping stones to oral and written activities.

Prerequisite: Minimum of 600 hours of French instruction, or equivalent

Core French, Grade 9, Applied (FSF1P)

This course emphasizes the concurrent development of oral communication, reading, and writing skills, using a broad-based theme such as the media. Students will enhance their ability to understand and speak French through conversations, discussions, and presentations. They will also read short stories, articles, poems, and songs, and write brief descriptions, letters, dialogues, and invitations.

Prerequisite: Minimum of 600 hours of French instruction, or equivalent

Extended French, Grade 9, Academic (FEF1D)

This course emphasizes the expansion of students' oral communication, reading, and writing skills through the study of themes that reflect their interests. Students will apply their knowledge of French in discussions, debates, dramatizations, and oral presentations. Students will write in a variety of genres (e.g., poems, articles, brochures) and study at least one short novel intended for a French-speaking audience.

Prerequisite: Minimum of 1260 hours of instruction in French, or equivalent

French Immersion, Grade 9, Academic (FIF1D)

This course enables students to enhance their knowledge of the French language and to further develop their language skills through the study of twentieth-century North American francophone literature and culture. Students will participate in oral communication, reading, and writing activities as they study an authentic novel and selected authentic poems, legends, songs, films, and newspaper articles from French-speaking parts of North America.

Prerequisite: Minimum of 3800 hours of instruction in French, or equivalent

Core French, Grade 10, Academic (FSF2D)

This course enables students to increase their knowledge of the French language, further develop their language skills, and deepen their understanding and appreciation of francophone culture around the world. Exploring a variety of themes, students will develop and apply critical thinking skills in discussion, in their analysis and interpretation of texts, and in their own writing.

Prerequisite: Grade 9 Core French, Academic or Applied

Core French, Grade 10, Applied (FSF2P)

This course emphasizes the further development of oral communication, reading, and writing skills using a broad-based theme such as adolescence. Students will expand their knowledge of French by studying a series of theme-related topics, such as students' rights and responsibilities, relationships with peers and adults, and part-time jobs.

Prerequisite: Grade 9 Core French, Academic or Applied

Extended French, Grade 10, Academic (FEF2D)

This course emphasizes the continued development and refinement of students' oral communication, reading, and writing skills as they explore a variety of themes. Students will expand their knowledge and appreciation of francophone culture through the study and interpretation of novels, poems, and plays intended for a French-speaking audience.

Prerequisite: Grade 9 Extended French or French Immersion

French Immersion, Grade 10, Academic (FIF2D)

This course enables students to increase their knowledge of the French language and to further develop their language skills through the study of twentieth-century European francophone literature and culture. Students will participate in oral communication, reading, and writing activities based on a variety of French literary and media works. They will study at least one novel and a selection of poems, short stories, films, plays, and newspaper and magazine articles.

Prerequisite: Grade 9 French Immersion

Core French, Grade 11, University (FSF3U)

This course draws on a variety of themes to promote extensive development of reading and writing skills and to reinforce oral communication skills. Students will gain a greater understanding of French-speaking cultures in Canada and around the world through their reading of a variety of materials, including a short novel or a play. Students will produce various written assignments, including a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 10 Core French, Academic

Core French, Grade 11, Open (FSF3O)

This course draws on a broad theme, such as leisure activities, to develop oral communication, reading, and writing skills. Students will give presentations, read a selection of short stories and articles, and produce a variety of written assignments. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 10 Core French, Academic or Applied

Extended French, Grade 11, University (FEF3U)

This course focuses on developing French-language skills through the study of Canadian francophone authors. Students will analyse a range of works and produce written assignments in a variety of genres, including the formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 10 Extended French

French Immersion, Grade 11, University (FIF3U)

This course develops knowledge and language skills through the study of francophone literature and culture from around the world. Students will study novels, plays, poems, short stories, films, and non-fiction works and produce written assignments in a variety of forms, including critiques and précis. They will also write a formal research essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 10 French Immersion

Core French, Grade 12, University (FSF4U)

This course draws on a variety of themes to promote extensive development of French-language skills. Students will consolidate their oral skills as they discuss literature, culture, and current issues. They will read a variety of texts and will write a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 11 Core French, University Preparation

Core French, Grade 12, Open (FSF4O)

This course focuses on the development of French-language skills that students can use in the business world or the workplace. Students will give presentations, read a selection of materials appropriate to the topics under study, and produce a variety of written assignments. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 11 Core French, Open or University Preparation

Extended French, Grade 12, University (FEF4U)

This course emphasizes the refinement of French-language skills through the study of Canadian and international francophone literature. Students will interpret literary works, produce written assignments in a variety of genres, and conduct research on a major topic for a written and oral presentation. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 11 Extended French

French Immersion, Grade 12, University (FIF4U)

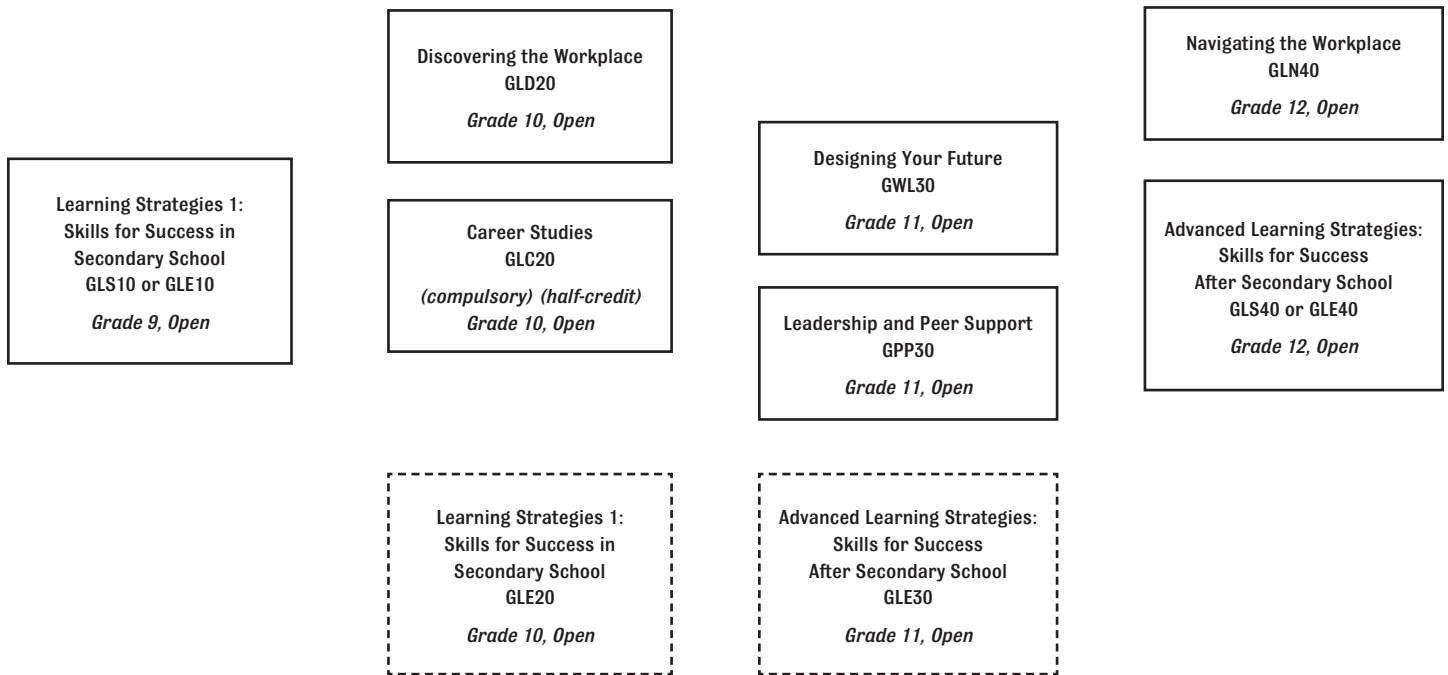
This course provides for extensive study of French literature and culture from the Middle Ages to the present. Students will study novels, plays, poems, films, and non-fiction works produced in various historical periods, and will write a formal research paper. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

Prerequisite: Grade 11 French Immersion

Courses in Guidance and Career Education, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
9	Learning Strategies 1: Skills for Success in Secondary School	Open	GLS1O	None
9	Learning Strategies 1: Skills for Success in Secondary School	Open	GLE1O	Recommendation of principal
10	Career Studies	Open	GLC2O	None
10	Learning Strategies 1: Skills for Success in Secondary School	Open	GLE2O	Recommendation of principal
10	Discovering the Workplace	Open	GLD2O	None
11	Designing Your Future	Open	GWL3O	None
11	Leadership and Peer Support	Open	GPP3O	None
11	Advanced Learning Strategies: Skills for Success After Secondary School	Open	GLE3O	Recommendation of principal
12	Advanced Learning Strategies: Skills for Success After Secondary School	Open	GLS4O	None
12	Advanced Learning Strategies: Skills for Success After Secondary School	Open	GLE4O	Recommendation of principal
12	Navigating the Workplace	Open	GLN4O	None

Course Chart for Guidance and Career Education, Grades 9–12



Course Descriptions for Guidance and Career Education

Learning Strategies 1: Skills for Success in Secondary School, Grade 9, Open (GLS1O)

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

Prerequisite: None

Learning Strategies 1: Skills for Success in Secondary School, Grade 9, Open (GLE1O)

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

Prerequisite: Recommendation of principal

Career Studies, Grade 10, Open (GLC2O)

This course teaches students how to develop and achieve personal goals for future learning, work, and community involvement. Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.

Prerequisite: None

Learning Strategies 1: Skills for Success in Secondary School, Grade 10, Open (GLE2O)

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

Prerequisite: Recommendation of principal

Discovering the Workplace, Grade 10, Open (GLD2O)

This course provides students with opportunities to discover and develop the workplace essential skills and work habits required to be successfully employed. Students will develop an understanding of work through practical hands-on experiences in the school and in the community, using real workplace materials. They investigate occupations of interest through experiential learning opportunities (such as worksite visits, job shadowing, work experience, simulations and entrepreneurial projects). This course helps students make plans for continued learning and work.

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

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

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

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

**Advanced Learning Strategies: Skills for Success After Secondary School,
Grade 12, Open (GLE4O)**

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 postsecondary destination.

Prerequisite: None

Health and Physical Education (1999–2000)

Courses in Health and Physical Education, Grades 9 to 12

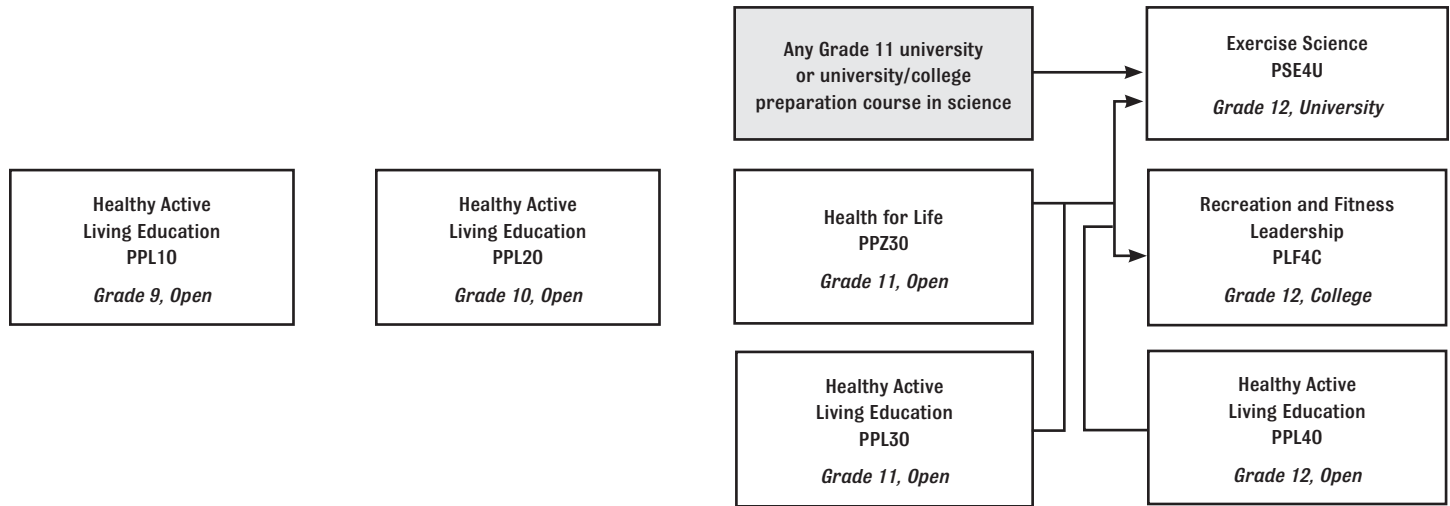
Grade	Course Name	Course Type	Course Code	Prerequisites
9	Healthy Active Living Education	Open	PPL1O	None
10	Healthy Active Living Education	Open	PPL2O	None
11	Healthy Active Living Education	Open	PPL3O	None
11	Health for Life	Open	PPZ3O	None
12	Healthy Active Living Education	Open	PPL4O	None
12	Exercise Science	University	PSE4U	Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 open course in health and physical education
12	Recreation and Fitness Leadership	College	PLF4C	Any Grade 11 or 12 open course in health and physical education

Notes:

- Each of the courses listed above is worth one credit.
- For information on course codes for courses that focus on particular groupings of physical activities, see the curriculum policy documents for health and physical education.
- Schools may develop the courses to focus on a particular group of physical activities as the vehicle through which students will attain the expectations. The possible groupings (with their corresponding course codes for Grade 11 and Grade 12 courses, respectively) are as follows: Personal and Fitness Activities (PAF3O, PAF4O), Large-Group Activities (PAL3O, PAL4O), Individual and Small-Group Activities (PAI3O, PAI4O), Aquatics (PAQ3O, PAQ4O), Rhythm and Movement (PAR3O, PAR4O), and Outdoor Activities (PAD3O, PAD4O).

Prerequisite Chart for Health and Physical Education, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Health and Physical Education

Healthy Active Living Education, Grade 9, Open (PPL1O)

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement skills and principles, ways to improve personal fitness and physical competence, and safety and injury prevention. They will investigate issues related to healthy sexuality and the use and abuse of alcohol, tobacco, and other drugs, and will participate in activities designed to develop goal-setting, communication, and social skills.

Prerequisite: None

Healthy Active Living Education, Grade 10, Open (PPL2O)

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decision-making, conflict resolution, and social skills in making personal choices.

Prerequisite: None

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 practise 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

Health for Life, Grade 11, Open (PPZ3O)

This course helps students develop a personalized approach to healthy living. Students will examine the factors that affect their own health and the health of individuals as members of the community. They will learn about the components of the Vitality approach to healthy living – an initiative that promotes healthy eating, an active lifestyle, and a positive self-image. Throughout this course, students will develop the skills necessary to take charge of and improve their own health, as well as to encourage others to lead healthy lives.

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

Exercise Science, Grade 12, University**(PSE4U)**

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 sports, and the factors that influence an individual's participation in physical activity. The course prepares students for university programs in physical education, kinesiology, recreation, and sports administration.

Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 open course in health and physical education

Recreation and Fitness Leadership, Grade 12, College**(PLF4C)**

This course focuses on the development of leadership and coordination skills related to recreational activities. Students will acquire the knowledge and skills required to plan, organize, and implement recreational events. They will also learn how to promote the value of physical fitness, personal well-being, and personal safety to others through mentoring. The course will prepare students for college programs in recreational, leisure, and fitness leadership.

Prerequisite: Any Grade 11 or 12 open course in health and physical education

Interdisciplinary Studies (2002)

Courses in Interdisciplinary Studies, Grades 11 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
11	Interdisciplinary Studies	Open	IDC3O	None
11	Interdisciplinary Studies	Open	IDP3O	The prerequisite for each of the courses in the package
12	Interdisciplinary Studies	University	IDC4U	Any university or university/college preparation course
12	Interdisciplinary Studies	University	IDP4U	The prerequisite for each of the courses in the package
12	Interdisciplinary Studies	Open	IDC4O	None
12	Interdisciplinary Studies	Open	IDP4O	The prerequisite for each of the courses in the package

Interdisciplinary Studies, Grade 11, Open**(IDC3O)**

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 analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, 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: None

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 analyse the connections among diverse subjects and disciplines; develop

Interdisciplinary Studies, Grade 12, University**(IDP4U)**

This course will help students develop and consolidate 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. Students will apply the principles and processes of inquiry and research to effectively use a range of print, electronic, and mass media resources; to analyse historical innovations and exemplary research; and to investigate real-life situations and career opportunities in interdisciplinary endeavours. They will also assess their own cognitive and affective strategies, apply general skills in both familiar and new contexts, create innovative products, and communicate new knowledge.

Prerequisite: The prerequisite for each of the courses in the package

Interdisciplinary Studies, Grade 12, Open**(IDC4O)**

This course emphasizes the development of practical skills and knowledge 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 into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge.

Prerequisite: None

Interdisciplinary Studies, Grade 12, Open**(IDP4O)**

This course emphasizes the development of practical skills and knowledge 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 into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge.

Prerequisite: The prerequisite for each of the courses in the package

Mathematics (2005–2007)

Courses in Mathematics, Grades 9 to 12

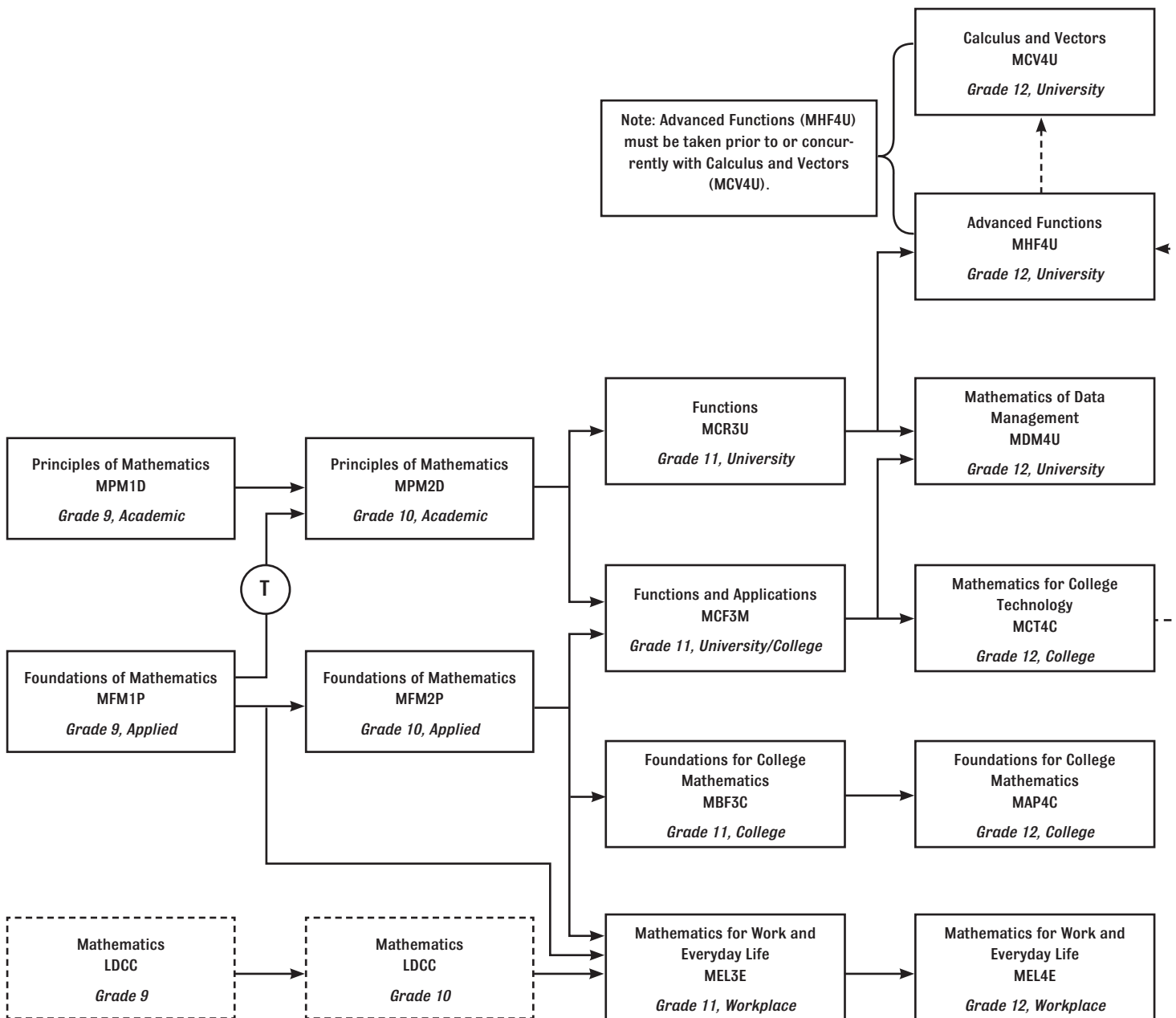
Grade	Course Name	Course Type	Course Code	Prerequisites
9	Principles of Mathematics	Academic	MPM1D	None
9	Foundations of Mathematics	Applied	MFM1P	None
9	Mathematics Transfer	Applied to Academic	MPM1H	Foundations of Mathematics, Grade 9, Applied (MFM1P)
10	Principles of Mathematics	Academic	MPM2D	Grade 9 Mathematics, Academic or Mathematics Transfer
10	Foundations of Mathematics	Applied	MFM2P	Grade 9 Mathematics, Academic or Applied
11	Functions	University	MCR3U	Principles of Mathematics, Grade 10, Academic
11	Functions and Applications	University/College	MCF3M	Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied
11	Foundations for College Mathematics	College	MBF3C	Foundations of Mathematics, Grade 10, Applied
11	Mathematics for Work and Everyday Life	Workplace	MEL3E	Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied, or a Grade 10 Mathematics LDCC (locally developed compulsory credit) course
12	Advanced Functions	University	MHF4U	Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation
12	Calculus and Vectors	University	MCV4U	Note: Advanced Functions, Grade 12, University Preparation, must be taken prior to or concurrently with Calculus and Vectors.
12	Mathematics of Data Management	University	MDM4U	Functions, Grade 11, University Preparation, or Functions and Applications, Grade 11, University/College Preparation

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
12	Mathematics for College Technology	College	MCT4C	Functions and Applications, Grade 11, University/College Preparation, or Functions, Grade 11, University Preparation
12	Foundations for College Mathematics	College	MAP4C	Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation
12	Mathematics for Work and Everyday Life	Workplace	MEL4E	Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation

Prerequisite Chart for Mathematics, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Notes:

- T – transfer course
- LDCC – locally developed compulsory credit course (LDCC courses are not outlined in the curriculum document.)

Principles of Mathematics, Grade 9, Academic**(MPM1D)**

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different

Foundations of Mathematics, Grade 10, Applied (MFM2P)

This course enables students to consolidate their understanding of linear relations and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Grade 9 Mathematics, Academic or 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

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

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, analysing, 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

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

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

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 three-dimensional 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 university-level 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 analysing 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 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

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

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse 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

Mathematics for Work and Everyday Life, Grade 12, College (M12WEL)

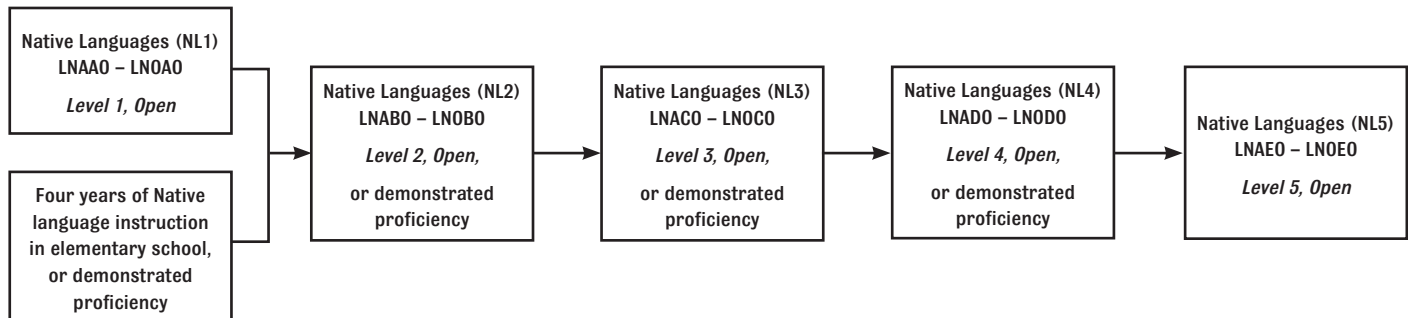
Prerequisite: Mathematics for Work and Everyday Life, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation

Native Languages (1999–2000)

Courses in Native Languages, Grades 9 to 12

Level	Course Name	Course Type	Course Code	Prerequisites
Level 1	Native Languages, Level 1 (NL1)	Open	LNAAO – LNOAO	None
Level 2	Native Languages, Level 2 (NL2)	Open	LNABO – LNOBO	At least four years of study of a Native language in elementary school, successful completion of NL1, or demonstrated proficiency
Level 3	Native Languages, Level 3 (NL3)	Open	LNACO – LNOCO	Successful completion of NL2 or demonstrated proficiency
Level 4	Native Languages, Level 4 (NL4)	Open	LNADO – LNODO	Native Languages, Level 3, or demonstrated proficiency
Level 5	Native Languages, Level 5 (NL5)	Open	LNAEO – LNOEO	Native Languages, Level 4, or demonstrated proficiency

Prerequisite Chart for Native Languages



A Note About Credits. Students may earn more than one credit for each level in Native languages by studying more than one Native language (e.g., Cree, Level 4, and Mohawk, Level 4).

Courses at Levels 4 and 5 are designed to be offered as full-credit courses. However, half-credit courses may be developed for specialized programs, as long as the original course is not designated as a requirement for entry into a university program. Individual universities will identify the courses that are prerequisites for admission to specific programs. Such courses must be offered as full-credit courses, to ensure that students meet admission requirements.

Course Descriptions for Native Languages

Native Languages (NL1), Level 1, Open (LNAAO – LNOAO)

This course is open to the entire student body and will allow students who have no prior Native language experience to develop an appreciation for a Native language and culture, to explore and experience a unique world view, and to learn to speak a Native language. Students will use the language being studied for greetings and daily routines, become familiar with its writing and sound system, and practise basic vocabulary and phrases. Students will also use information technology during course-related activities.

Prerequisite: None

Native Languages (NL2), Level 2, Open (LNABO – LNOBO)

This course will enable students to experience the unique respect for life that permeates Native languages and cultures. Students will expand their vocabulary and knowledge of phrases and expressions, using them in simple dialogues, narrative writing, grammatical constructions, and reading, and to exchange information electronically. This course is open to any student who has successfully completed at least four years of elementary Native languages study, has successfully completed NL1, or demonstrates the required proficiency.

Prerequisite: At least four years of study of a Native language in elementary school, successful completion of NL1, or demonstrated proficiency

Native Languages (NL3), Level 3, Open (LNACO – LNOCO)

This course will provide students an opportunity to expand their knowledge of a Native language and of Native philosophy, spirituality, and values, and to enhance their identity and self-worth. Students will communicate by using a variety of phrases and expressions, create short conversations, skits, stories, and narratives, use information technology, and develop an awareness of the structural and functional workings of a Native language. This course is open to students who have successfully completed NL2 or who can demonstrate the required proficiency.

Prerequisite: Successful completion of NL2 or demonstrated proficiency

Native Languages (NL4), Level 4, Open (LNADO – LNODO)

This course will provide students with opportunities to further develop their knowledge of a Native language and of Native philosophy, spirituality, and values, and to enhance their sense of identity and self-worth. Students will increase their vocabulary and their facility in using idioms, and will use the Native language to analyse literature, discuss various issues that affect the local community, and exchange information electronically.

Prerequisite: Native Languages, Level 3, or demonstrated proficiency

Native Languages (NL5), Level 5, Open**(LNAEO – LNOEO)**

This course provides students with opportunities to increase their knowledge of a Native language and culture. Students will increase their vocabulary; use complex language patterns and formal language; and use the Native language to analyse literature, discuss issues (e.g., economic development, personal development), and study Native customs, traditions, and world views. They will examine differences in dialects while communicating with others electronically.

Prerequisite: Native Languages, Level 4, or demonstrated proficiency

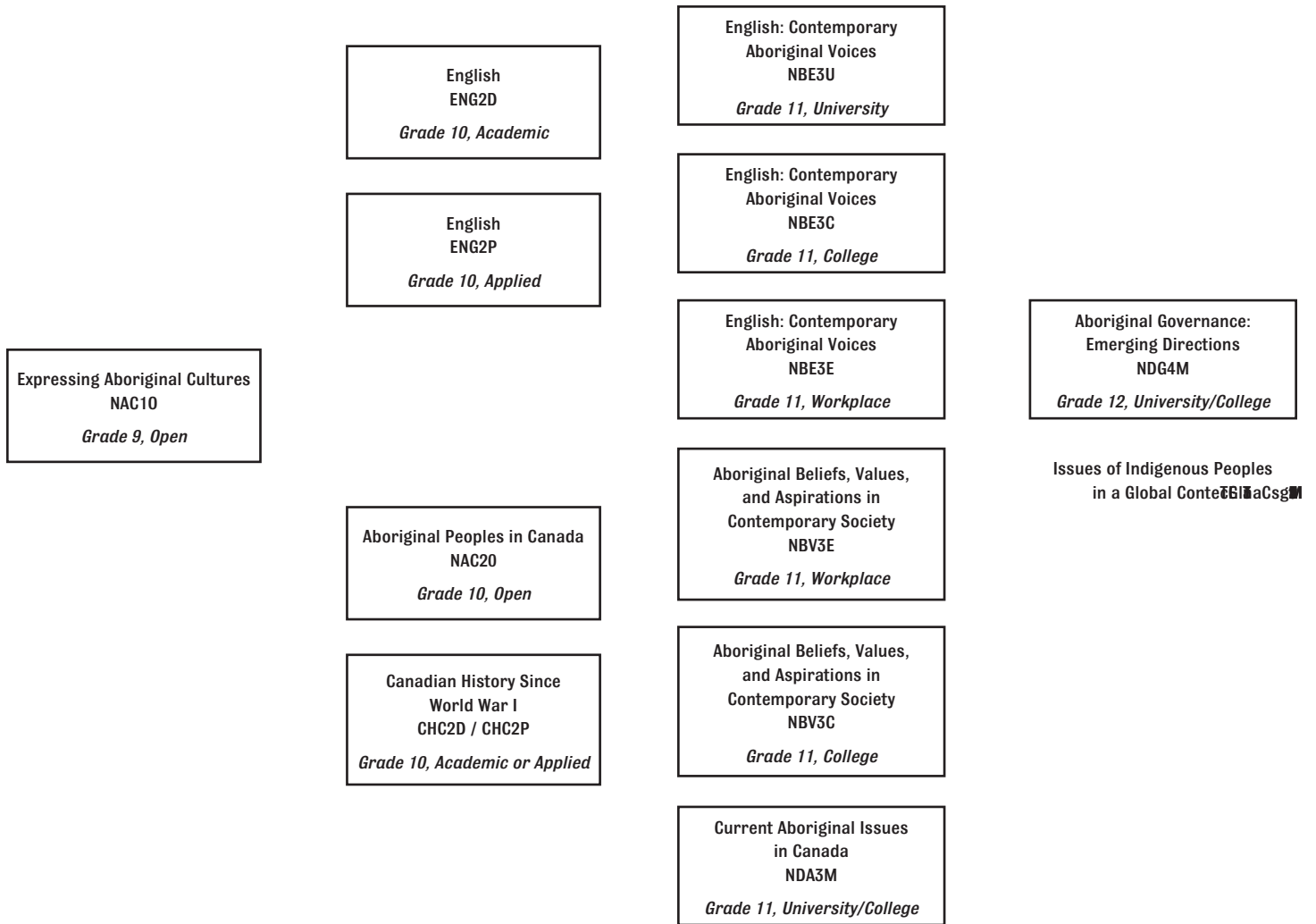
Native Studies (1999–2000)

Courses in Native Studies, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
9	Expressing Aboriginal Cultures	Open	NAC1O	None
10	Aboriginal Peoples in Canada	Open	NAC2O	None
11	English: Contemporary Aboriginal Voices	University	NBE3U	Grade 10 English, Academic
11	Current Aboriginal Issues in Canada	University/College	NDA3M	Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied
11	Aboriginal Beliefs, Values, and Aspirations in Contemporary Society	College	NBV3C	Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied
11	English: Contemporary Aboriginal Voices	College	NBE3C	Grade 10 English, Academic or Applied
11	Aboriginal Beliefs, Values, and Aspirations in Contemporary Society	Workplace	NBV3E	Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied
11	English: Contemporary Aboriginal Voices	Workplace	NBE3E	Grade 10 English, Academic or Applied
12	Aboriginal Governance: Emerging Directions	University/College	NDG4M	Any Grade 11 university, university/college, or college preparation course in Native studies
12	Issues of Indigenous Peoples in a Global Context	University/College	NDW4M	Any Grade 11 university, university/college, or college preparation course in Native studies

Prerequisite Chart for Native Studies

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Native Studies

Expressing Aboriginal Cultures, Grade 9, Open (NAC10)

This course examines Aboriginal cultures in Canada through an exploration of art forms – painting, sculpture, story telling, dance, and music – created by Aboriginal artists. Students will learn to identify Aboriginal art forms and describe relationships between the art forms and Aboriginal traditions, philosophy, and culture. Students will also create their own art forms to express their understanding of Aboriginal identity, relationships, and sovereignty.

Prerequisite: None

Aboriginal Peoples in Canada, Grade 10, Open (NAC20)

This course emphasizes historical and contemporary issues that affect the relationship between Aboriginal peoples and Canadian governments. Students will examine legal, political, social, and economic issues; key aspects of the Indian Act and its revisions that have an impact on the daily lives of Aboriginal persons; the different types of relationships that Aboriginal peoples have established with other nations throughout history; and the methodology of historical inquiry.

Prerequisite: None

English: Contemporary Aboriginal Voices, Grade 11, University (NBE3U)

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Through the analysis of literary texts and media works, students will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will conduct research and analyse the information gathered; write persuasive and literary essays; and analyse the relationship between media forms and audiences. An important focus will be the further development of students' understanding of English-language usage and conventions.

Prerequisite: Grade 10 English, Academic

Current Aboriginal Issues in Canada, Grade 11, University/College (NDA3M)

This course focuses on existing and emerging issues of importance to Aboriginal peoples in Canada. Students will investigate issues related to identity, relationships among Aboriginal peoples and between Aboriginal peoples and other Canadians, sovereignty principles as presented by Aboriginal peoples, and the contemporary challenges posed by these issues. Students will also examine such topics as language preservation, the responsibilities of Aboriginal women and men, and the need for dialogue between Aboriginal and non-Aboriginal peoples.

Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied

**Aboriginal Beliefs, Values, and Aspirations in Contemporary Society,
Grade 11, College (NBV3C)**

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine world views of Aboriginal peoples and the political, economic, cultural, and social challenges facing individuals and communities. Students will also learn how traditional and contemporary beliefs and values influence the aspirations and actions of Aboriginal peoples.

Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied

English: Contemporary Aboriginal Voices, Grade 11, College (NBE3C)

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literary and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write reports, correspondence, and persuasive essays and analyse the relationship between media forms and audiences. An important focus will be on establishing appropriate voice and using business and technical language with precision and clarity.

Prerequisite: Grade 10 English, Academic or Applied

**Aboriginal Beliefs, Values, and Aspirations in Contemporary Society,
Grade 11, Workplace (NBV3E)**

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine issues of identity facing Indian, Métis, and Inuit peoples, and their relationships to land and nature, as well as to one another within their communities and working environments. Students will also learn how traditional and contemporary beliefs and values influence the present-day aspirations and actions of Aboriginal peoples.

Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied

English: Contemporary Aboriginal Voices, Grade 11, Workplace (NBE3E)

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literary and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write explanations, letters, and reports and will investigate the connections between media forms and audiences. An important focus will be on using language clearly, accurately, and effectively in a variety of contexts.

Prerequisite: Grade 10 English, Academic or Applied

**Aboriginal Governance: Emerging Directions,
Grade 12, University/College**

(NDG4M)

This course investigates how Aboriginal governments exercise authority and demonstrate responsibilities associated with governance in Canada. Students will explore Aboriginal world views regarding identity, relationships among Aboriginal peoples and between Aboriginal peoples and other Canadians, and Aboriginal definitions of sovereignty. Students will also compare traditional and contemporary forms of Aboriginal governance and will examine Aboriginal and Canadian relations, focusing on empowerment and the inherent right to self-government.

Prerequisite: Any Grade 11 university, university/college, or college preparation course in Native studies

**Issues of Indigenous Peoples in a Global Context,
Grade 12, University/College**

(NDW4M)

This course provides students with an overview of the issues and challenges that confront indigenous peoples worldwide. Students will develop an understanding of the concerns and aspirations of the world's indigenous population, plan and conduct research on global issues that have an impact on indigenous peoples, and use information technology to consult materials related to the views of indigenous peoples throughout the world.

Prerequisite: Any Grade 11 university, university/college, or college preparation course in Native studies

Science (2008)

Courses in Science, Grades 9 to 12

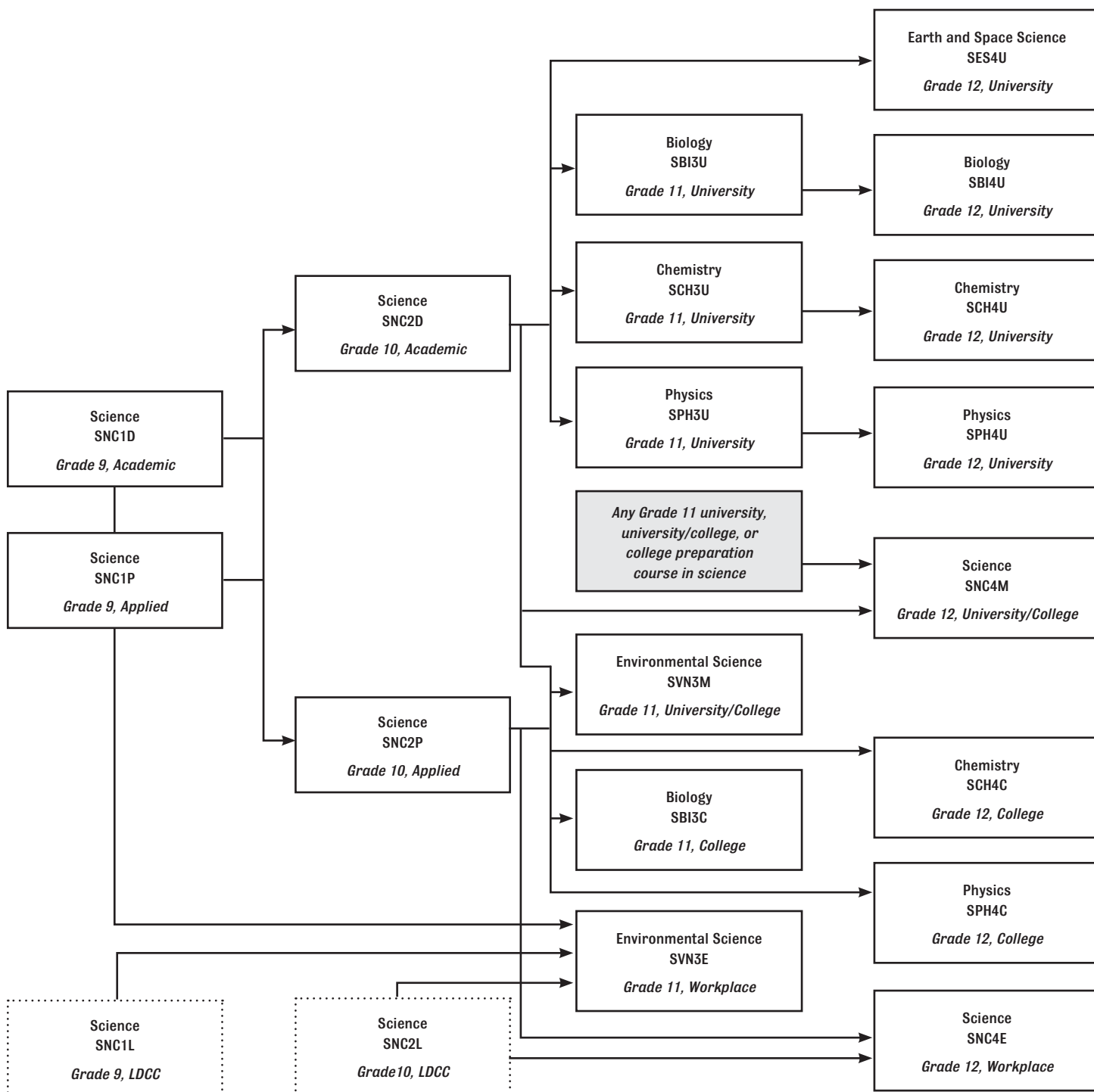
Grade	Course Name	Course Type	Course Code	Prerequisites
Science				
9	Science	Academic	SNC1D	None
9	Science	Applied	SNC1P	None
10	Science	Academic	SNC2D	Grade 9 Science, Academic or Applied
10	Science	Applied	SNC2P	Grade 9 Science, Academic or Applied
12	Science	University/College	SNC4M	Grade 10 Science, Academic, or any Grade 11 university, university/college, or college preparation course in science
12	Science	Workplace	SNC4E	Grade 10 Science, Applied, or a Grade 10 locally developed compulsory credit (LDCC) course in science
Biology				
11	Biology	University	SBI3U	Grade 10 Science, Academic
11	Biology	College	SBI3C	Grade 10 Science, Academic or Applied
12	Biology	University	SBI4U	Grade 11 Biology, University Preparation
Chemistry				
11	Chemistry	University	SCH3U	Grade 10 Science, Academic
12	Chemistry	University	SCH4U	Grade 11 Chemistry, University Preparation
12	Chemistry	College	SCH4C	Grade 10 Science, Academic or Applied
Earth and Space Science				
12	Earth and Space Science	University	SES4U	Grade 10 Science, Academic
Environmental Science				
11	Environmental Science	University/College	SVN3M	Grade 10 Science, Applied or Academic
11	Environmental Science	Workplace	SVN3E	Grade 9 Science, Academic or Applied, or a Grade 9 or 10 locally developed compulsory credit (LDCC) course in science

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
Physics				
11	Physics	University	SPH3U	Grade 10 Science, Academic
12	Physics	University	SPH4U	Grade 11 Physics, University Preparation
12	Physics	College	SPH4C	Grade 10 Science, Academic or Applied

Prerequisite Chart for Science, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the prerequisites for them. It does not attempt to depict all possible movements from course to course.



Note: Dotted lines represent locally developed compulsory credit courses (LDCCs), which are not outlined in the curriculum document.

Course Descriptions for Science

Science

Science, Grade 9, Academic

(SNC1D)

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

Prerequisite: None

Science, Grade 9, Applied

(SNC1P)

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity.

Prerequisite: None

Science, Grade 10, Academic

(SNC2D)

This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.

Prerequisite: Grade 9 Science, Academic or Applied

Science, Grade 10, Applied

(SNC2P)

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter.

Prerequisite: Grade 9 Science, Academic or Applied

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

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

Biology**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 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

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

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, 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

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

Earth and Space Science

Earth and Space Science, Grade 12, University (SES4U)

This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.

Prerequisite: Grade 10 Science, Academic

Environmental 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

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

Physics

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 analyse 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, 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

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

Social Sciences and Humanities (1999–2000)

Courses in Social Sciences and Humanities, Grades 9 to 12

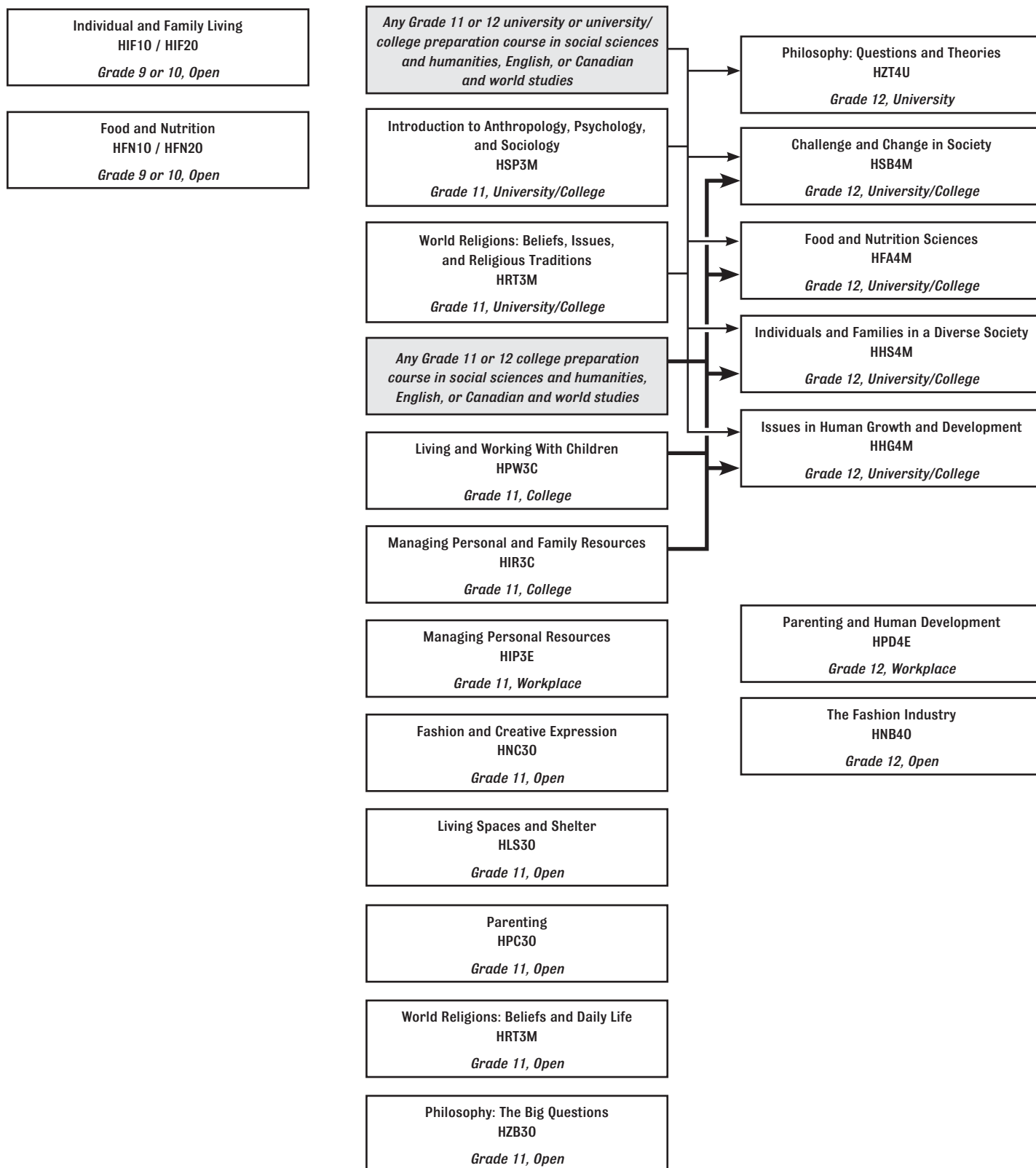
Grade	Course Name	Course Type	Course Code	Prerequisites
Family Studies				
9	Food and Nutrition	Open	HFN1O	None
9	Individual and Family Living	Open	HIF1O	None
10	Food and Nutrition	Open	HFN2O	None
10	Individual and Family Living	Open	HIF2O	None
11	Living and Working With Children	College	HPW3C	None
11	Managing Personal and Family Resources	College	HIR3C	None
11	Managing Personal Resources	Workplace	HIP3E	None
11	Fashion and Creative Expression	Open	HNC3O	None
11	Living Spaces and Shelter	Open	HLS3O	None
11	Parenting	Open	HPC3O	None
12	Food and Nutrition Sciences	University/College	HFA4M	Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Individuals and Families in a Diverse Society	University/College	HHS4M	Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Issues in Human Growth and Development	University/College	HHG4M	Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Parenting and Human Development	Workplace	HPD4E	None
12	The Fashion Industry	Open	HNB4O	None

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
General Social Science				
11	Introduction to Anthropology, Psychology, and Sociology	University/College	HSP3M	None
12	Challenge and Change in Society	University/College	HSB4M	Any university or university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
Philosophy				
11	Philosophy: The Big Questions	Open	HZB3O	None
12	Philosophy: Questions and Theories	University	HZT4U	Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
World Religions				
11	World Religions: Beliefs, Issues, and Religious Traditions	University/College	HRT3M	None
11	World Religions: Beliefs and Daily Life	Open	HRF3O	None

Prerequisite Chart for Social Sciences and Humanities, Grades 9–12

This chart maps out all the courses in the discipline and shows the links between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



Course Descriptions for Social Sciences and Humanities

Family Studies

Food and Nutrition, Grade 9, Open

(HFN1O)

This course explores the factors that affect attitudes and decisions about food, examines current issues of body image and food marketing, and is grounded in the scientific study of nutrition. Students will learn how to make informed food choices and how to prepare foods, and will investigate our Canadian food heritage and food industries, as well as global food issues. The course also introduces students to research skills related to food and nutrition.

Prerequisite: None

Individual and Family Living, Grade 9, Open

(HIF1O)

This course explores the challenges faced by all people: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will acquire knowledge and skills that are needed to make the transition to adulthood. Teachers will instruct students in developing interpersonal, decision-making, and practical skills related to daily life. Students will explore the functioning of families and the diversities found among families and within society.

Prerequisite: None

Food and Nutrition, Grade 10, Open

(HFN2O)

This course explores the factors that affect attitudes and decisions about food, examines current issues of body image and food marketing, and is grounded in the scientific study of nutrition. Students will learn how to make informed food choices and how to prepare foods, and will investigate our Canadian food heritage and food industries, as well as global food issues. The course also introduces students to research skills related to food and nutrition.

Prerequisite: None

Individual and Family Living, Grade 10, Open

(HIF2O)

This course explores the challenges faced by all people: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will acquire knowledge and skills that are needed to make the transition to adulthood. Teachers will instruct students in developing interpersonal, decision-making, and practical skills related to daily life. Students will explore the functioning of families and the diversities found among families and within society.

Prerequisite: None

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

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

Managing Personal Resources, Grade 11, Workplace (HIP3E)

This course prepares students for living independently and working successfully with others. Students will learn to manage their personal resources (including talent, money, and time), to develop interpersonal skills, and to understand economic influences on workplace issues, in order to make wise and responsible personal and occupational choices. The course emphasizes the achievement of expectations through practical experiences and introduces students to skills used in researching and investigating resource management.

Prerequisite: None

Fashion and Creative Expression, Grade 11, Open (HNC3O)

This course explores what clothing communicates about the wearer and how it becomes a creative and entrepreneurial outlet through the design and production processes. Students will learn, through practical experiences, about the nature of fashion design; the characteristics of fibres and fabrics; the construction, production, and marketing of clothing; and how to plan and care for a wardrobe that is appropriate for an individual's appearance, activities, employment, and lifestyle. Students will develop research skills as they explore the evolution of fashion and its relationship to society, culture, and individual psychology.

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

Parenting, 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

Food and Nutrition Sciences, Grade 12, University/College**(HFA4M)**

This course examines various nutritional, psychological, social, cultural, and global factors that influence people's food choices and customs. Students will learn about current Canadian and worldwide issues related to food, frameworks for making appropriate dietary choices, and food-preparation techniques. This course also refines students' skills used in researching and investigating issues related to food and nutrition.

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/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

**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

The Fashion Industry, Grade 12, Open**(HNB4O)**

This course provides a historical perspective on fashion and design, exploring the origins, influence, and importance of fashion as an expression of national, cultural, religious, and personal identity. Students will learn about the many facets of the Canadian fashion industry, including both large-scale and small entrepreneurial enterprises, and its worldwide links, as well as gaining practical experience in garment design, production, and care. This course also refines students' skills used in researching and investigating various aspects of the fashion industry.

Prerequisite: None

General Social Science

**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

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 analyse 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

Philosophy

Philosophy: The Big Questions, Grade 11, Open**(HZB3O)**

This course addresses three (or more) of the following questions: What is a person? What is a meaningful life? What are good and evil? What is a just society? What is human knowledge? How do we know what is beautiful in art, music, and literature? Students will learn critical-thinking skills in evaluating philosophical arguments related to these questions, as well as skills used in researching and investigating various topics in philosophy.

Prerequisite: None

Philosophy: Questions and Theories, Grade 12, University (HZT4U)

This course addresses three (or more) of the main areas of philosophy: metaphysics, logic, epistemology, ethics, social and political philosophy, and aesthetics. Students will learn critical-thinking skills, the main ideas expressed by philosophers from a variety of the world's traditions, how to develop and explain their own philosophical ideas, and how to apply those ideas to contemporary social issues and personal experiences. The course will also help students refine skills used in researching and investigating topics in philosophy.

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

World Religions

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

World Religions: Beliefs and Daily Life, Grade 11, Open (HRF3O)

This course introduces students to the range and diversity of world religions, and examines how systems of belief affect individual lives and social relationships. Students will learn about a variety of religious beliefs, teachings, traditions, and practices. The course also helps students to develop skills used in researching and investigating topics related to world religions.

Prerequisite: None

Technological Education (2009)

Courses in Technological Education, Grades 9 to 12

Grade	Course Name	Course Type	Course Code	Prerequisites
9	Exploring Technologies	Open	TIJ1O	None
Communications Technology				
10	Communications Technology	Open	TGJ2O	None
11	Communications Technology	University/College	TGJ3M	None
11	Communications Technology: Broadcast and Print Production	Open	TGJ3O	None
12	Communications Technology	University/College	TGJ4M	Communications Technology, Grade 11, University/College Preparation
12	Communications Technology: Digital Imagery and Web Design	Open	TGJ4O	None
Computer Technology				
10	Computer Technology	Open	TEJ2O	None
11	Computer Engineering Technology	University/College	TEJ3M	None
11	Computer Technology	Workplace	TEJ3E	None
12	Computer Engineering Technology	University/College	TEJ4M	Computer Engineering Technology, Grade 11, University/College Preparation
12	Computer Technology	Workplace	TEJ4E	Computer Technology, Grade 11, Workplace Preparation

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
Construction Technology				
10	Construction Technology	Open	TCJ2O	None
11	Construction Engineering Technology	College	TCJ3C	None
11	Construction Technology	Workplace	TCJ3E	None
11	Custom Woodworking	Workplace	TWJ3E	None
12	Construction Engineering Technology	College	TCJ4C	Construction Engineering Technology, Grade 11, College Preparation
12	Construction Technology	Workplace	TCJ4E	Construction Technology, Grade 11, Workplace Preparation
12	Custom Woodworking	Workplace	TWJ4E	Custom Woodworking, Grade 11, Workplace Preparation
Green Industries				
10	Green Industries	Open	THJ2O	None
11	Green Industries	University/College	THJ3M	None
11	Green Industries	Workplace	THJ3E	None
12	Green Industries	University/College	THJ4M	Green Industries, Grade 11, University/College Preparation
12	Green Industries	Workplace	THJ4E	Green Industries, Grade 11, Workplace Preparation
Hairstyling and Aesthetics				
10	Hairstyling and Aesthetics	Open	TXJ2O	None
11	Hairstyling and Aesthetics	Workplace	TXJ3E	None
12	Hairstyling and Aesthetics	Workplace	TXJ4E	Hairstyling and Aesthetics, Grade 11, Workplace Preparation
Health Care				
10	Health Care	Open	TPJ2O	None
11	Health Care	University/College	TPJ3M	None
11	Health Care	College	TPJ3C	None
12	Health Care	University/College	TPJ4M	Health Care, Grade 11, University/College Preparation
12	Health Care	College	TPJ4C	Health Care, Grade 11, College Preparation
12	Child Development and Gerontology	College	TOJ4C	None
12	Health Care: Support Services	Workplace	TPJ4E	None

(continued)

Grade	Course Name	Course Type	Course Code	Prerequisites
Hospitality and Tourism				
10	Hospitality and Tourism Technology	Open	TFJ2O	None
11	Hospitality and Tourism	College	TFJ3C	None
11	Hospitality and Tourism	Workplace	TFJ3E	None
12	Hospitality and Tourism	College	TFJ4C	Hospitality and Tourism, Grade 11, College Preparation
12	Hospitality and Tourism	Workplace	TFJ4E	Hospitality and Tourism, Grade 11, Workplace Preparation
Manufacturing Technology				
10	Manufacturing Technology	Open	TMJ2O	None
11	Manufacturing Engineering Technology	University/College	TMJ3M	None
11	Manufacturing Technology	College	TMJ3C	None
11	Manufacturing Technology	Workplace	TMJ3E	None
12	Manufacturing Engineering Technology	University/College	TMJ4M	Manufacturing Engineering Technology, Grade 11, University/College Preparation
12	Manufacturing Technology	College	TMJ4C	Manufacturing Technology, Grade 11, College Preparation
12	Manufacturing Technology	Workplace	TMJ4E	Manufacturing Technology, Grade 11, Workplace Preparation
Technological Design				
10	Technological Design	Open	TDJ2O	None
11	Technological Design	University/College	TDJ3M	None
11	Technological Design and the Environment	Open	TDJ3O	None
12	Technological Design	University/College	TDJ4M	Technological Design, Grade 11, University/College Preparation
12	Technological Design in the Twenty-first Century	Open	TDJ4O	None

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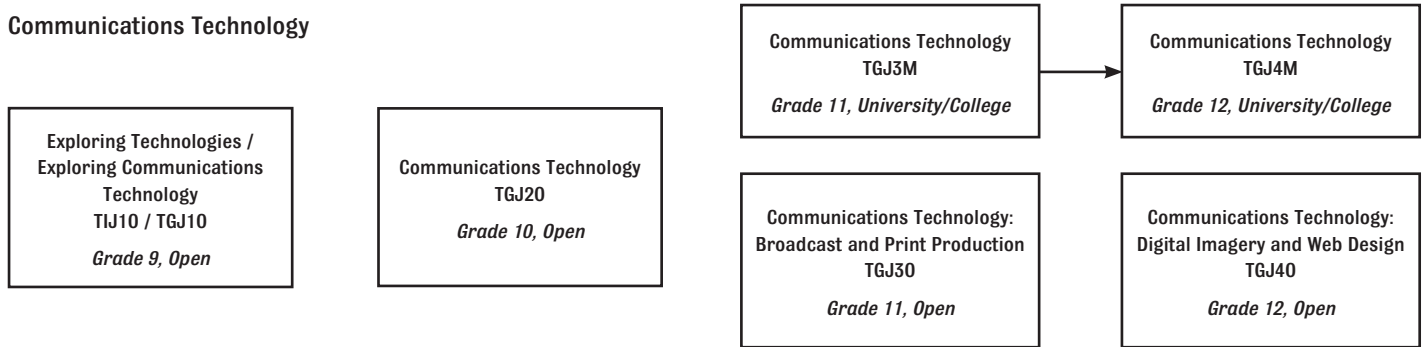
Grade	Course Name	Course Type	Course Code	Prerequisites
Transportation Technology				
10	Transportation Technology	Open	TTJ2O	None
11	Transportation Technology	College	TTJ3C	None
11	Transportation Technology: Vehicle Ownership	Open	TTJ3O	None
12	Transportation Technology	College	TTJ4C	Transportation Technology, Grade 11, College Preparation
12	Transportation Technology: Vehicle Maintenance	Workplace	TTJ4E	None

The emphasis courses that may be developed in each technological subject can be identified, along with the course codes that must be assigned to them, from the list of Common Course Codes on the Ministry of Education's website, at www.Ontario.ca/edu.

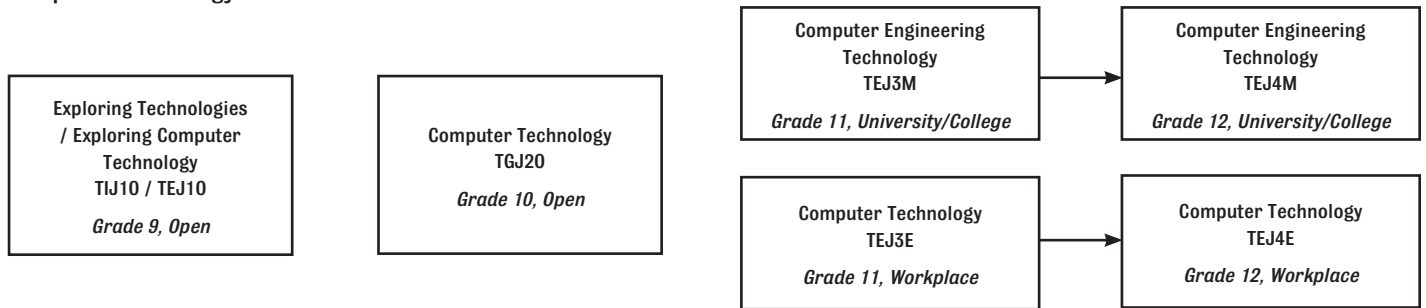
Prerequisite Charts for Technological Education, Grades 9–12

These charts map out all the courses in the discipline and show the links between courses and the possible prerequisites for them. They do not attempt to depict all possible movements from course to course.

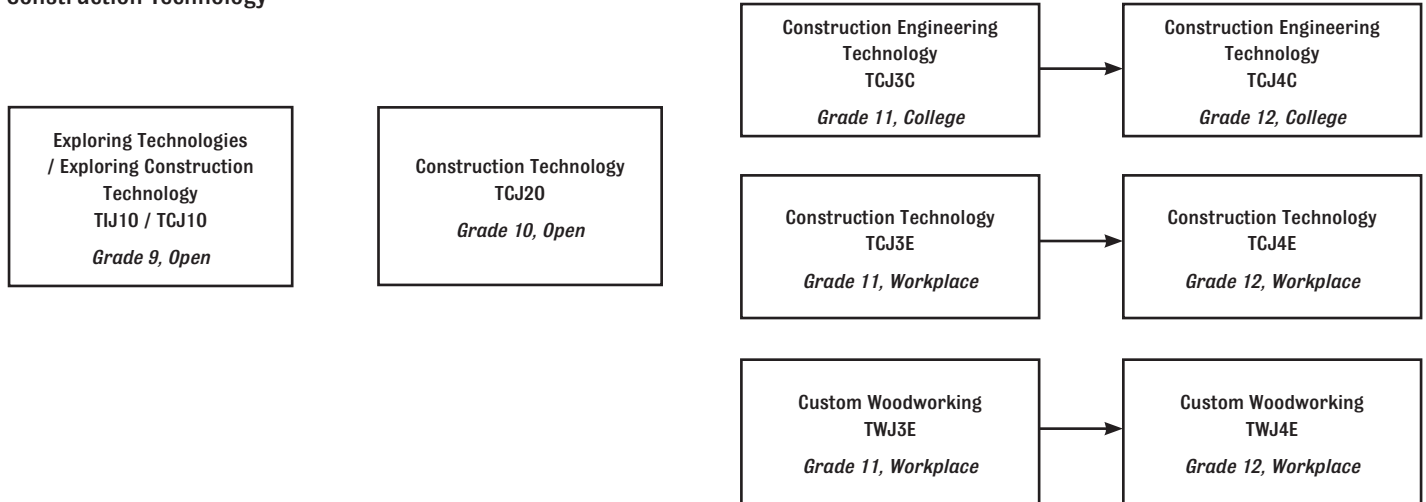
Communications Technology



Computer Technology



Construction Technology



Green Industries

Exploring Technologies /
Exploring Green Industries
TIJ10 / THJ10
Grade 9, Open

Green Industries
THJ20
Grade 10, Open

Green Industries
THJ3M
Grade 11, University/College

Green Industries
THJ4M
Grade 12, University/College

Green Industries
THJ3E
Grade 11, Workplace

Green Industries
THJ4E
Grade 12, Workplace

Hairstyling and Aesthetics

Exploring Technologies /
Exploring Hairstyling and
Aesthetics
TIJ10 / TXJ10
Grade 9, Open

Hairstyling and Aesthetics
TXJ20
Grade 10, Open

Hairstyling and Aesthetics
TXJ3E
Grade 11, Workplace

Hairstyling and Aesthetics
TXJ4E
Grade 12, Workplace

Health Care

Exploring Technologies /
Exploring Health Care
TIJ10 / TPJ10
Grade 9, Open

Health Care
TPJ20
Grade 10, Open

Health Care
TPJ3M
Grade 11, University/College

Health Care
TPJ4M
Grade 12, University/College

Health Care
TPJ3C
Grade 11, College

Health Care
TPJ4C
Grade 12, College

Child Development and
Gerontology
TOJ4C
Grade 12, College

Health Care: Support Services
TPJ4E
Grade 12, Workplace

Hospitality and Tourism

Exploring Technologies /
Exploring Hospitality
and Tourism
TIJ10 / TFJ10
Grade 9, Open

Hospitality and Tourism
TFJ20
Grade 10, Open

Hospitality and Tourism
TFJ3C
Grade 11, College

Hospitality and Tourism
TFJ4C
Grade 12, College

Hospitality and Tourism
TFJ3E
Grade 11, Workplace

Hospitality and Tourism
TFJ4E
Grade 12, Workplace

Manufacturing Technology

Exploring Technologies /
Exploring Manufacturing
Technology
TIJ10 / TMJ10
Grade 9, Open

Manufacturing Technology
TMJ20
Grade 10, Open

Manufacturing
Engineering Technology
TMJ3M
Grade 11, University/College

Manufacturing
Engineering Technology
TMJ4M
Grade 12, University/College

Manufacturing Technology
TMJ3C
Grade 11, College

Manufacturing
Technology
TMJ4C
Grade 12, College

Manufacturing Technology
TMJ3E
Grade 11, Workplace

Manufacturing Technology
TMJ4E
Grade 12, Workplace

Technological Design

Exploring Technologies /
Exploring Technological Design
TIJ10 / TDJ10
Grade 9, Open

Technological Design
TDJ20
Grade 10, Open

Technological Design
TDJ3M
Grade 11, University/College

Technological Design
TDJ4M
Grade 12, University/College

Technological Design and
the Environment
TDJ30
Grade 11, Open

Technological Design in the
Twenty-first Century
TDJ40
Grade 12, Open

Transportation Technology

Exploring Technologies /
Exploring Transportation
Technology
TIJ10 / TTJ10
Grade 9, Open

Transportation Technology
TTJ20
Grade 10, Open

Transportation Technology
TTJ3C
Grade 11, College

Transportation Technology
TTJ4C
Grade 12, College

Transportation Technology:
Vehicle Ownership
TTJ30
Grade 11, Open

Transportation Technology:
Vehicle Maintenance
TTJ4E
Grade 12, Workplace

Course Descriptions for Technological Education

Exploring Technologies, Grade 9, Open

(TIJ1O)

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields.

Prerequisite: None

Communications Technology

Communications Technology, Grade 10, Open

(TGJ2O)

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and interactive new media and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology, and will explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields.

Prerequisite: None

Communications Technology, Grade 11, University/College

(TGJ3M)

This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues, and will explore college and university programs and career opportunities in the various communications technology fields.

Prerequisite: None

**Communications Technology: Broadcast and Print Production,
Grade 11, Open (TGJ3O)**

This course enables students to develop knowledge and skills in the areas of graphic communication, printing and publishing, audio and video production, and broadcast journalism. Students will work both independently and as part of a production team to design and produce media products in a project-driven environment. Practical projects may include the making of signs, yearbooks, video and/or audio productions, newscasts, and documentaries. Students will also develop an awareness of related environmental and societal issues, and will explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields.

Prerequisite: None

Communications Technology, Grade 12, University/College (TGJ4M)

This course enables students to further develop media knowledge and skills while designing and producing projects in the areas of live, recorded, and graphic communications. Students may work in the areas of TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also expand their awareness of environmental and societal issues related to communications technology, and will investigate career opportunities and challenges in a rapidly changing technological environment.

Prerequisite: Communications Technology, Grade 11, University/College Preparation

**Communications Technology: Digital Imagery and Web Design,
Grade 12, Open (TGJ4O)**

This course enables students to develop knowledge and skills in the areas of photography, digital imaging, animation, 3D modelling, and web design. Students will work both independently and as part of a production team to design and produce media products in a project-driven environment. Practical projects may include photo galleries, digital images, animations, 3D models, and websites. Students will also expand their awareness of environmental and societal issues related to communications technology, and will explore postsecondary education, training, and career opportunities.

Prerequisite: None

Computer Technology

Computer Technology, Grade 10, Open (TEJ2O)

This course introduces students to computer systems, networking, and interfacing, as well as electronics and robotics. Students will assemble, repair, and configure computers with various types of operating systems and application software. Students will build small electronic circuits and write computer programs to control simple peripheral devices or robots. Students will also develop an awareness of related environmental and societal issues, and will learn about secondary and postsecondary pathways and career opportunities in computer technology.

Prerequisite: None

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

Computer Technology, Grade 11, Workplace (TEJ3E)

This course enables students to develop knowledge and skills related to computer hardware, networks, operating systems, and other software. Students will use utility and application software, and learn proper procedures for installing, maintaining, and troubleshooting computer systems and networks. Students will develop an awareness of environmental and societal issues related to the use of computers, and will learn about apprenticeships and other employment opportunities in the field of computer technology that they may choose to pursue after graduation.

Prerequisite: None

Computer Engineering Technology, Grade 12, University/College (TEJ4M)

This course extends students' understanding of computer systems and computer interfacing

Construction Engineering Technology, Grade 11, College (TCJ3C)

This course focuses on the development of knowledge and skills related to residential construction. Students will gain hands-on experience using a variety of construction materials, processes, tools, and equipment; learn about building design and planning construction projects; create and interpret working drawings and sections; and learn how the Ontario Building Code and other regulations and standards apply to construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore career opportunities in the field.

Prerequisite: None

Construction Technology, Grade 11, Workplace (TCJ3E)

This course enables students to develop technical knowledge and skills related to carpentry, masonry, electrical systems, heating and cooling, and plumbing for residential construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment to design, lay out, and build projects. They will create and read technical drawings, learn construction terminology, interpret building codes and regulations, and apply mathematical skills as they develop construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore postsecondary and career opportunities in the field.

Prerequisite: None

Custom Woodworking, Grade 11, Workplace (TWJ3E)

This course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques associated with custom woodworking. Students will learn to create and interpret technical drawings and will plan, design, and fabricate projects. They will also develop an awareness of environmental and societal issues related to the woodworking industry, and will explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation.

Prerequisite: None

Construction Engineering Technology, Grade 12, College (TCJ4C)

This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment, and will learn more about building design and project planning. They will continue to create and interpret construction drawings and will extend their knowledge of construction terminology and of relevant building codes and regulations, as well as health and safety standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology, and will explore career opportunities in the field.

Prerequisite: Construction Engineering Technology, Grade 11, College Preparation

Construction Technology, Grade 12, Workplace**(TCJ4E)**

This course enables students to further develop technical knowledge and skills related to residential construction and to explore light commercial construction. Students will continue to gain hands-on experience using a variety of materials, processes, tools, and equipment; create and interpret construction drawings; and learn more about building design and project planning. They will expand their knowledge of terminology, codes and regulations, and health and safety standards related to residential and light commercial construction. Students will also expand their awareness of environmental and societal issues related to construction technology, and will explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation.

Prerequisite: Construction Technology, Grade 11, Workplace Preparation

Custom Woodworking, Grade 12, Workplace**(TWJ4E)**

This course enables students to further develop knowledge and skills related to the planning, design, and construction of residential and/or commercial cabinets and furniture. Students will gain further experience in the safe use of common woodworking materials, tools, equipment, finishes, and hardware, and will learn about the entrepreneurial skills needed to establish and operate a custom woodworking business. Students will also expand their awareness of health and safety issues and environmental and societal issues related to woodworking, and will explore career opportunities that may be pursued directly after graduation.

Prerequisite: Custom Woodworking, Grade 11, Workplace Preparation

Green Industries

Green Industries, Grade 10, Open**(THJ2O)**

This course introduces students to the various sectors of the green industries – agriculture, forestry, horticulture, floristry, and landscaping. Using materials, processes, and techniques commonly employed in these industries, students will participate in a number of hands-on projects that may include plant or animal propagation; production, maintenance, and harvesting activities; the development of floral or landscaping designs; and/or related construction activities. Students will also develop an awareness of environmental and societal issues related to green industry activities, learn about safe and healthy working practices, and explore secondary and postsecondary education and training pathways and career opportunities in the various industry sectors.

Prerequisite: None

Green Industries, Grade 11, University/College**(THJ3M)**

This course enables students to develop knowledge and skills related to agriculture, forestry, horticulture, and landscaping. Students will study the identification, growth, and management of plants and animals and develop process, design, and management skills required in the green industries. Students will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and will explore postsecondary education programs and career opportunities.

Prerequisite: None

Green Industries, Grade 11, Workplace (THJ3E)

This course enables students to develop knowledge and skills related to agriculture, floristry, forestry, horticulture, and landscaping. Students will learn to identify a broad range of plant and animal species; examine factors that affect the growth of plants and animals and the quality of products derived from them; and develop process, design, and maintenance skills required in the green industries. Students will also learn about safe and healthy working practices, develop an awareness of environmental and societal issues related to green industry activities, and learn about apprenticeships and other postsecondary education and training opportunities, as well as employment opportunities that may be pursued directly after graduation.

Prerequisite: None

Green Industries, Grade 12, University/College (THJ4M)

This course focuses on more complex concepts and skills related to the green industries. Students will focus on developing process skills, design and management techniques, and ways of enhancing environmental sustainability. They will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and explore career opportunities. The knowledge and skills acquired in this course will prepare students for more specialized studies at the college and university level.

Prerequisite: Green Industries, Grade 11, University/College Preparation

Green Industries, Grade 12, Workplace (THJ4E)

This course enables students to gain further experience with a variety of industry procedures and operations and to acquire additional industry-specific skills. Students will study more complex processes, develop more advanced design and maintenance skills, and explore ways of enhancing environmental sustainability. They will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and explore career opportunities in the various industries. The knowledge and skills acquired in this course will prepare students for the workplace and apprenticeship training.

Prerequisite: Green Industries, Grade 11, Workplace Preparation

Hairstyling and Aesthetics

Hairstyling and Aesthetics, Grade 10, Open (TXJ2O)

This course presents hairstyling, make-up, and nail care techniques from a salon/spa perspective. Using materials, processes, and techniques used in the industry, students learn fundamental skills in hairstyling, giving manicures and facials, and providing hair/scalp analyses and treatments. Students will also consider related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics.

Prerequisite: None

Hairstyling and Aesthetics, Grade 11, Workplace (TXJ3E)

This course enables students to develop knowledge and skills in cosmetology and offers a variety of applications that will equip students to provide services for a diverse clientele. Students will identify trends in the hairstyling and aesthetics industry, learn about related health and safety laws, and expand their communication and interpersonal skills through interactions with peers and clients. Students will also consider environmental and societal issues related to the industry, and will acquire a more detailed knowledge of apprenticeships and direct-entry work positions.

Prerequisite: None

Hairstyling and Aesthetics, Grade 12, Workplace**(TXJ4E)**

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students will strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students will also expand their understanding of environmental and societal issues and their knowledge of postsecondary destinations in the hairstyling and aesthetics industry.

Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation

Health Care

Health Care, Grade 10, Open**(TPJ2O)**

This course introduces students to personal health promotion, child and adolescent health concerns, and a variety of medical services, treatments, and technologies. Students will become familiar with various instruments and equipment and will learn about human anatomy, organs, and body chemistry, as well as the effects that lifestyle choices can have on personal well-being. They will plan recreational activities for youth, perform a dietary analysis, and evaluate health care practices. Students will develop an awareness of environmental and societal issues related to health care, and will explore secondary and postsecondary pathways leading to careers 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, analyse environmental and societal issues related to health care, and learn about professional practice standards and career opportunities in the field.

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 12, University/College (TPJ4M)

This course focuses on the development of a range of skills needed to analyse and interpret clinical findings. Students will learn about accepted health care practices and demonstrate an understanding of basic procedures and the use of appropriate instruments and equipment. They will acquire an understanding of basic concepts related to the function of the human immune system and explore the relationship between pathology and disease prevention and treatment. Students will expand their awareness of workers' health and safety issues, analyse environmental and societal issues related to health care, and further explore professional practice standards and postsecondary destinations in the field.

Prerequisite: Health Care, Grade 11, University/College Preparation

Health Care, Grade 12, College (TPJ4C)

This course focuses on the development of clinical skills needed to assess general health status. Students will learn about accepted health care practices and demonstrate an understanding of some basic procedures and the use of appropriate instruments and equipment. They will identify the characteristics of the human immune system and learn about pathology and disease prevention and treatment. Students will expand their awareness of workers' health and safety issues, environmental and societal issues related to health care, professional practice standards, and postsecondary destinations in the field.

Prerequisite: Health Care, Grade 11, College Preparation

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: 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 practise 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

Hospitality and Tourism

Hospitality and Tourism Technology, Grade 10, Open (TFJ2O)

This course provides students with opportunities to explore different areas of hospitality and tourism, as reflected in the various sectors of the tourism industry, with an emphasis on food service. Students will study culinary techniques of food handling and preparation, health and safety standards, the use of tools and equipment, the origins of foods, and event planning, and will learn about tourism attractions across Ontario. Students will develop an awareness of related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the tourism industry.

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 11, Workplace (TFJ3E)

This course enables students to acquire knowledge and skills related to the food and beverage services sector of the tourism industry. Students will learn how to prepare, present, and serve food using a variety of tools and equipment, and will develop an understanding of the fundamentals of providing high-quality service to ensure customer satisfaction and the components of running a successful event or activity. Students will develop an awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector.

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 and Tourism, Grade 12, Workplace (TFJ4E)

This course enables students to further develop knowledge and skills related to the food and beverage services sector of the tourism industry. Students will demonstrate proficiency in using food preparation and presentation tools and equipment; plan nutritious menus, create recipes, and prepare and present finished food products; develop customer service skills; and explore event and activity planning. Students will expand their awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector.

Prerequisite: Hospitality and Tourism, Grade 11, Workplace Preparation

Manufacturing Technology

Manufacturing Technology, Grade 10, Open (TMJ2O)

This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, or a fabrication project involving processes such as machining, welding, vacuum forming, or injection moulding. Students will develop an awareness of environmental and societal issues related to manufacturing, and will learn about secondary and postsecondary pathways leading to careers in the industry.

Prerequisite: None

**Manufacturing Engineering Technology,
Grade 11, University/College (TMJ3M)**

This course enables students to develop knowledge and skills related to design, process planning, control systems, and quality assurance. Students will use a broad range of tools and equipment and will combine modern manufacturing techniques and processes with computer-aided manufacturing as they develop critical decision-making, problem-solving, and project-management skills. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

Prerequisite: None

Manufacturing Technology, Grade 11, College (TMJ3C)

This course enables students to develop knowledge and skills through hands-on, project-based learning. Students will acquire design, fabrication, and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer-aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

Prerequisite: None

Manufacturing Technology, Grade 11, Workplace (TMJ3E)

This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving and using tools and equipment such as engine lathes, milling machines, and welding machines. In addition, students may have the opportunity to acquire industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry.

Prerequisite: None

Manufacturing Engineering Technology, Grade 12, University/College (TMJ4M)

This course enables students to further develop knowledge and skills related to design, process planning, control systems, project management, quality assurance, and business operations. Students will use a broad range of tools and equipment, enhance their skills in computer-aided design, and collaborate in managing a project. Students will critically analyse and solve complex problems involved in manufacturing products. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Engineering Technology, Grade 11, University/College Preparation

Manufacturing Technology, Grade 12, College (TMJ4C)

This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have opportunities to obtain industry-standard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology, Grade 11, College Preparation

Manufacturing Technology, Grade 12, Workplace (TMJ4E)

This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of engine lathes, milling machines, welding machines, and other tools and equipment as they design and fabricate solutions to a variety of technological challenges in manufacturing. Students may also have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation

Technological Design

Technological Design, Grade 10, Open

(TDJ2O)

This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designs for homes, vehicles, bridges, robotic arms, clothing, or other products. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary education and training leading to careers in the field.

Prerequisite: None

Technological Design, Grade 11, University/College

(TDJ3M)

This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working drawings and other communication methods to present their design ideas. They will develop an awareness of environmental, societal, and cultural issues related to technological design, and will explore career opportunities in the field, as well as the college and/or university program requirements for them.

Prerequisite: None

Technological Design and the Environment, Grade 11, Open

(TDJ3O)

This course enables students to apply a systematic process for researching, designing, building, and assessing solutions to address specific human and environmental challenges. Through their work on various projects, students will explore broad themes that may include aspects of industrial design, mechanical design, architectural design, control system design, and/or apparel design. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary pathways leading to careers in the field.

Prerequisite: None

Technological Design, Grade 12, University/College

(TDJ4M)

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and other communication methods to present their designs. Students will enhance their problem-solving and communication skills, and will explore career opportunities and the postsecondary education and training requirements for them.

Prerequisite: Technological Design, Grade 11, University/College Preparation

Technological Design in the Twenty-first Century, Grade 12, Open

(TDJ4O)

This course focuses on the relationship between society and technological development. Students will use appropriate tools, techniques, and strategies to research, design, build, and assess prototypes for products and/or processes that respond to society's changing needs. Students will describe how social factors, including culture, media, politics, religion, and environmental concerns, influence technological design. Students will also learn about professional practices in the field, and will research postsecondary pathways leading to careers related to technological design.

Prerequisite: None

Transportation Technology

Transportation Technology, Grade 10, Open (TTJ2O)

This course introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service, electrical/battery service, and proper body care. Students will develop an awareness of related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the transportation industry.

Prerequisite: None

Transportation Technology, Grade 11, College (TTJ3C)

This course enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, brake, and steering systems on vehicles, aircraft, and/or watercraft. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation, and will learn about apprenticeship and college programs leading to careers in the transportation industry.

Prerequisite: None

Transportation Technology: Vehicle Ownership, Grade 11, Open (TTJ3O)

This general interest course enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. Students will develop an awareness of environmental and societal issues related to vehicle ownership and use, and will explore career opportunities in the transportation industry.

Prerequisite: None

Transportation Technology, Grade 12, College (TTJ4C)

This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; powertrains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small-engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading to careers in the transportation industry.

Prerequisite: Transportation Technology, Grade 11, College Preparation

Transportation Technology: Vehicle Maintenance, Grade 12, Workplace (TTJ4E)

This course introduces students to the servicing, repair, and maintenance of vehicles through practical applications. The course is appropriate for all students as a general interest course to prepare them for future vehicle operation, care, and maintenance or for entry into an apprenticeship in the motive power trades. Students will develop an awareness of environmental and societal issues related to transportation, and will learn about careers in the transportation industry and the skills and training required for them.

Prerequisite: None

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