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RELIGIOUS EDUCATION

All full time students in secondary school shall be enrolled in a prescribed credit course in religious education for each of their four years.

Religious Education credit courses shall be those prescribed by the Ontario Conference of Catholic Bishops in the document by the Institute for Catholic Education:
Ontario Catholic Secondary Curriculum Policy Document:
Religious Education (Revised 2006):

HRE1O – Grade 9 – Be with Me
HRE2O – Grade 10 – Christ and Culture
HRT3M – Grade 11 – World Religions: Beliefs, Issues and Religious Traditions
HRT3O – Grade 11 – World Religions: Beliefs and Daily Life
HRE4O – Grade 12 – Church and Culture
HRE4M – Grade 12 – Church and Culture

RELIGIOUS EDUCATION

HRE 1O1 – Discipleship and Culture
Open - Grade 9
This course engages students in the examination of the Christian narrative as revealed in Sacred Scripture. Students are invited to a deeper understanding of both the joy and the demands of living out the call to discipleship as it is described in the Scriptures. Students explore discipleship as encountered in the Sacred Tradition of the Church (Sacraments, Liturgical Year and Church Teaching and Law), as part of their ongoing personal growth and faith understanding. Students explore Catholic rituals, teaching, practice, moral and values, and virtues to facilitate a healthy and covenantal relationship with self, God and with others. Using theological reflection, they are challenged to explore the connections and disconnections of ethical concepts (euthanasia, abortion, sexuality, etc.) between the Church and contemporary culture. The course focuses on encouraging students to know and love by following in the footsteps of Jesus. As they learn of his words and deeds, they discover the importance of prayerfully serving the community to bring about the Reign of God.
Prerequisite: None
Credit Value: 1.0

HRE 2O1 - Christ and Culture
Open - Grade 10
This course examines the relationship between the person and message of Christ and the dominant attitudes of contemporary culture. Beginning with the Gospel narratives as a foundation, students acquire a deeper and more systematic knowledge of Christ, his message and his Church. Connections between the living Church and contemporary culture are explored in terms of what it means to be a responsible adolescent developing within a community of disciples in the context of a secular, pluralistic world. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships and sexuality. Students with 75% or above will be exempt from writing the final exam.
Prerequisite: None
Credit Value: 1.0

HRT 3M1 - World Religions and Belief Traditions: Perspectives, Issues & Challenges
University / College Prep - Grade 11
This course provides students with opportunities to explore various world religions and belief traditions. Students will develop knowledge of the terms and concepts relevant to this area of study, will examine the ways in which religions and belief traditions meet various human needs, and will learn about the relationship between belief and action. They will examine sacred writings and teachings, consider how concepts of time and place influence different religions and belief traditions, and develop research and inquiry skills related to the study of human expressions of belief.
Prerequisite: None
Credit Value: 1.0

HRF 301 - World Religions and Belief Traditions in Daily Life
Open - Grade 11
This course enables students to study world religions and belief traditions in local, Canadian, and global contexts. Students will explore aspects of the human quest for meaning and will examine world religions and belief traditions as exemplified in various sacred teachings and principles, rites, and passages. They will also study the interaction throughout history between society and various belief traditions, and will have opportunities to develop research and inquiry skills related to the study of world religions and belief traditions.
Prerequisite: None
Credit Value: 1.0

RELIGIOUS EDUCATION

HRE 4M – Church and Culture ***Compulsory** **University/College Preparation – Grade 12** This course is directed toward the clear identification of Catholic moral principles and the concrete application of these principles in the lives of students. This course proceeds from foundational beliefs rooted in Sacred Scripture concerning justice and peace to an exploration of the principles that shape Christian life. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships and sexuality. Special attention is given to the interaction between Church and culture. This course is intended to prepare the senior student for the lifelong task of the Christian moral life: The call to follow Jesus, to believe in His redemptive love for mankind and to proclaim and incarnate the reign of God as begun by Jesus Christ. *Prerequisite: Any Grade 11 or 12 university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies* Credit Value: 1.0	**HRE 4O - Church and Culture** ***Compulsory** **Open - Grade 12** This course assists students in their development of the skills and knowledge necessary to live lives of full maturity. Within the Catholic faith tradition, it is believed that this growth towards human maturity is best served when students are able to define themselves authentically towards other people and to their God, to others and to their world. In the Family Life Education strand, students explore a variety of topics related to the theme of personhood, interpersonal relationships and sexuality. Students will demonstrate acknowledgement of the prophetic tradition in Scripture, become familiar with the social teachings of the Catholic Church, explore contemporary notions of spirituality and prayer, and recognize the importance, power, and potential of the human person in relation to morality and personal choices concerning future life paths. *Prerequisite: None* Credit Value: 1.0

RELIGIOUS EDUCATION

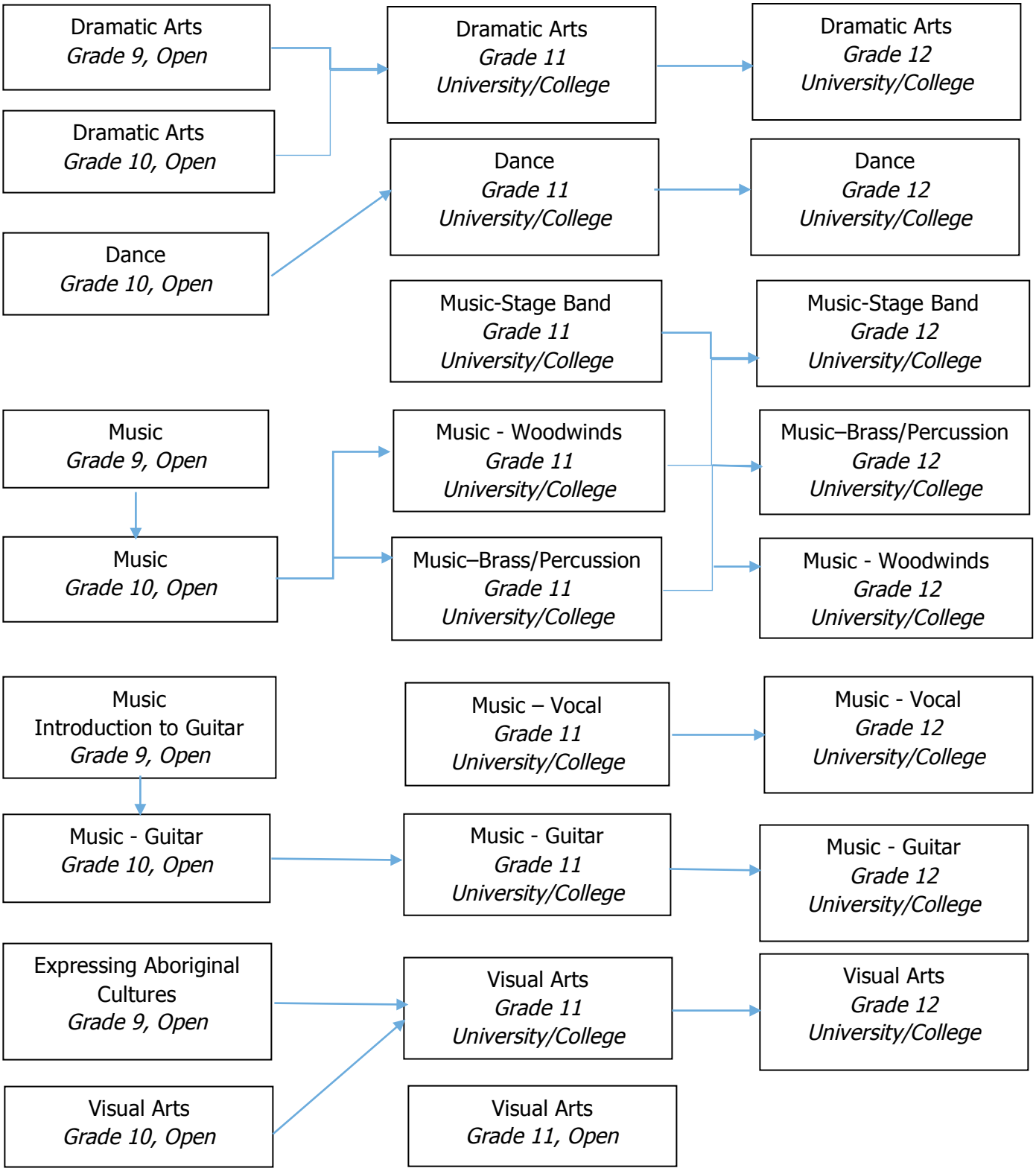
HHS 4U - Families in Canada
University Preparation – Grade 12
This course enables students to draw on sociological, psychological, and anthropological theories and research to analyse the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships.
Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.
Credit Value: 1.0

HHS4C - **Families in Canada**
College Preparation - Grade 12
This course enables students to develop an understanding of social science theories as they apply to individual development, the development of intimate relationships, and family and parent-child relationships. Students will explore a range of issues relating to the development of individuals and families in contemporary Canadian society as well as in other cultures and historical periods. They will develop the investigative skills required to conduct research on individuals, intimate relationships, and parent-child roles and relationships in Canada.
Prerequisite: Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.
Credit Value: 1.0

HZT 4U - Philosophy:
Questions and Theories
University Preparation - Grade 12
This course enables students to acquire an understanding of the nature of philosophy and philosophical reasoning skills and to develop and apply their knowledge and skills while exploring specialized branches of philosophy (the course will cover at least three of the following branches: metaphysics, ethics, epistemology, philosophy of science, social and political philosophy, and aesthetics). Students will develop critical thinking and philosophical reasoning skills as they formulate and evaluate arguments related to a variety of philosophical questions and theories. They will also develop research and inquiry skills related to the study and practice of philosophy.
*Prerequisite**:** Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.*
Credit Value: 1.0 1.0

Prerequisite Chart for the Arts, Grade 9 – 12

This chart maps out all the course 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.



ARTS

ADA 1O - Drama
Open - Grade 9
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 analyze drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.
Credit Value: 1.0

ADA 2O - Drama
Open - Grade 10
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 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
Credit Value: 1.0

ATC 2O - Dance
Open - Grade 10
This course emphasizes the development of student's 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
Credit Value: 1.0

ADA 3M – Drama
University / College Prep. - Grade 11
This course requires students to create and perform in dramatic presentations. Students will analyze, 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 analyze the functions of playwrights, directors, actors, designers, technicians, and audiences.
Prerequisite: Grade 9 or 10 Dramatic Arts
Credit Value: 1.0

ADA 4M - Dramatic Arts
University / College Prep. - Grade 12
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 text 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 analyze 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
Credit Value: 1.0

ATC 3M – Dance
University / College Prep. – Grade 11
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
Credit Value: 1.0

ARTS

ATC 4M – Dance
University / College Prep. – Grade 12
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
Credit Value: 1.0

AMG 1O - Introduction to Guitar
This course emphasizes the appreciation, analysis, and performance of various kinds of music, including baroque and classical music, popular music and Canadian and non-Western music. Students will perform technical exercises and appropriate repertoire, complete detailed creative activities, and analyze and evaluate lives and recorded performances. They will continue to increase their understanding of the elements of music while developing their technical and imaginative abilities.
Credit Value: 1.0
Note: Grade 9 Guitar is strongly recommended as a prerequisite for Grade 10 Guitar credit.

AMG 2O - Guitar
Open - Grade 10

AMB 3M - Instrumental Music: Brass/Percussion – Grade 11
University / College Prep. - Grade 11
AMH 3M - Music Stage Band
University / College Prep. - Grade 11
AMG 3M – Guitar
University / College Prep. - Grade 11
AMW 3M - Music – Woodwinds
University / College Prep. - Grade 11
Prerequisite: Music, Grade 10, Open or Permission of the Instructor
(Guitar AMG3M1 Prerequisite AMG2O1 or the permission of the Instructor.)
Credit Value: 1.0

AMU 1O - Music
Open - Grade 9
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.
Note: Grade 9 Music is strongly recommended as perquisite for Grade 10 Music Credit
Credit Value: 1.0

AMU 2O – Music
Open - Grade 10
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: Grade 9 Music is strongly recommended as perquisite for Grade 10 Music Credit
Audition is required for students who do not have AMU 1O
Credit Value: 1.0

ARTS

AMV 3M – Music – Vocal/Choral
University/College Prep.-Grade 11
This course develops students' artistic knowledge and skills through the performance of music and the preparation of music productions. Students will perform appropriate works, particularly works in contemporary popular styles. Independently and in groups, they will also plan, market, and produce music productions, making use of appropriate technology, and will evaluate the results. This course is designed for the intermediate vocalist.
Prerequisite: None
Credit Value: 1.0

AMV 4M – Music Vocal/Choral
University/College Prep. –Grade 12
This course emphasizes the appreciation, analysis, and performance of music from the romantic period and from the twentieth century, including jazz, popular music, art music, and Canadian and non-Western music. Students will concentrate on developing interpretive skills and the ability to work independently. They will also complete complex creative projects in which they make use of new technologies. This course is designed for the intermediate vocalist. *Prerequisite: Vocal Music, Grade 11*
Credit value: 1.0

NAC 1O1 – Visual Arts
Open – Grade 9
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. Examples include, but are not limited to, a variety of contemporary and traditional First Nations, Métis, and Inuit art forms such as new media, storytelling, installation and performance art.
Credit Value: 1.0

AMB 4M - Instrumental Music:
Brass/Percussion - Grade 12
University / College Prep. - Grade 12
AMG 4M - Guitar
University / College Prep. - Grade 12
AMH 4M - Music Stage Band
University / College Prep. - Grade 12
AMW 4M - Music – Woodwinds
University / College Prep. - Grade 12
These courses emphasizes the appreciation, analysis, and performance of music from the Romantic period and the twentieth century, including art music, jazz, popular music, and Canadian and non-Western music. Students will concentrate on developing interpretive skills and the ability to work independently. They will also complete complex creative projects.
Prerequisite: Music, Grade 11, University/College Preparation
Guitar AMG 4M1
Prerequisite: AMG 3M1
Credit Value: 1.0

AVI 2O - Visual Arts
Open - Grade 10
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
Credit Value: 1.0

AVI 3O– Visual Arts
Open - Grade 11
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
Credit: 1.0

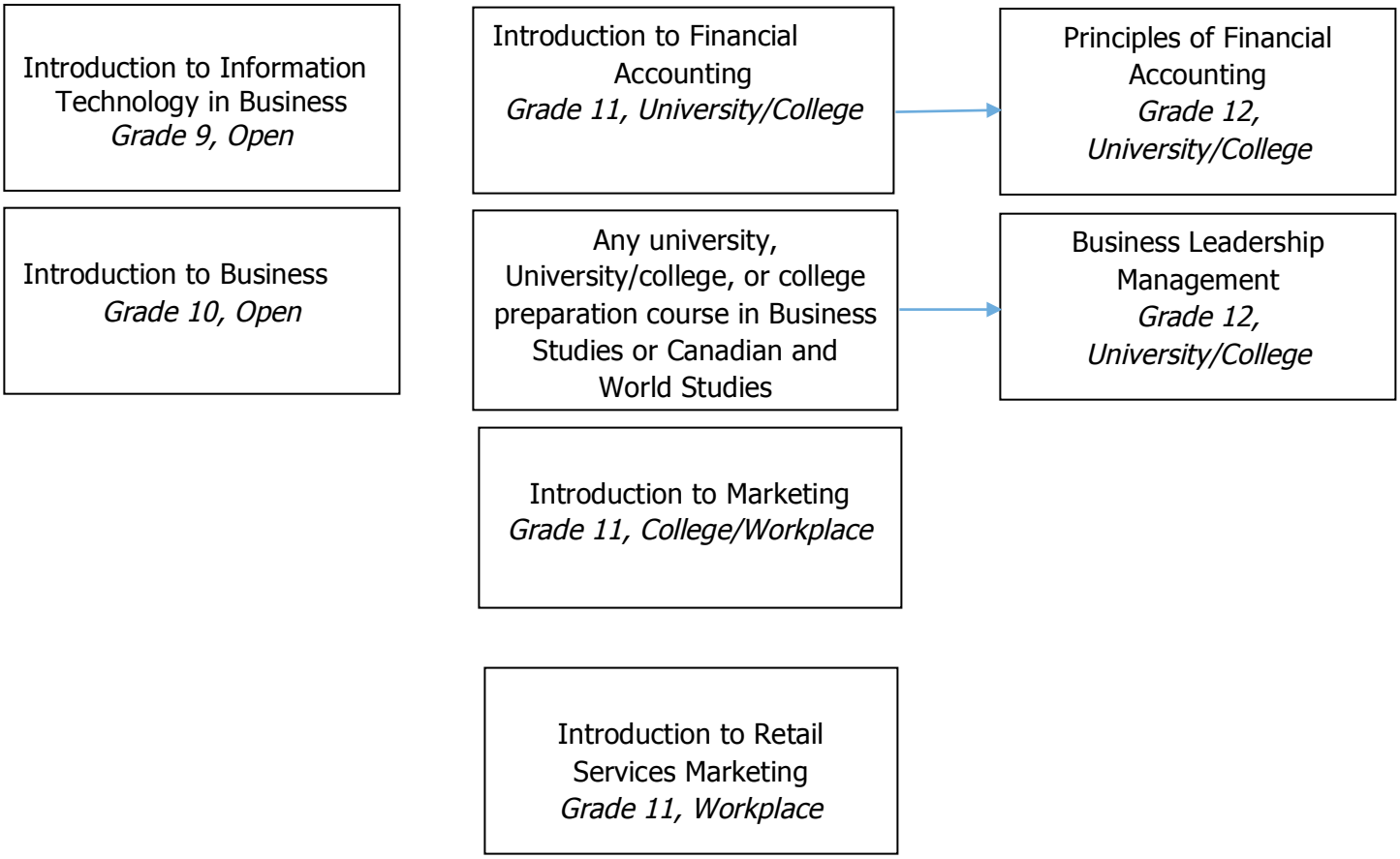
ARTS

AVI 3M - Visual Arts **University / College Prep. - Grade 11** 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 emergent 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, and information design.) *Prerequisite: Visual Arts, Grade 9 or 10* Credit Value: 1.0	**AVI 4M - Visual Arts** **University / College Prep. - Grade 12** 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 or Open* Credit Value: 1.0

BUSINESS STUDIES

Prerequisite Chart for Business Studies, Grade 9 – 12

The chart maps out all the course 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.



BUSINESS STUDIES

BTT1O
Information and Communication Technology in Business
Open - Grade 9
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 web site 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. Students will also produce projects that include animation, photography and video production.
Prerequisite: None
Credit Value: 1.0

BBI 2O - Introduction to Business
Open - Grade 10
This course introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and/or international scale. Students will also learn concepts and skills related to personal finance, entrepreneurship, and international business.
Credit Value: 1.0

BAF 3M - Introduction to Financial Accounting
University / College Prep. - Grade 11
This course introduces students to the fundamental principles and procedures of accounting, with emphasis on accounting procedures used in service and merchandising businesses. Students will develop an understanding of the connections between financial analysis, control, and decision- making in the management of a business, as well as the effects of technology and globalization on accounting procedures and the role of the accountant.
Prerequisite: None
Credit Value: 1.0

BUSINESS STUDIES

BMI 3C – Introduction to Marketing
College Prep. – Grade 11
This course introduces the fundamental concepts of marketing, with an emphasis on in-depth analysis of the influence of changes in the economy and global marketplace, trends and issues, and the impact of technology. Students will analyze the buying patterns of various consumers and the effect of marketing strategies, and will engage in marketing research. Students will also develop and present a marketing plan for a specific product.
Prerequisite: None
Credit Value: 1.0

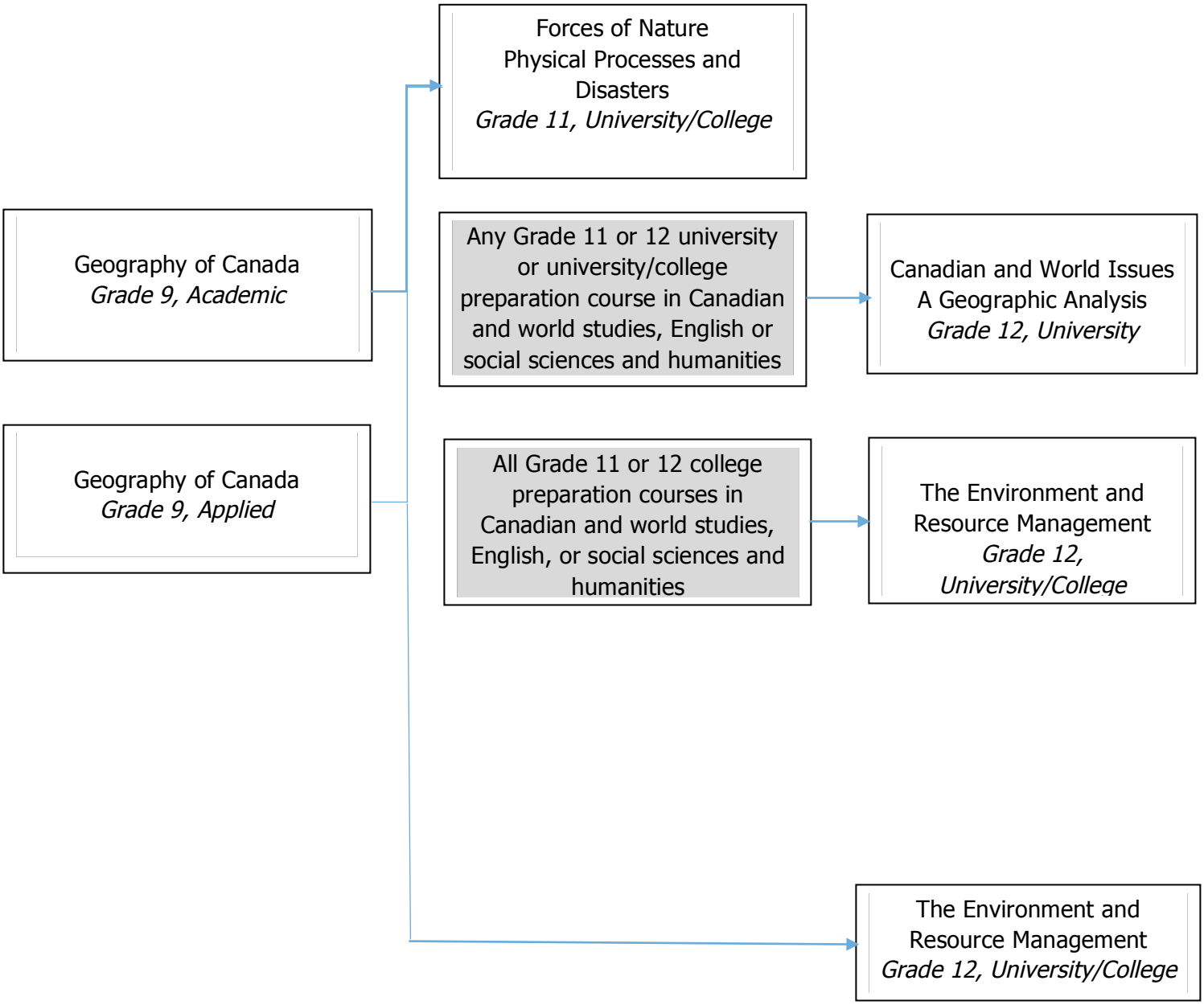
BMX 3E - Introduction to Retail
And Services Marketing
Workplace Prep. - Grade 11
This course focuses on developing knowledge and applying skills in the context of retail and services marketing. Students will learn about the importance of customer service, analyze the methods used to maintain customer loyalty, examine ways in which product presentation influences buyers, and investigate the critical factors in inventory control, including the role of technology.
Prerequisite: None
Credit Value: 1.0

BOH 4M – Business Leadership: Management
University/College Prep. – Grade 12
This course focuses on the development of leadership skills used in managing a successful business. Students will analyze the role of a leader in business, with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility are also emphasized.
Prerequisite: Any university, university/college, or college preparation course in business studies or Canadian and world studies
Credit Value: 1.0

BAT 4M - Principles of
Financial Accounting
University/College Prep. - Grade 12
This course emphasizes study of accounting principles related to financial statements. Students will learn about ways in which information in these statements is used in making business decisions, and about the effects on financial statements of using different methods of inventory valuation and adjusting and reversing entries. Students will also study various means of financing a business and ways in which the strength of a corporation can be determined through the reading of its annual report.
Prerequisite: Introduction to Financial Accounting, Grade 11,
University/College Preparation
Credit Value: 1.0

CANADIAN WORLD STUDIES

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.



CANADIAN AND WORLD STUDIES

CGC 1D - Issues in Canadian Geography
Academic - Grade 9
This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live.
*Prerequisite**:** None*
Credit Value: 1.0

CGC 1P - Issues in Canadian Geography
Applied - Grade 9
This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore a range of issues, including food and water supplies, competing land uses, and interactions with the natural environment, developing their awareness that issues that affect their lives are interconnected with issues in other parts of the world. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate choices related to sustainable living in Canada.
Prerequisite: None.
Credit Value: 1.0

CGF 3M - Forces of Nature: Physical Processes and Disasters
University/College Preparation –
Grade 11
In this course, students will explore physical processes related to the earth's water, land, and air. They will investigate how these processes shape the planet's natural characteristics and affect human systems, how they are involved in the creation of natural disasters, and how they influence the impacts of human disasters. Throughout the course, students will apply the concepts of geographic thinking and the geographic inquiry process and use spatial technologies to analyze these processes, make predictions related to natural disasters, and assess ways of responding to them.
*Prerequisite**:** Issues in Canadian Geography, Grade 9, Academic or Applied*
Credit Value: 1.0

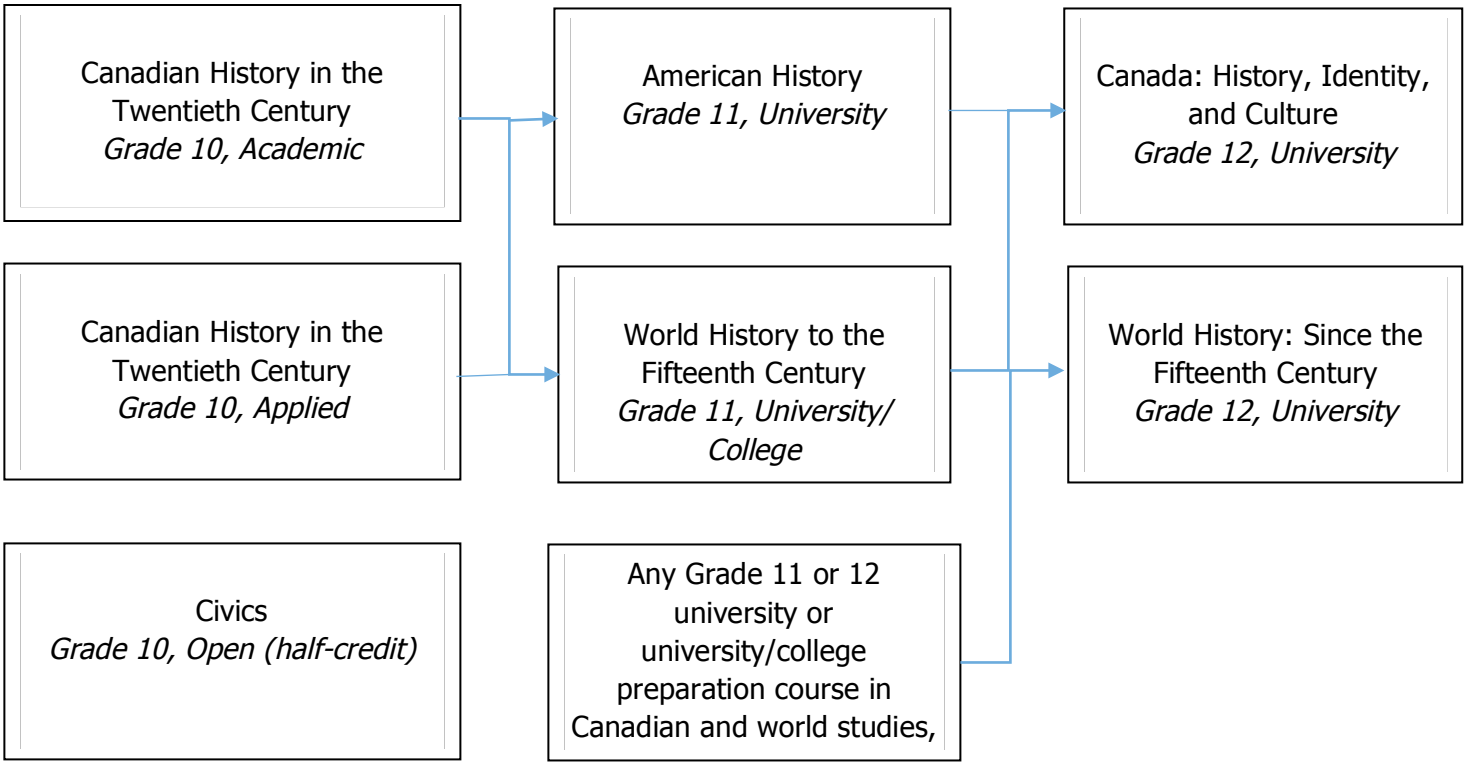
CANADIAN AND WORLD STUDIES

CGW 4U - World Issues: A Geographic Analysis **University Preparation - Grade 12** In this course, students will address the challenge of creating a more sustainable and equitable world. They will explore issues involving a wide range of topics, including economic disparities, threats to the environment, globalization, human rights, and quality of life, and analyze government policies, international agreements, and individual responsibilities relating to them. Students will apply the concepts of geographic thinking and the geographic inquiry process, including the use of spatial technologies, to investigate these complex issues and their impacts on natural and human communities around the world. *Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities* Credit Value: 1.0	**CGR 4M - The Environment and Resource Management** **University/College Preparation – Grade 12** This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyze these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment. *Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities* Credit Value: 1.0

CANADIAN AND WORLD STUDIES

Prerequisite Chart for Canadian and World Studies, Grades 9 – 12 History (including Civics)

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.



CANADIAN AND WORLD STUDIES

CHC 2D - Canadian History since World War I
Academic - Grade 10
This course explores social, economic, and political developments and events and their impact on the lives of different groups in Canada since 1914. Students will examine the role of conflict and cooperation in Canadian society, Canada's evolving role within the global community, and the impact of various individuals, organizations, and events on Canadian identity, citizenship, and heritage. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key issues and events in Canadian history since 1914.
Prerequisite: None
Credit Value: 1.0

CHC 2P - Canadian History since World War I
Applied - Grade 10
This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to Canadian heritage and identity. Students will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating the continuing relevance of historical developments and how they have helped shape communities in present-day Canada.
Prerequisite: None
Credit Value: 1.0

CHV 2O – Civics and Citizenship
Open - Grade 10
This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy schools, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.
Prerequisite: None
Credit Value: 0.5

CHA 3U - American History
University - Grade 11
This course explores key aspects of the social, economic, and political development of the United States from precontact to the present. Students will examine the contributions of groups and individuals to the country's evolution and will explore the historical context of key issues, trends, and events that have had an impact on the United States, its identity and culture, and its role in the global community. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating various forces that helped shape American history.
Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied
Credit Value: 1.0

CANADIAN AND WORLD STUDIES

CHW 3M - World History to the End of the Fifteenth Century
University/College Preparation – Grade 11
This course explores the history of various societies and civilizations around the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating social, political, and economic structures and historical forces at work in various societies and in different historical eras.
Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied
Credit Value: 1.0

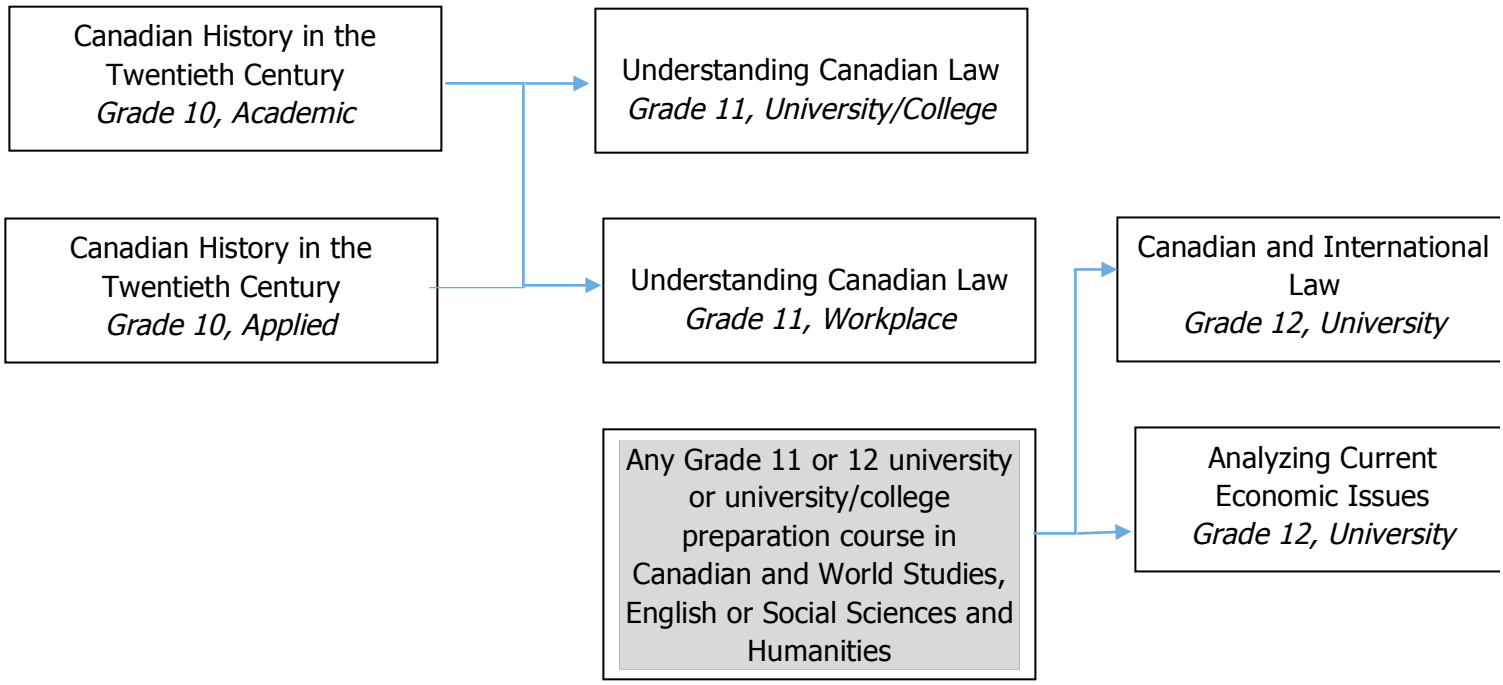
CHY 4U - World History since the Fifteenth Century
University Preparation – Grade 12
This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history.
Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities.
Credit Value: 1.0

CHI 4U - Canada: History, Identity, and Culture
University Preparation - Grade 12
This course traces the history of Canada, with a focus on the evolution of our national identity and culture as well as the identity and culture of various groups that make up Canada. Students will explore various developments and events, both national and international, from precontact to the present, and will examine various communities in Canada and how they have contributed to the development of identity and heritage in Canada. Students will investigate the development of culture and identity, including national identity, in Canada and how and why they have changed throughout the country's history. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate the people, events, and forces that have shaped Canada.
Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Credit Value: 1.0

CANADIAN AND WORLD STUDIES

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.



CANADIAN AND WORLD STUDIES

CLU 3M - Understanding Canadian Law
University/College Preparation – Grade 11
This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of laws relating to rights and freedoms in Canada; our legal system; and family, contract, employment, tort, and criminal law. Students will develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating a range of legal issues and formulating and communicating informed opinions about them.
Prerequisite: Canadian History since World War 1, Grade 10, Academic or Applied
Credit Value: 1.0

CLU 3E - Understanding Canadian Law in Everyday Life
Workplace Preparation - Grade 11
This course enables students to develop a practical understanding of laws that affect the everyday lives of people in Canada, including their own lives. Students will gain an understanding of the need for laws, and of their rights, freedoms, and responsibilities under Canadian law. Topics include laws relating to marriage, the workplace, cyberbullying, and criminal offences. Students will begin to develop legal reasoning skills and will apply the concepts of legal thinking and the inquiry process when investigating legal issues that are relevant to life in Canada today.
Prerequisite: Canadian History since World War 1, Grade 10, Academic or Applied, or locally develop compulsory course (LDCC)
Credit Value: 1.0

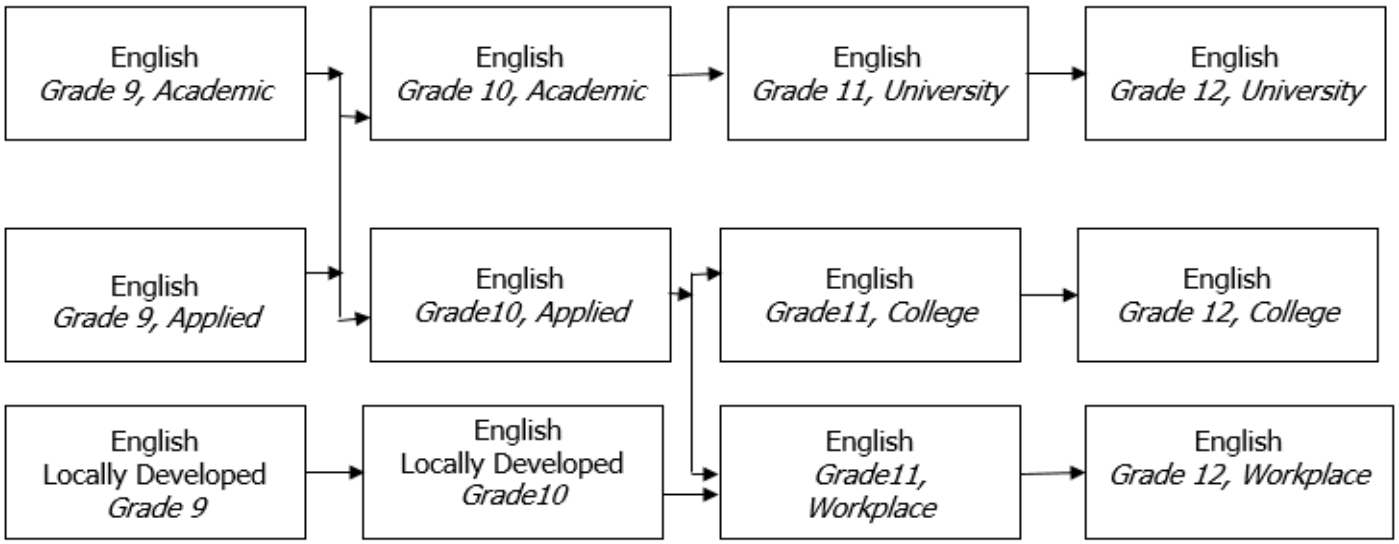
CLN4U - Canadian and International Law
University Preparation - Grade 12
This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts.
Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Credit Value: 1.0

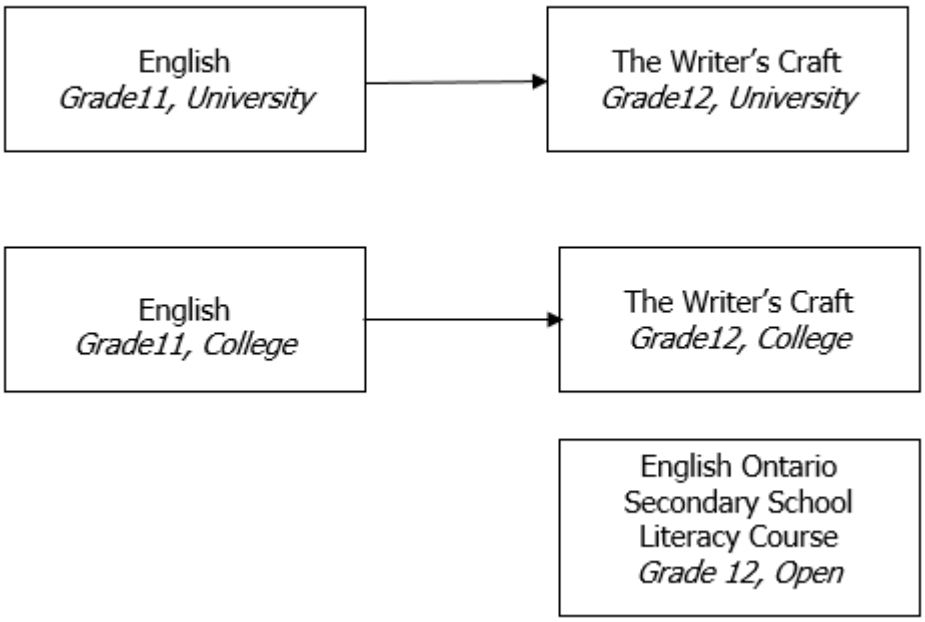
CIA 4U - Analysing Current Economic Issues
University Preparation - Grade 12
This course examines current Canadian and international economic issues, developments, policies, and practices from diverse perspectives. Students will explore the decisions that individuals and institutions, including governments, make in response to economic issues such as globalization, trade agreements, economic inequalities, regulation, and public spending. Students will apply the concepts of economic thinking and the economic inquiry process, as well as economic models and theories, to investigate, and develop informed opinions about, economic trade-offs, growth, and sustainability and related economic issues.
Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Credit Value: 1.0

ENGLISH

Prerequisite Charts for English, Grade 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.





ENGLISH

ENG 1D – English
Academic Grade 9
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 analyze 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 student for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.
Prerequisite: None
Credit Value: 1.0

ENG 1P – English
Applied Grade 9
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 Grade 11 and 12.
Prerequisite: None
Credit Value: 1.0

ENG 1L - Locally Developed Compulsory English – LDCC
Grade 9 English 1
This course provides foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and in the English Grade 11 Workplace Preparation course. The course is organized by strands that develop listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on developing foundational literacy skills and in using language clearly and accurately in a variety of authentic contexts. Students develop strategies and put into practice the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.
Prerequisite: None
Credit Value: 1.0

ENG 2L - Locally Developed Compulsory English – LDCC
Grade 10 English 1
In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, in the English Grade 11 Workplace Preparation course, or in the English: Contemporary Aboriginal Voices Grade 11 Workplace Preparation course. The course is organized by strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands the focus is on refining foundational literacy skills and in using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.
Prerequisite: A Grade 9 English Credit
Credit Value: 1.0

ENGLISH

ENG 2D – English
Academic - Grade 10
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 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: English, Grade 9, Academic or Applied. It is highly recommended that students take Grade 9 Academic English. Students must meet with Guidance Counsellor.
Credit Value: 1.0

ENG 2P – English
Applied - Grade 10
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: English, Grade 9, Academic or Applied
Credit Value: 1.0

ENG 3U – English
University Prep. - Grade 11
This course emphasizes the development of literacy, communication, and critical and creative thinking, and skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries and cultures as well as a range of informational and graphic texts, and create oral, written and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course.
Prerequisite: English, Grade 10, Academic
Credit Value: 1.0

ENG 3C – English
College Preparation - Grade 11
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 informational and graphic texts and literary works 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: English, Grade 10 Applied
Credit Value: 1.0

ENG 3E – English
Workplace Preparation - Grade 11
This course emphasizes the development of literacy, communication, and critical thinking, and creative thinking skills. 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: English, Grade 10* Credit Value 1.0

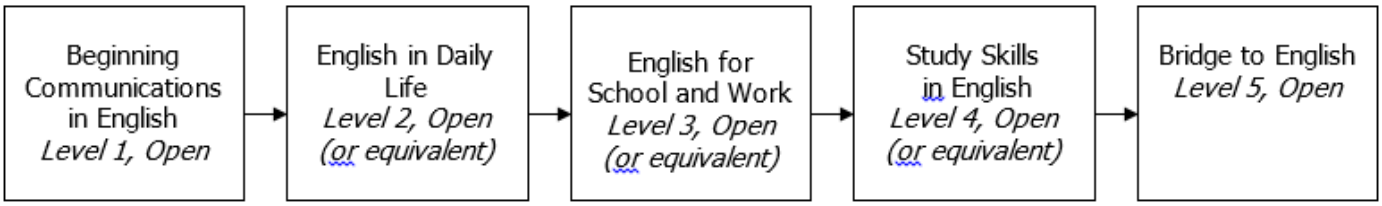
ENGLISH

ENG 4U – English Compulsory **University Preparation - Grade 12** This course emphasizes consolidation of literacy, communication, and critical thinking, creative thinking skills necessary for success in academic and daily life. Students will analyze a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college or the workplace. *Prerequisite: English, Grade 11, University Preparation* Credit Value: 1.0 **ENG 4C – English Compulsory** **College Prep. Grade 12** This course emphasizes consolidation of literacy, critical thinking, and communication skills. Students will analyze informational texts and literary works from various time periods, countries, and cultures; write research reports, summaries, and short analytical essays; complete an independent study project; and analyze the interactions among media forms, audiences, and media industry practices. An important focus will be on establishing appropriate style and using business and technical language effectively. *Prerequisite: English, Grade 11, College Preparation* Credit Value: 1.0	**EWC 4U - The Writer's Craft Optional** **University Preparation - Grade 12** This course emphasizes knowledge and skills related to the craft of writing. Students will analyze models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers. *Prerequisite: English, Grade 11, University Preparation* Credit Value: 1.0 **EWC 4C - The Writer's Craft Optional** **College Prep. – Grade 12** 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: English, Grade 11, College Preparation* Credit Value: 1.0

ENGLISH

ENG 4E – English Compulsory Workplace Preparation - Grade 12 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: English, Grade 11, Workplace Preparation* Credit Value: 1.0	**OLC 4O – English Ontario Secondary School Literacy Course** **Open – Grade 12** 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. 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 literacy portfolio containing a record of their reading experiences and samples of their writing. The credit earned for successful completion of this course may be used to meet either the Grade 12 English compulsory credit requirement or the Group 1 additional compulsory credit requirement, or may be used as an elective credit. *Prerequisite: Students who have been eligible to write the Ontario Secondary School Literacy Test, and have attempted and been unsuccessful at least once, are eligible to take this course.* Credit Value: 1.0

Prerequisite Charts for English as a Second Language and English Literacy Development



ENGLISH AS A SECOND LANGUAGE

ESL AO - ESL Level 1, Beginning Communication in English
Open
This course builds on students' previous education and language knowledge to introduce the English language and help students adjust to their new cultural environment. Students will develop the ability to use oral and written English for daily needs, acquire basic conversation skills and vocabulary, and use simple sentence patterns. Students will also acquire basic orientation information related to their needs as newcomers to Canada.
Prerequisite: None
Credit Value: 1.0

ESL BO - ESL Level 2, English in Daily Life
Open
This course expands students' essential English communication skills and cultural knowledge and introduces the language of classroom studies. Students will develop oral classroom skills and reading strategies, expand their vocabulary, and use more complex sentence patterns. Students will also learn how to use some school and community resources.
Prerequisite: ESL AO0 or equivalent
Credit Value: 1.0

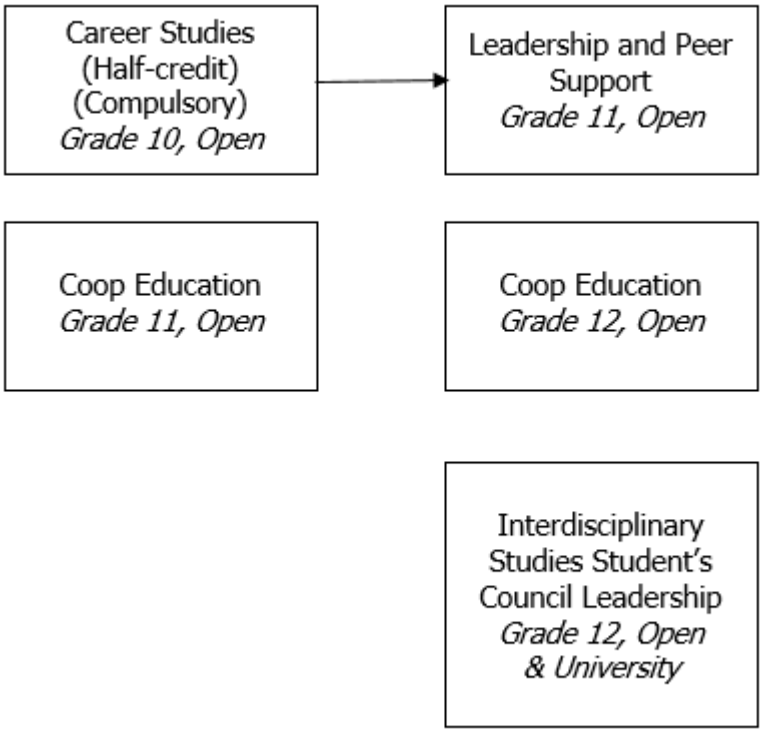
ESL CO - ESL Level 3, English for School and Work
Open
This course is designed to improve students' accuracy in using English in classroom situations, for personal and career planning, and to understand the changing world around them. Students will study and interpret a range of texts and produce a variety of forms of writing. Activities will also help students to develop their oral presentation skills and acquire study skills (including note-taking and summarizing skills) that will enhance their ability to learn in all subjects.
Prerequisite: ESL BO0 or equivalent
Credit Value: 1.0

ESL DO - ESL Level 4, Study Skills in English
Open
This course prepares students to use English with increasing accuracy in most classroom and social situations and to participate in society as informed citizens. Students will develop the reading, writing, and oral presentation skills required for success in all subjects. Students will study and interpret a variety of grade-level texts, develop oral communication skills through participation in informal debates and seminars, and extend their range of research skills.
Prerequisite: ESL CO0
Credit Value: 1.0

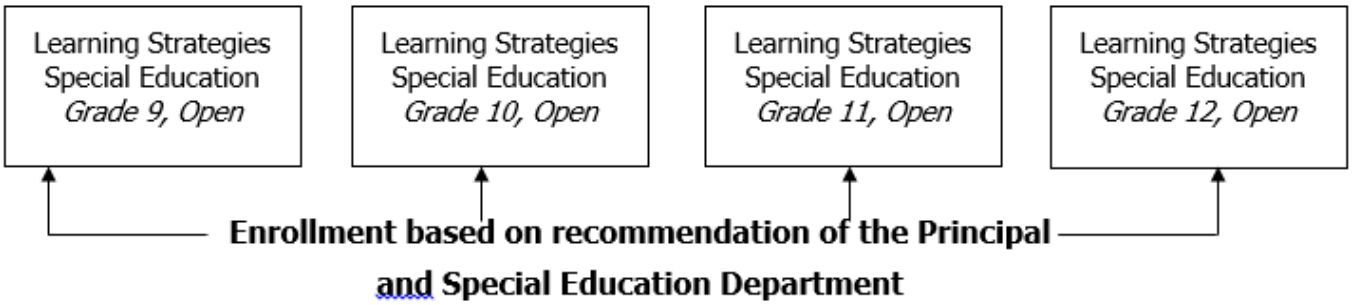
ESL EO - ESL Level 5, Bridge to English
Open
This course prepares students for secondary school English and other courses at the college and university preparation levels. Students will be encouraged to develop independence in reading literary works and academic texts, in writing essays and narratives, and in applying learning strategies and research skills effectively. Students will also learn to respond critically to print and media works.
Prerequisite: ESL DO0
Credit Value: 1.0

GUIDANCE AND CAREER EDUCATION

Prerequisite Chart for Guidance and Career 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.



Special Education



GUIDANCE AND CAREER EDUCATION

GLE 1O - Learning Strategies
Special Education
Open
This course introduces students to learning theories and strategies, prepares them to become effective independent learners, and helps them increase their personal management skills, both in school and in other contexts. Students will learn how to use reflective thinking, structured inquiring, active reading, memorization, goal-setting strategies, and time- and stress-management skills to identify and work towards their goals. The course will also help students identify their preferred ways of learning and use this knowledge to increase their confidence, motivation, and ability to learn.
Credit Value: 1.0

GLE 2O - Learning Strategies
Special Education
Open
This course introduces students to learning theories and strategies, prepares them to become effective independent learners, and helps them increase their personal management skills, both in school and in other contexts. Students will learn how to use reflective thinking, structured inquiring, active reading, memorization, goal-setting strategies, and time- and stress-management skills to identify and work towards their goals. The course will also help students identify their preferred ways of learning and use this knowledge to increase their confidence,

GLE 3O - Advanced Learning Strategies: Skills for Success
After Secondary School
Open - Grade 12
This course improves students' learning skills, preparing them to make successful transitions to work and postsecondary education and become independent, lifelong learners. Students will learn how to assess their learning abilities and use critical reading, time management, and other techniques for promoting effective learning. In addition, they will investigate learning requirements for employment and postsecondary education or training and develop plans for learning after secondary school.
Credit Value: 1.0

GLE 4O - Advanced Learning Strategies: Skills for Success
After Secondary School
Open - Grade 12
This course improves students' learning skills, preparing them to make successful transitions to work and postsecondary education and become independent, lifelong learners. Students will learn how to assess their learning abilities and use critical reading, time management, and other techniques for promoting effective learning. In addition, they will investigate learning requirements for employment and postsecondary education or training and develop plans for learning after secondary school.
Credit Value: 1.0

motivation, and ability to learn.
Credit Value: 1.0

GLC 2O - Career Studies
Open - Grade 10
This course teaches students how to develop and achieve personal goals in education and work and contribute to their communities. Student learning will include assessing their own knowledge, skills, and characteristics and investigating economic trends, workplace organization, work opportunities, and ways to search for work. The course explores post-secondary learning options, prepares students for community-based learning, and helps them build the capabilities needed for managing work and life transitions. Students will design action plans for pursuing their goals.
Credit Value: 0.5

GUIDANCE AND CAREER STUDIES

COP3O - Cooperative Education
Open - Grade 11
COP4O - Cooperative Education
Open - Grade 12
Co-operative Education is an exciting concept that allows students to combine in-school instruction with on-the-job experience as an alternative way of earning senior credits towards a Secondary School Diploma. It provides students with the opportunity to discover their skills and career interests in the workplace while still attending school. The credits are tied to an in-school subject the student has already taken or is taking concurrently. For instance, if a student were taking cooperative education at an 'accounting' work placement, the cooperative education credits would be tied to the student's senior level accounting course. Similarly, 'veterinary' work placements are tied to the senior level biology or chemistry course.
Students attend this placement for half of the school day, a.m. or p.m. and take regular in-school subjects the remaining two periods.
Many college and university programs are looking for volunteer or experience in a field related to the program for which they are applying. Cooperative education is an excellent way to meet this expectation.
Credit Value: 2.0

Note: Co-op 3O and 4O are Open Level Courses and are not considered as University or University/College level for entrance requirements to

GPP 3O - Leadership and Peer Support (Peer Tutoring)
Open - Grade 11
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.
Note: Students must have an 80% average or higher in the subject in which they are being considered to peer tutor. They must have an excellent attendance record (no more than 10 absences and lates overall in a semester). Also, they must meet with their Guidance Counsellor for an interview regarding their eligibility and an appropriate placement. The peer tutor teacher will place students based on their academic strengths and on the subject areas of most need.
Prerequisite: Career Studies, Grade 10, Open
Credit Value: 1.0

IDC 4OS & IDC 4US – Student Leadership
Open & University– Grade 12
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 finding beyond the

Universities	scope of a single subject or discipline. Through individual and collaborative inquiry and research, students will analyze the connections among diverse subjects and disciplines; develop information literacy skills in analyzing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. This course will introduce students to basic leadership theories as they pursue leadership roles in the school and community. Students will study and apply theory in developing skills in the areas of self-awareness, communication, planning/goal setting, and leadership. Students will develop the skills and knowledge to support them in pursuing a variety of leadership roles. *Prerequisite: None* *Anterequisite: IDC 4UP Sports Leadership and IDC 4UY Yearbook* Credit: 1.0

GUIDANCE AND CAREER EDUCATION

OYAP (ONTARIO YOUTH APPRENTICESHIP PROGRAM)

OYAP is a Ministry of Advanced Education and Skills Development, the short form is MAESD. It is a program that provides senior students with the opportunity to complete the requirements for a secondary school diploma while receiving apprenticeship training. OYAP is for those students who have career plans in the skilled trades. There are 160 trades recognized by MAESD. The hands-on experience in any of the apprenticeable trades is obtained through the cooperative education program (co-op). The student earns co-op credits as well as hours toward the number required for journeyperson status in the chosen trade.

Criteria for Student Acceptance into OYAP

Students will:

- ☐ have successfully completed 16 credits, be enrolled full time and be 16 years of age
- ☐ agree to follow an educational plan designed specifically for the apprenticeship destination and to complete the requirements for the OSSD
- ☐ demonstrate competencies in Math, English and Technological Studies
- ☐ follow the application procedure for co-op

To pursue an OYAP placement in any of the skilled trades, see your Guidance Counsellor or Co-op

Apprenticeship

Apprenticeship is a formal agreement with MAESD between a person who wants to learn a skilled trade and an employer who needs a skilled worker and is able and willing to do the training. Students may register as apprentices and begin their formal apprenticeship training while they earn credits toward the OSSD. The registration of an apprentice is at the discretion of the employer, therefore apprenticeship cannot be guaranteed. Eighty to ninety percent of the training occurs on the job, where the apprentice learns by watching, practicing and performing tasks. Ten to twenty percent is theoretical, in-school training delivered by a college or MAESD approved delivery agent.

During the secondary school, a student may also begin the Level 1 Theory required for an apprenticeship. The Level 1 Theory component for the following apprenticeships may be offered through OYAP in the 2017-2018 academic school year. The student will complete secondary school cooperative education credits in conjunction with the College or approved Training Centre Level 1 Apprenticeship program.

Level 1 Apprenticeship Theory Programs

General Carpenter, Hairstylist, Brick and Stone Mason, Plumbing, Chef - St. Lawrence College, Kingston

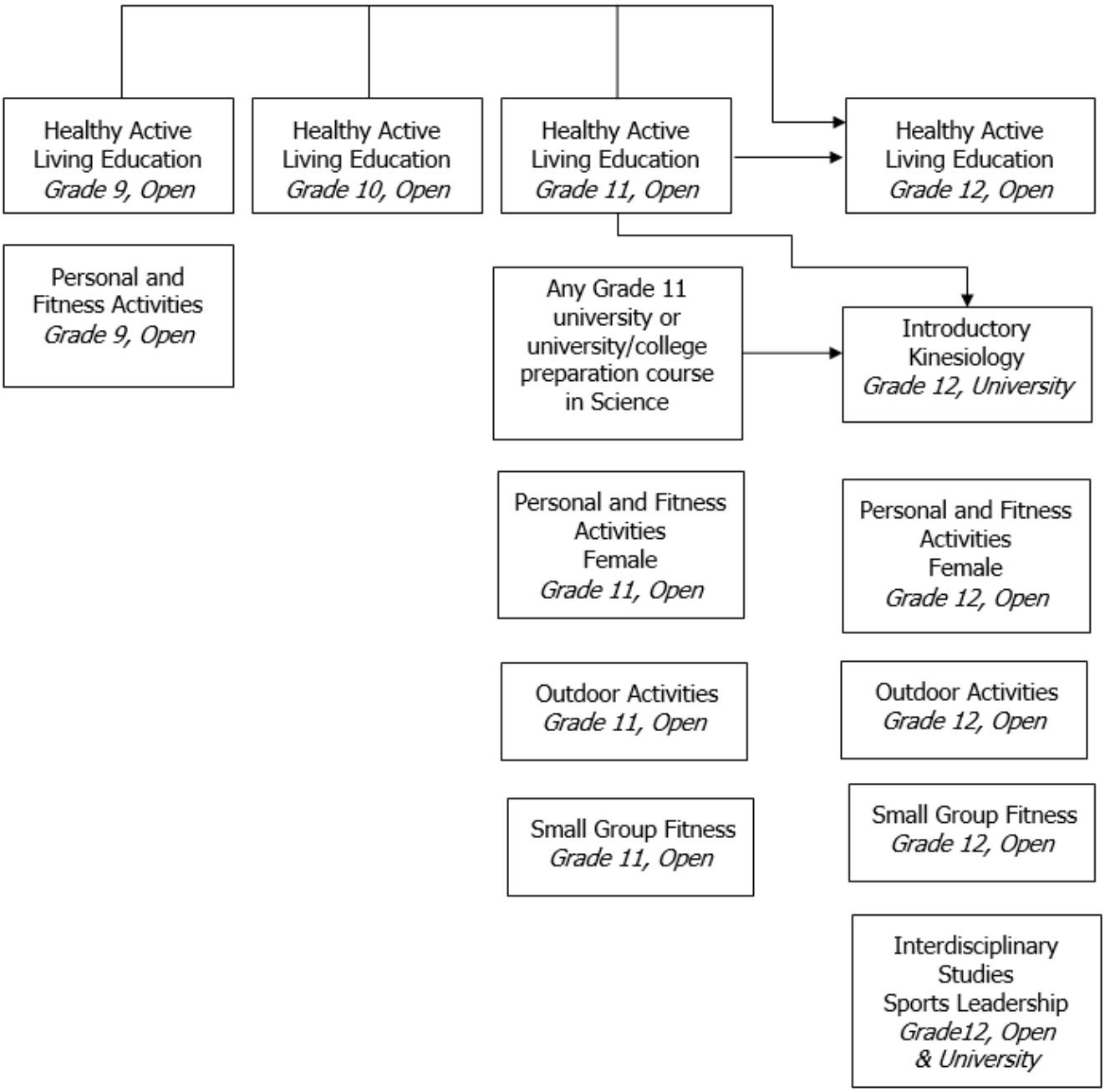
These programs require students to have a Semester of Grade12 dedicated to the combined co-op/theory program. To be successful the student will be

For more information on OYAP visit ***www.ontgov.on.ca/apprenticeship***	required to meet the training requirements of MAESD. Although there will be no secondary school credits attached to the theory programs, the schedule allows students to complete secondary school cooperative education credits in conjunction with Level 1 Apprenticeship. The theory component for all other apprenticeships will be completed after secondary school, with some apprenticeship hours and some skill sets signed off before graduation through OYAP.

HEALTH AND PHYSICAL EDUCATION

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.



HEALTH AND PHYSCIAL EDUCATION

PPL 1O - Healthy Active Living **Open - Grade 9** This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities,	**PPL 2O - Healthy Active Living Education** **Open - Grade 10** This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of

students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire and understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
* This course is segregated into male and female only sections.
Credit Value: 1.0

PAF 1O – Personal and Fitness Activities
Open - Grade 9
This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire and understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
* This adapted course will focus on developing these skills in a non-competitive manner.
* This course is segregated into male and female only sections.
Credit Value: 1.0

physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
* This course is segregated into male and female only sections.
Prerequisite: None
Credit Value: 1.0

PPL 3O - Healthy Active Living Education
Open - Grade 11
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
Prerequisite: None
Credit Value: 1.0

HEALTH AND PHYSCIAL EDUCATION

PAD 3O - Healthy Living And Outdoor Activities
Open - Grade 11
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of

PAD 4O - Healthy Living And Outdoor Activities
Open - Grade 12
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of

physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
*This course will focus on meeting these expectations in an outdoor environment. Activities will include fishing, hiking, canoeing, biking and wilderness survival.
Prerequisite: None
Credit Value:1.0

PAF 3O - Healthy Living And Personal Fitness Activities
Open - Grade 11
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
*This course will focus on meeting these expectations in a non-competitive environment
Prerequisite: None
Credit Value:1.0

physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
*This course will focus on meeting these expectations in an outdoor environment. Activities will include fishing, hiking, canoeing, biking and wilderness survival.
Prerequisite: None
Credit Value:1.0

PAF 4O - Healthy Living And Personal Fitness Activities
Open - Grade 12
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.
*This course will focus on meeting these expectations in a non-competitive environment
Prerequisite: None
Credit Value:1.0

HEALTH AND PHYSICAL EDUCATION

PAI 3O - Healthy Living And Small Group Activities
Open - Grade 11
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range

PAI 4O - Healthy Living And Small Group Activities
Open - Grade 12
This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range

of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. *This course will focus on developing fitness (body composition, flexibility, strength, endurance and cardio). *Prerequisite: None* Credit Value:1.0 **PSK 4U – Intro to Kinesiology** **University Prep. - Grade 12** This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration. *Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education* Credit Value: 1.0	of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. *This course will focus on developing fitness (body composition, flexibility, strength, endurance and cardio). *Prerequisite: None* Credit Value:1.0 **IDC 4OP & IDC 4UP - Sports Leadership** **Open & University Prep. – Grade 12** The course analyzes the role of sports and athletics in contemporary culture, history and compares various cultures. Using diverse resources and research methods, students will analyze the depiction of sports and health in media and literature and will examine trends in the business and communication of sports related activities. They will also explore the importance of personal fitness and healthy living, the relationship between amateur and professional sports and local and provincial opportunities and careers in sports, outdoor education and physical activity. The impact of sports on society is examined at both the macro and micro-dimensions. *Prerequisite: Any Grade 11or 12 open course in health and physical education however an interview with the teacher is required.* *Anterequiste: IDC 4US Student Leadership and IDC 4UY Yearbook* Credit Value: 1.0

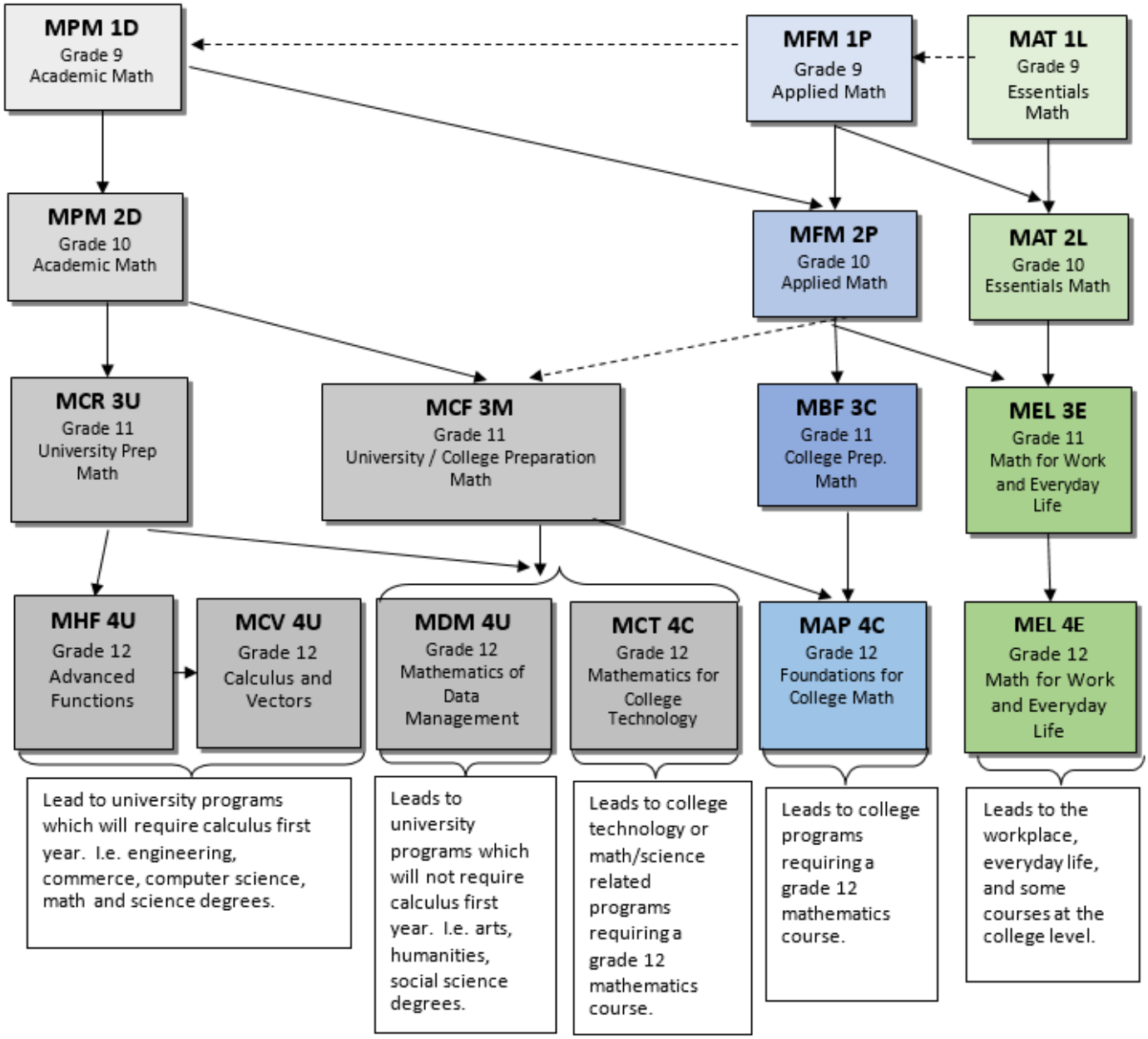
MATHEMATICS

Prerequisite Chart for Mathematics, Grades 9 – 12

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

Prerequisite Chart for Mathematics, Grades 9 – 12

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



1) MCV 4U must be taken after MHF4U or at the same time.

2) To graduate, a students must have **3** credits in mathematics, with one of the credits at the grade 11 or 12 level.

MATHEMATICS

MPM 1D - Principles of Mathematics Academic - Grade 9 This course enables students to develop understanding of mathematical concepts related to	**MAT 1L - Locally Developed Compulsory Mathematics - LDCC** **Grade 9 Mathematics 1** This course emphasizes further development of

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 representations of a relationship. They will also explore relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
*EQAO math assessment takes place during the last month of the term and is worth 10% of the student's final mark.
Successful completion of this course prepares students for Principles of Mathematics, Grade 10, Academic (MPM2D) or Foundations of Mathematics, Grade 10, Applied (MFM2P).
Credit Value: 1.0

MFM 1P - Foundations of Mathematics Applied - Grade 9
This course enables students to develop understanding of mathematical concepts related to introductory algebra, proportional reasoning, and measurement and geometry through investigation, the effective use of technology, and hands-on activities. Students will investigate real-life examples to develop various representations of linear relationships and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.
*EQAO math assessment takes place during the last month of the term and is worth 10% of the student's final mark.
Successful completion of this course prepares students for Foundations of Mathematics, Grade 10, Applied (MFM2P). (*Note: Students who wish to take Principles of Mathematics, Grade 10, Academic (MPM2D) after completing this course will need to achieve the MPM 1D credit.)*
Credit Value: 1.0

mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, in the Grade 10 LDCC course, and in the Mathematics Grade 11 and Grade 12 Workplace Preparation courses. Three strands related to money sense measurement, and proportional reasoning organize the course. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to further develop their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.
Prerequisite: None
Credit Value: 1.0

MPM 2D – Principles of Mathematics Academic - Grade 10
This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
Prerequisite: *MPM1D0 or MFM 1P0*
Credit Value: 1.0

MATHEMATICS

MFM 2P - Foundations of Mathematics, Applied - Grade 10
This course enables students to consolidate their understanding of linear relations and extend their

MCR 3U - Functions University - Grade 11
This course introduces the mathematical concept of the function by extending students' experiences with

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.
*Prerequisit*e: Grade 9 Mathematics, Academic or Applied
Credit Value: 1.0

MAT 2L – Locally Developed Compulsory Mathematics - LDCC - Grade 10 Mathematics 1
This course emphasizes the extension of mathematical knowledge and skill to prepare students for success in their everyday lives, in the workplace, and in the Mathematics Grade 11 and 12 Workplace Preparation courses. The curse is organized by three stands related to money sense measurement, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skill by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.
Prerequisite: *A Grade 9 Mathematics credit*
Credit Value: 1.0

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
Credit Value: 1.0

MCF 3M - Functions and Applications, University/College - Grade 11
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
Credit Value: 1.0

MATHEMATICS

MBF 3C - Foundations for College Mathematics, Grade 11, College
This course enables students to broaden their

MCV 4U - Calculus and Vectors Grade 12 - University
This course builds on students' previous experience

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
Credit Value: 1.0

MEL 3E Mathematics for Work and Everyday Life Grade 11 - Workplace
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
Credit Value: 1.0

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.
Credit Value: 1.0

MHF 4U - Advanced Functions, Grade 12 - University
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
Credit Value: 1.0

MATHEMATICS

MDM 4U - Mathematics of Data Management Grade 12 - University
This course broadens students' understanding of

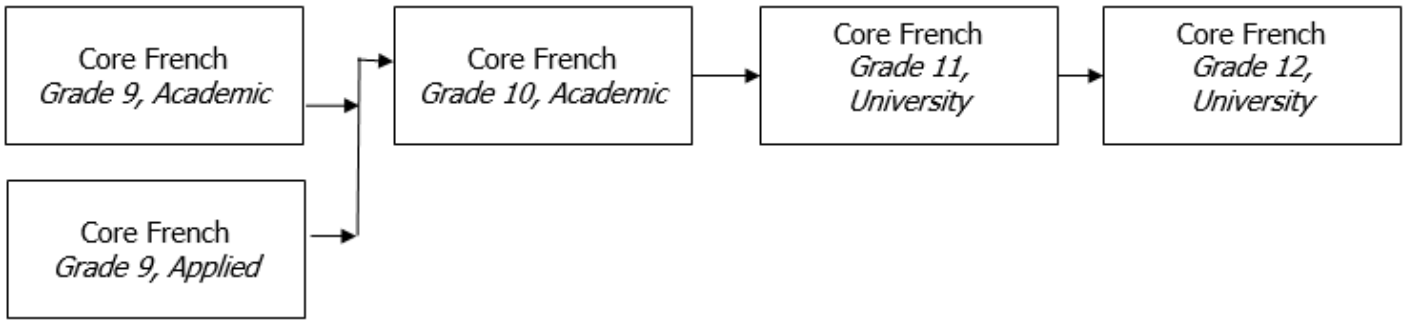
MAP4C - Foundations for College Mathematics Grade 12 - College
This course enables students to broaden their

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 Credit Value: 1.0 **MCT4C - Mathematics for College Technology** **Grade 12 - College** 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 Credit Value: 1.0	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 Credit Value: 1.0 **MEL 4E - Mathematics for Work and Everyday Life** **Grade 12 - Workplace** This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. *Prerequisite*: Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation Credit Value: 1.0

MODERN LANGUAGES

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 prerequisite for them.



Students who have successfully completed elementary Extended French or French Immersion programs and do not wish to pursue further studies in these programs could be considered for advanced placement in the Core French program, if they demonstrate the necessary knowledge and skills. Students need to contact their guidance Counsellor.

MODERN LANGUAGES

FSF 1D - Core French **Academic - Grade 9** This course provides opportunities for students to communicate and interact in French with increasing	**FSF 2D - Core French** **Academic - Grade 10** This course provides opportunities for students to communicate in French about personally relevant,

independence, with a focus on familiar topics related to their daily lives. Students will develop their skills in listening, speaking, reading, and writing by using language learning strategies introduced in the elementary Core French program, and will apply creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.
Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent.
Credit Value: 1.0

FSF 1P - Core French
Applied - Grade 9
This course provides opportunities for students to communicate and interact in French in structured situations, with a focus on everyday topics, and to apply their knowledge of French in everyday situations. Students will develop listening, speaking, reading, and writing skills introduced in the elementary Core French program, through practical applications and concrete examples, and will use creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.
Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent.
Credit Value: 1.0

familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, and writing through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.
Prerequisite: Core French, Grade 9, Academic or Applied.
Credit Value: 1.0

FSF 3U - Core French
University Preparation - Grade 11
This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their listening, speaking, reading, and writing skills, as well as their creative and critical thinking skills, through responding to and exploring a variety of oral and written texts. They will also broaden their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.
Prerequisite: Core French, Grade 10, Academic
Credit Value: 1.0

MODERN LANGUAGES

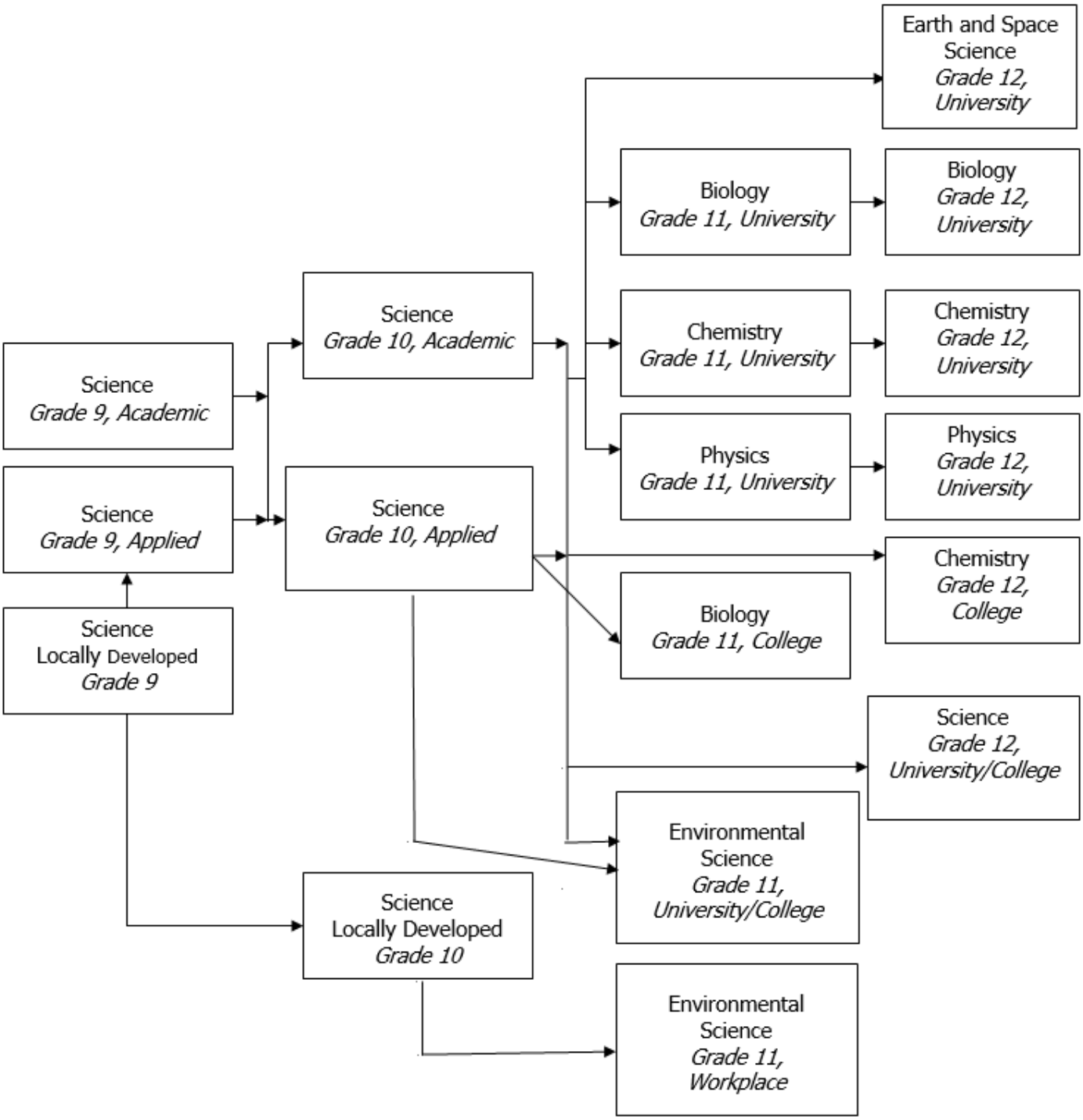
FSF 4U - Core French
University Prep. - Grade 12
This course provides extensive opportunities for

students to speak and interact in French independently. Students will develop their listening, speaking, reading, and writing skills, apply language learning strategies in a wide variety of real-life situations, and develop their creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning. *Prerequisite: Core French, Grade 11, University Preparation* Credit Value: 1.0	

SCIENCE

Prerequisite Chart for Science, Grade 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.



SNC 1D - Science
Academic - Grade 9
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
Credit Value: 1.0

SNC 1P - Science
Applied - Grade 9
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
Credit Value: 1.0

SNC 1L - Locally Developed Compulsory Science
Grade 9 Science 1
This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking and the relationship between science, society, and the environment, to prepare students for success in everyday life, in the workplace and in the Science Grade 11 Workplace Preparation course. Students explore a range of topics including science in daily life, properties of common materials, life sustaining processes in simple and complex organisms, and electrical circuits. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities.
Prerequisite: None
Credit Value: 1.0

SNC 2L - Locally Developed Compulsory Science – LDCC
Grade 10 Science 1
This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the environmental impact of science and technology, to prepare students for success in everyday life, in the workplace and in the Science Grade 11 Workplace Preparation course. Students explore a range of topics including science in the media, interactions of common materials, interdependence of organisms in communities, and using electrical energy. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities.
Prerequisite: None
Credit Value: 1.0

SNC 2D – Science
Academic - Grade 10
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: SNC 1D1 or SNC1P1
It is highly recommended that students take SNC 1D. Students must speak to Guidance Counsellor.
Credit Value: 1.0

SNC 2P – Science
Applied - Grade 10
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: SNC 1D1 or SNC 1P1
Credit Value: 1.0

SBI 3U – Biology
University Prep. - Grade 11
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: SNC2D1
Credit Value: 1.0

SBI 3C – Biology
College Prep. - Grade 11
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: SNC2D1 or SNC2P1
Credit Value: 1.0

SCH 3U – Chemistry
University Prep. - Grade 11
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: SNC2D1
Credit Value: 1.0

SCIENCE

SPH 3U – Physics

SBI 4U – Biology

Academic - Grade 11
This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.
Prerequisite: SNC2D1
Credit Value: 1.0

SNC4M - Science, University/College Preparation - Grade 12
This course enables students, including those pursuing post-secondary 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: *Science, Grade 10, Academic, or any Grade 11 university, university/college, or college preparation course in science*
Credit Value: 1.0

SCH 4C - Chemistry
College Prep. - Grade 12
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: SNC2D1 or SNC2P1
Credit Value: 1.0

University Prep. - Grade 12
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: SBI3U1
Credit Value: 1.0

SCH 4U – Chemistry
University Preparation - Grade 12
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: SCH3U1
Credit Value: 1.0

SPH 4U – Physics
University Preparation - Grade 12
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 relating 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: SPH3U1
Credit Value: 1.0

SCIENCES

SNV 3M - Environmental Science
University/College Preparation - Grade 11

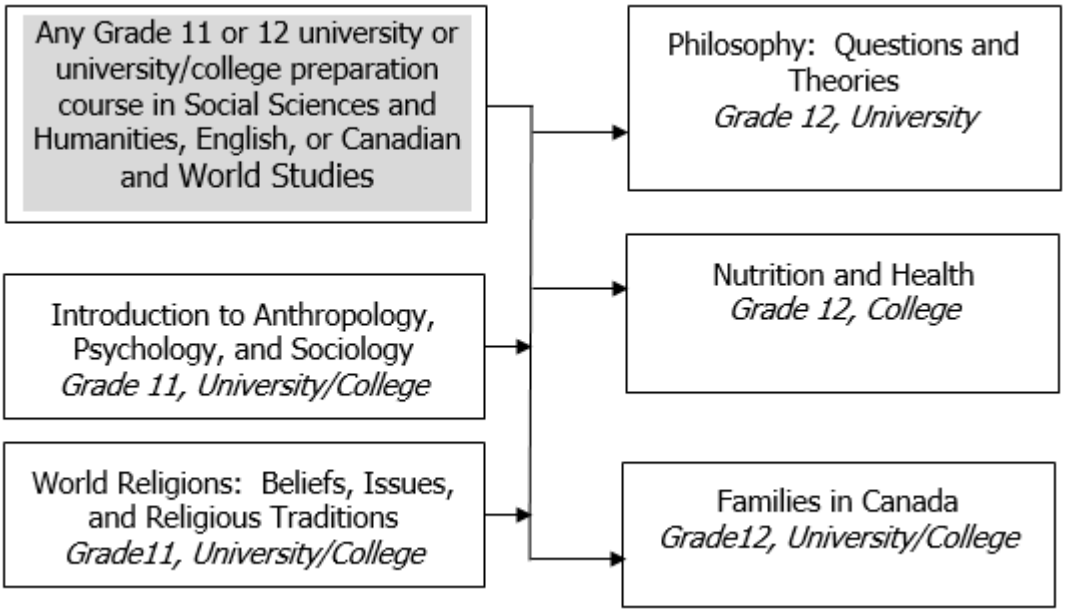
SNV 3E - Environmental Science
Workplace Preparation - Grade 11

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: SNC2D1 or SNC2P1* Credit Value: 1.0	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 environmental responsibility in the workplace. Emphasis is place on relevant, practical application 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: SNC1D, SNC1P, SNC1L or SNC2L* Credit Value: 1.0

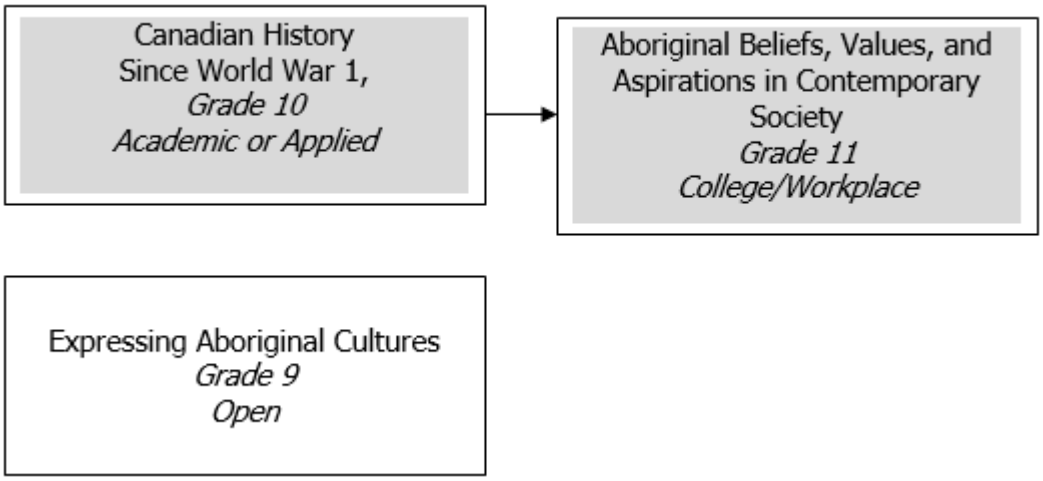
SOCIAL SCIENCE AND HUMANITIES

Prerequisite Chart for Social Sciences and Humanities, Grade 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.



Native Studies – Aboriginal Beliefs, Values and Aspirations in Contemporary Society



SOCIAL SCIENCE AND HUMANITIES

HSP 3U - Introduction to Anthropology, Psychology, and Sociology	**Descriptions of the following Social Sciences and Humanities Courses can be found on**

Grade 11 - University Preparation This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science, and to become familiar with current thinking on a range of issues within the three disciplines. *Prerequisite: The Grade 10 academic course in English or the Grade 10 academic history course (Canadian and world studies).* Credit Value: 1.0 **HSP3C - Introduction to Anthropology, Psychology, and Sociology, Grade 11 College Preparation** This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. They will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines. *Prerequisite: None.* Credit Value: 1.0	**pages 41 to 43 in the Religion subject category:** **HRT3M - Faith and Culture** **HRF 30 - Faith and Culture** **HRE4M - Church and Culture** **HRE4O -Church and Culture** **HHS4U/HHS4C – Families in Canada** **HZT 4U - Philosophy: Questions and Theories** **HFA 4C – Nutrition and Health** **Grade 12 - College Preparation** This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health. *Prerequisite: any university, college or university/college preparation course in social sciences and humanities, English, or Canadian and world studies* Credit Value: 1.0

SOCIAL SCIENCES (NATIVE STUDIES)

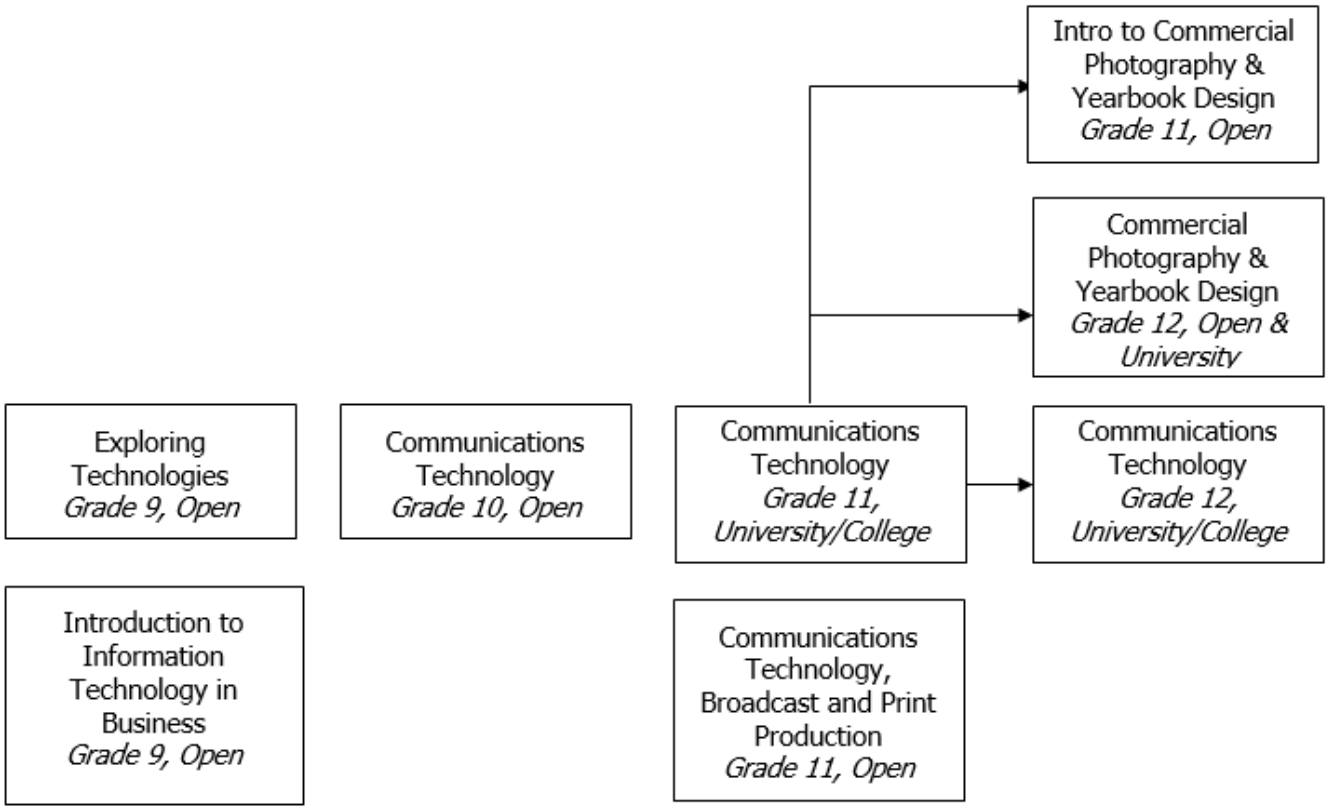
NAC 1O1 – Expressions of Aboriginal Cultures Open - Grade 9	**NBV3C - World Views and Aspirations of First Nations, Métis, and Inuit Peoples in Canada**

This course will explore a variety of contemporary and traditional First Nations, Métis, and Inuit art forms such as new media, storytelling, installation and performance art. Students will examine the interrelationships between Aboriginal art forms and individual and cultural identities and values. They will create art works to express their own ideas and understanding of Aboriginal identity, relationships, and sovereignty by using a range of media, processes, techniques, and styles. *Prerequisite: None*. Credit Value: 1.0 Note: This course will substitute for the Art compulsory credit.	**College / Workplace – Grade 11** This course explores diverse world views and aspirations of First Nations, Métis, and Inuit peoples in Canada. Students will examine the traditional context for – and current economic, cultural, and social successes and challenges related to – those beliefs, values, and aspirations. Students will explore their own and others' world views, and the factors that shape world views, to develop an understanding of how traditional and contemporary values influence the aspirations of First Nations, Métis, and Inuit peoples. Students are also given the opportunity to develop their own problem-solving strategies to address an issue of diversity and inclusion. *Prerequisite:* Grade 10 First Nations, Métis, and Inuit Peoples in Canada, Open, or Grade 10 Canadian History since World War I, Academic, or Applied Credit Value: 1.0 **NBV3E - World Views and Aspirations of First Nations, Métis, and Inuit Peoples in Canada Workplace Preparation – Grade 11** This course explores diverse world views and aspirations of First Nations, Métis, and Inuit peoples in Canada. Students will examine issues of identity facing First Nations, Métis, and Inuit individuals and communities with respect to changing relationships with the land, nature, one another, and Canada. Students will explore their own world views, and the factors that shape world views over time, to develop an understanding of how traditional and contemporary values influence the aspirations of First Nations, Métis, and Inuit peoples *Prerequisite* Grade 10 First Nations, Métis, and Inuit Peoples in Canada, Open, or Grade 10 Canadian History since World War I, Academic, Applied, or Locally Developed Compulsory Credit (LDCC) Credit Value: 1.0

TECHNOLOGIES

Prerequisite Charts for Technological Education, Grade 9 – 12
Part A: Broad-Based Technology

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. (Grade 9 Exploring Technologies is strongly recommended for grades 10, 11 & 12 Technological Education Courses.)



TECHNOLOGIES

TIJ 10 - Exploring Technologies Open - Grade 9	**TGJ3O - Communications Technology: Broadcast and Print Production,**

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 career in technology-related fields.
Projects may include: animation, audio video production, computers, architectural design, photography, robotics, woodworking, and transportation, and 3D printing.
***Prerequisite**: None.*
NOTE: TIJ 1O is strongly recommended for students wishing to take grades 10, 11, and 12 Technological Education Courses.
Credit Value: 1.0

TGJ 2O – Communication Technology
Open - Grade 10
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 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 explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields.
Prerequisite: None, however, TIJ 1O or BTT1O is strongly recommended.
Course projects center around the students' world: teams, hobbies, clubs, family, etc ……
Credit Value: 1.0

Grade 11 - Open
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
Credit Value: 1.0

TGJ3M Communications Technology Grade 11 - University/College
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. Based on a theme of Advertising: students produce radio, magazine, and TV ads.
Prerequisite: None
Credit Value: 1.0

TECHNOLOGIES

TGJ4M - Communications Technology Grade 12 - University/College
This course enables students to further develop

IDC 4OY & IDC 4UY- Interdisciplinary Studies – (Commercial Photography and Yearbook Design)

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. A portfolio development course for college, university, workplace applications: students produce a broad range of projects 9documentary video, logos, short movie, photo poster, blog etc……
Prerequisite: Communications Technology, Grade 11, University/College Preparation
Credit Value: 1.0

IDC 3OY – Interdisciplinary Studies (Introduction to Commercial Photography and Yearbook Design) – Open - Grade 11
This course prepares students for further study in graphics, journalism and / or commercial photography. The course integrates digital imaging, studio photography, interviewing, caption and story writing, graphics, desktop publishing and page design. Students will plan, design, and produce yearbook pages for publication. This course examines communications systems and design and production processes in the area of electronic, live, recorded, and graphic communication. Students will create, manage, and distribute projects both independently and in project teams. Students will also study industry standards and regulation and health and safety issues, and will explore careers, the importance of lifelong learning, and the impact of communication technology on society and the environment.
Prerequisite: None
Recommended: TGJ 2O
Credit Value: 1.0

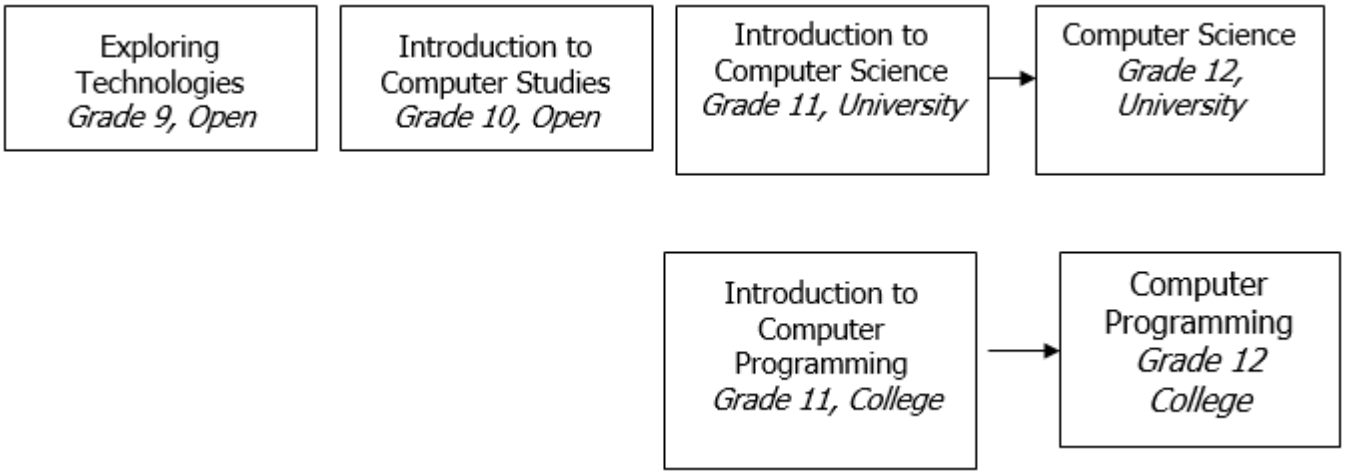
Open & University Preparation – Grade 12
This course prepares students for further study in graphics, journalism and / or commercial photography. The course integrates digital imaging, studio photography, interviewing, caption and story writing, graphics, desktop publishing and page design. Students will plan, design, and produce yearbook pages for publication. This course examines communications systems and design and production processes in the area of electronic, live, recorded, and graphic communications. Students will create, manage, and distribute complex electronic, graphic, recorded projects independently and in project teams. Students will also study industry standards and regulations and health and safety issues, and will explore careers, the importance of lifelong learning, and the impact of communications technology on society and the environment.
Prerequisite: TGJ 3M and interview with the instructor. Ante requisite: IDC 4UP, IDC 4US
Credit Value: 1.0

TECHNOLOGIES

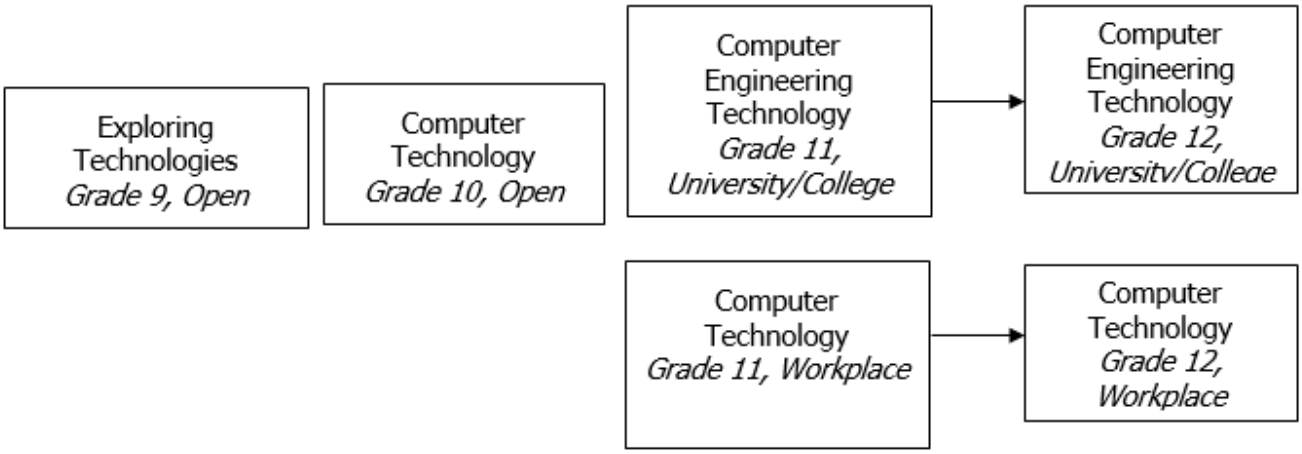
Computer Studies

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 courses to course.

Computer Studies



Computer Engineering Technology



TECHNOLOGIES

TIJ 10 - Exploring Technologies	**TEJ 3E - Computer Technology**

Open - Grade 9
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 career in technology-related fields.
Projects may include: animation, audio video production, computers, architectural design, photography, robotics, woodworking, and transportation, and 3D printing.
***Prerequisite**: None.*
NOTE: TIJ 1O is strongly recommended for students wishing to take grades 10, 11, and 12 Technological Education Courses.
Credit Value: 1.0

TEJ 2O - Computer Technology
Grade 10 Open
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, however BTT 1O is strongly recommended.
Credit Value: 1.0

Grade 11 Workplace Preparation
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, however TEJ 2O is strongly recommended.
Credit Value: 1.0

TEJ 3M -Computer Engineering Technology
Grade 11 University / College Preparation
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, however TEJ 2O is strongly recommended.
Credit Value: 1.0

TEJ 4M - Computer Engineering Technology
Grade 12 University / College Preparation
This course extends students' understanding of computer systems and computer interfacing with external devices. Students will assemble computer systems by installing and configuring appropriate hardware and software, and will learn more about fundamental concepts of electronics, robotics, programming, and networks. Students will examine related environmental and societal issues, and will explore postsecondary pathways leading to careers in computer technology.
Prerequisite: TEJ 3M
Credit Value: 1.0

TECHNOLOGIES

TEJ 4E - Computer Technology

Grade 12 Workplace Preparation This course enables students to further develop their practical understanding of computer hardware, software, networks, and operation systems. Students will use utility and application software, and will follow proper procedures for installing, maintaining, and troubleshooting computer systems and networks. In addition to demonstrating an understanding of the ethical use and environmental effects of computers, students will develop marketable skills and assess career opportunities in the field. *Prerequisite: TEJ 3E* Credit Value: 1.0	

ICS 2O - Introduction to Computer Studies
Grade 10 Open
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. *Projects may include the creation of simple game programs incorporating graphics, the creation of a basic network chat program.*

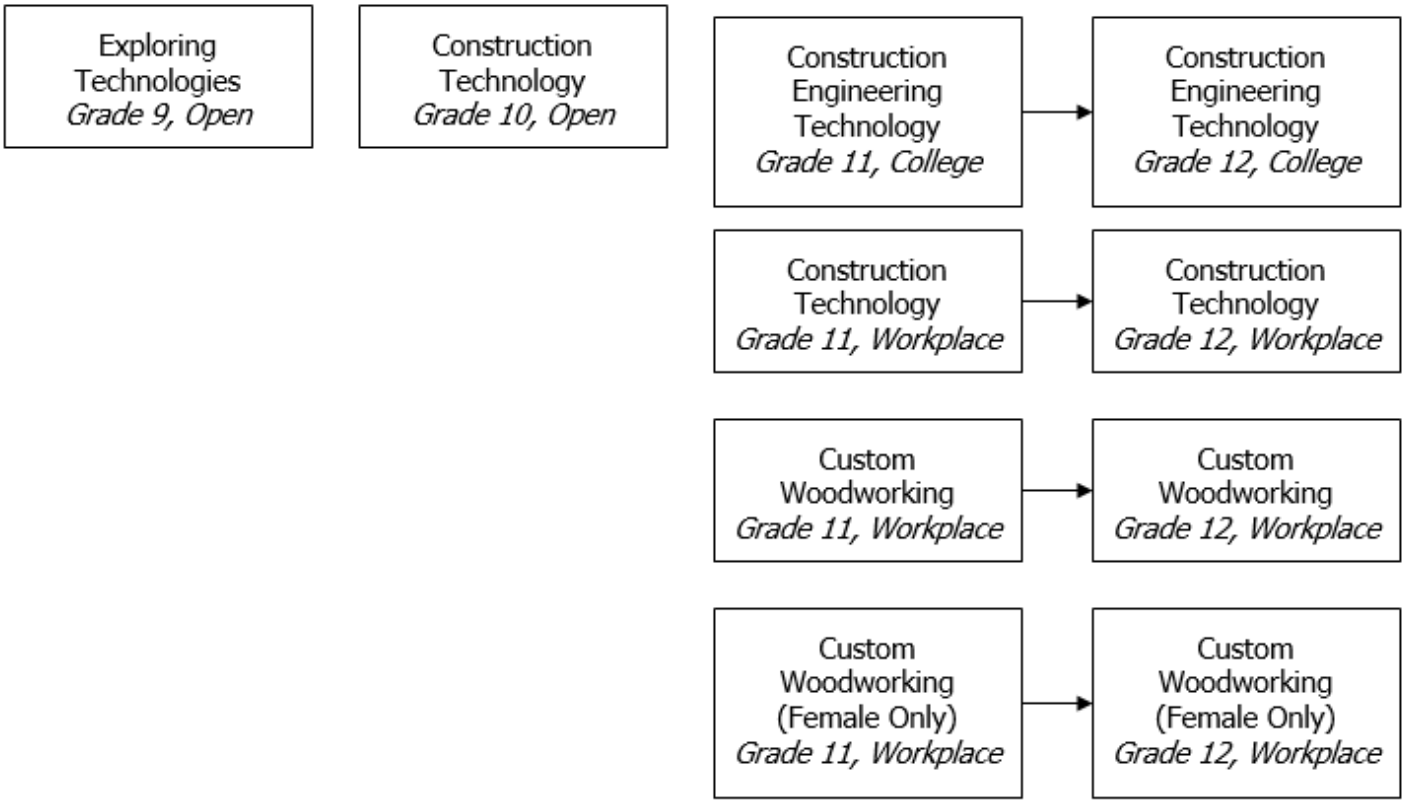
ICS 3C - Introduction to Computer Programming
Grade 11 College Preparation
This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply 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. The culminating activity in this course will involve the planning and development of a large, student-initiated program which can incorporate graphics, sound and other advanced programming concepts.
Prerequisite: None
Credit Value: 1.0

ICS 3U - Introduction to Computer Science
Grade 11 University Preparation
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. The culminating activity in this course will involve the planning and development of a large, student-initiated program which can incorporate graphics, sound and other advanced programming concepts.
Prerequisite: None
Credit Value: 1.0

ICS4U - Computer Science
Grade 12 University Preparation
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 analyze 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.
Credit Value: 1.0

ICS4C - Computer Programming **Grade 12 College Preparation** This course further develops students' computer programming skills. Students will learn object-oriented programming concepts, create object-oriented software solutions, and design graphical user interfaces. Student teams will plan and carry out a software development project using industry-standard programming tools and proper project management techniques. Students will also investigate ethical issues in computing and expand their understanding of environmental issues, emerging technologies, and computer-related careers. *Prerequisite: Introduction to Computer Programming, Grade 11, College Preparation.* Credit Value: 1.0	

Construction Technology



TIJ 10 - Exploring Technologies
Open - Grade 9
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 career in technology-related fields.
Projects may include: animation, audio video production, computers, architectural design, photography, robotics, woodworking, and transportation, and 3D printing.
***Prerequisite**: None.*
NOTE: TIJ 1O is strongly recommended for students wishing to take grades 10, 11, and 12 Technological Education Courses.
Credit Value: 1.0

TCJ 2O - Construction Technology
Open - Grade 10
This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop and awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry.
Prerequisite: None
Credit Value: 1.0

TCJ 3E - Construction Technology
Workplace Prep. - Grade 11
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
Credit Value: 1.0

TCJ 3C - Construction Engineering Technology
College Prep. - Grade 11
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 explore career opportunities in the field.
Prerequisite: None
Credit Value: 1.0

TWJ 3E – Custom Woodworking
Workplace Prep. – Grade 11
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 explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation.
Prerequisite: None
Credit Value: 1.0

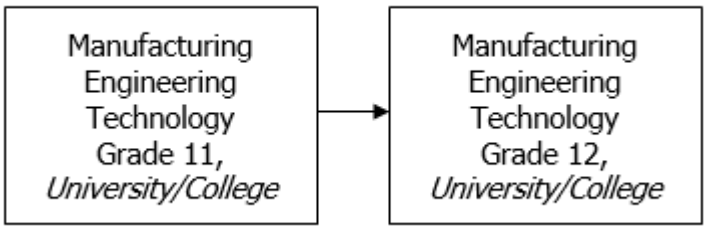
TCJ4C - Construction Engineering Technology
Grade 12 College Preparation
This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands on experience using a variety of materials, processes, 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: TCJ 3C Construction Engineering Technology, Grade 11, College Preparation (and / or instructor's permission)
Credit Value: 1.0

TWJ4E -Custom Woodworking
Grade 12 Workplace Preparation
This course enables students to further develop knowledge and skills related to the planning, design, and construction for 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: TWJ 3E Custom Woodworking, Grade 11, Workplace Preparation (and / or instructor's permission)
Credit Value: 1.0

TCJ4E - Construction Technology
Grade 12 Workplace Preparation
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: TCJ 3E Construction Technology, Grade 11, Workplace Preparation (and / or instructor's permission)
Credit Value: 1.0

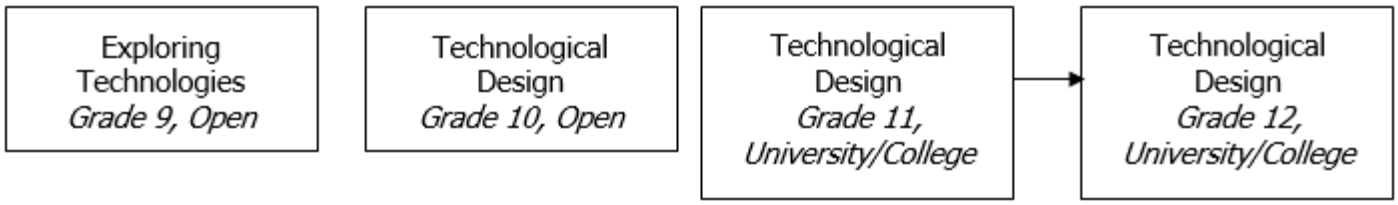
TWJ 3EF – Custom Woodworking (Female Only) **Grade 11 Workplace Preparation** This course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques 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 explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation. This course has been designed for female students interested in woodworking. *Prerequisite: None* Credit Value: 1.0	**TWJ 4EF – Custom Woodworking (Female Only)** **Grade 12 Workplace Preparation** This course enables students to further develop knowledge and skills related to the planning, design, and construction for 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 sills 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. This course has been designed for female students interested in woodworking. *Prerequisite: TWJ 3E and / or instructor's permission.* Credit Value: 1.0

Manufacturing Engineering



TMJ 3M – Manufacturing Engineering Technology **Grade 11 University/ College Preparation** 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 career in the industry. *Prerequisite: None* Credit Value: 1.0	**TMJ 4M – Manufacturing Engineering Technology** **Grade 12 University/ College Preparation** This course enables students to further develop knowledge and skill 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 Technology, Grade 11* Credit Value: 1.0

Technological Design



TIJ 10 - Exploring Technologies
Open - Grade 9
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 career in technology-related fields.
Projects may include: animation, audio video production, computers, architectural design, photography, robotics, woodworking, and transportation, and 3D printing.
***Prerequisite**: None.*
NOTE: TIJ 1O is strongly recommended for students wishing to take grades 10, 11, and 12 Technological Education Courses.
Credit Value: 1.0

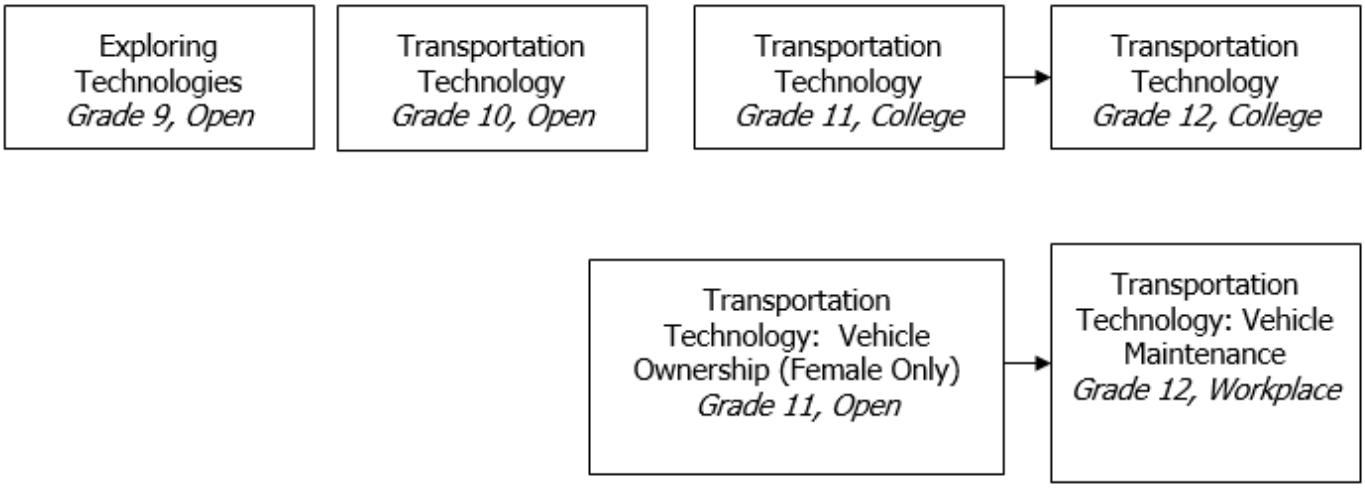
TDJ 3M - Technological Design
Grade 11 University / College
This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working 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.
Projects may include; 21st Century Design History, Animation, Architectural Design, Cable Cars, CAD Drafting, Graphic Design, Popsicle Stick Bridge.
Prerequisite: None
Credit Value: 1.0

TDJ 2O -Technological Design
Grade 10 Open
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 learn about secondary and postsecondary education and training leading to careers in the field. *Projects may include; Paper Tower, Graphic Design, Locker Organizer, Career Exploration, Interior Design and Animation.*
Prerequisite: None
Credit Value: 1.0

TDJ 4M - Technological Design
Grade 12 University / College
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 communications methods to present their designs. Students will enhance their problem-solving and communication skills, and explore career opportunities and the postsecondary education and training requirements for them. *Projects may include; Animation, Architectural Design, CAD Drafting, City & Regional Planning, Graphic Design, Interior Design-Photo Essay.*
Prerequisite: TD J 3M
Credit Value: 1.0

TECHNOLOGIES

Transportation Technology



TIJ 10 - Exploring Technologies
Open - Grade 9
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 career in technology-related fields.
Projects may include: animation, audio video production, computers, architectural design, photography, robotics, woodworking, and transportation, and 3D printing.
***Prerequisite**: None.*
NOTE: TIJ 1O is strongly recommended for students wishing to take grades 10, 11, and 12 Technological Education Courses.
Credit Value: 1.0

TTJ 2O – Transportation Technology
Grade 10, Open
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 project 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 an postsecondary pathways leading to careers in the transportation industry.
Prerequisite: None, however, TIJ 1O Exploring Technologies is recommended.
Credit Value: 1.0

TTJ 3O – Transportation Technology: Vehicle Ownership (Female Only)
Grade 11, Open
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. This course had been designed with the female driver in mind.
Prerequisite: None
Credit Value: 1.0

TTJ 3C – Transportation Technology **College Prep. – Grade 11** **(Dual Credit Option)** 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 task, 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. *Transportation Technology Dual Credit Option:* *In addition, in the first term an exciting program will be offered – a Dual Credit program for students enrolled in Transportation Technology TTJ 3C. Along with the potential of earning a TTJ 3C credit, students will be given the opportunity to simultaneously earn a credit from Loyalist College – AMST 1024: Suspension, Steering and Brakes. Successful completion of this college course may lead to a future post-secondary exemption. This course will enable students to develop technical knowledge and skills at a college level as they study, test, and service vehicle suspension, brakes, wheels and tires and steering systems. The course will be team taught by Holy Cross and a Loyalist College professor who will also provide two days of instruction at the College for all students.* *Prerequisite: None* Credit Value: 1.0	**TTJ 4C - Transportation Technology** **College Prep. - Grade 12** This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; 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: TTJ 3C* Credit Value: 1.0 **TTJ 4E -Transportation Technology: Vehicle Maintenance** **Grade 12 Workplace Preparation** 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* Credit Value: 1.0