Grade 11: OPTIONAL COURSES

Sciences

Biology, University Preparation (SBI3U)

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

Biology, College Preparation (SBI3C)

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

Chemistry, University Preparation (SCH3U)

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment. **Prerequisite:** Science, Grade 10, Academic

Physics (SPH3U)

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

The Arts

Visual Arts (AVI3O)

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

Media Arts (ASM3O)

This course emphasizes the development of the knowledge and skills required for the production of media art works (e.g., robo-sculpture, photocopy art, computer animation with synthesized sound). Students will develop an appreciation of the history of media arts through analysing specific works, and will create media art works using a variety of technologies (e.g., digital camera, photo-imaging software, computer-modelling software, synthesizer, videotape, multi-track sound recording). **Prerequisite:** Any Grade 9 or 10 course in the arts

Drama (ADA3O)

This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences. **Prerequisite:** Drama, Grade 9 or 10, Open

Canadian and World Studies

Understanding Canadian Law (CLU3M)
This course explores Canadian law with a focus on legal issues that are relevant to people's everyday lives. Students will investigate fundamental legal concepts and processes to gain a practical understanding of Canada's legal system, including the criminal justice system. Students will use critical-thinking, inquiry, and communication skills to develop informed opinions on legal issues and apply this knowledge in a variety of ways and settings, including case analysis, legal research projects, mock trials, and debates.
Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied

World History up to the Fifteenth Century (CHW3M)
This course investigates the history of humanity from earliest times to the sixteenth century. Students will analyse diverse societies from around the world, with an emphasis on the political, cultural, and economic structures and historical forces that have shaped the modern world. They will apply historical inquiry, critical-thinking, and communication skills to evaluate the influence of selected individuals, groups, and innovations and to present their own conclusions. **Prerequisite:** Canadian History Since World War I, Grade 10, Academic or Applied

Forces of Nature: Physical Processes and Disasters (CGF3M)
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 analyse 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

Social Sciences and Humanities

World Religions and Belief Traditions: Perspectives, Issues and Challenges (HRT3M)
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

Introduction to Anthropology, Psychology, and Sociology (HSP3U)
This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines.
Prerequisite: The Grade 10 academic course in English, or the Grade 10 academic history course (Canadian and world studies)

Healthy Active Living

Healthy Active Living Education (PPL3O)
This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills and will be given opportunities to practise goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety.
Prerequisite: None

Business Studies

Entrepreneurship: The Enterprising Person (BDP3O)
This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a school-based or student-run business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs. **Prerequisite:** None

Guidance and Career Education

Advanced Learning Strategies: Skills for Success After Secondary School (GLE3O)
This course improves students' learning and personal-management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal-management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals. **Prerequisite**: For GLE4O and GLE3O – Recommendation of principal

Designing Your Future (GWL3O)
This course prepares students to make successful transitions to postsecondary destinations as they investigate specific postsecondary options based on their skills, interests, and personal characteristics. Students will explore the realities and opportunities of the workplace and examine factors that affect success, while refining their job-search and employability skills. Students will develop their portfolios with a focus on their targeted destination and develop an action plan for future success. **Prerequisite:** None

Computer Studies

Introduction to Computer Science (ICS3U)
This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields. **Prerequisite:** None

Introduction to Computer Programming (ICS3C)
This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields. **Prerequisite:** None