# UMEI Christian High School GRADE 11 Course Selection 2023-2024

Student Name:	
Compulsory Courses:  Math Religious Studies (Anabaptist Perspectives in a Global Community)  English	
<b>Course Options</b> – Students should choose one from each option, remembering that they may only have <b>1.5 spares per semester</b> . Please see the other side for course descriptions and course codes.	e
Choose the appropriate course for your future plans:	
Functions MCR3U OR College Math MBF3C	
Academic English <b>ENG3U</b> OR College English <b>ENG3C</b>	
Semester 1	
Senior Robotics or French 11, FSF3U	
Chemistry 11, SCH3U or Exploring & Creating in the Arts, AEA40	
Semester 2	
Chemistry 12, <b>SCH4U</b> or Intro to Kinesiology, <b>PSK4U</b>	
Environmental Science, <b>SVN3M</b> or Financial Accounting, <b>BAF3M</b>	
Non-Semestered	
Vocal Choir <b>AVM3U</b> or Cooperative Education or College Math	
Sr. Phys. Ed., <b>PPL3P.</b> or Sr. Art, <b>AVI3O</b>	

Course descriptions are on the backside of this page. Please read through each carefully.

#### **Course Coding System**

The first three characters of the Common Course Code are assigned by the Ministry and represent the discipline, the subject and the course.

The fourth character refers to the grade of the course as follows:

- 1 grade 9
- 2 grade 10
- 3 grade 11
- 4 grade 12

The fifth character refers to the type of course:

- D Academic (Post-Secondary track)
- P Applied (College track)
- O Open (used in calculating overall average)
- U University (counts toward a student's top 6 courses when applying to University)
- C College (counts toward applying for College)
- M College/University (counts toward a student's top 6 when applying to University)

# **Course Descriptions**

## MBF3C - FOUNDATIONS FOR COLLEGE MATHEMATICS, Grade 11, College

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratics 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 – Principles of Mathematics, Grade 10, Academic)

# MCR3U - FUNCTIONS, Grade 11, University

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

(Prerequisite – Principles of Mathematics, Grade 10, Academic)

#### TEJ3M, Computer Engineering, Grade 11, College OR University

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 – Computer Engineering, Grade 10)

# FSF3U – FRENCH, Grade 11, University

This course draws on a variety of themes to promote extensive development of reading and writing skills and to reinforce oral communication skills. Students will read a wide variety of

materials, including a short novel or a play. Students will produce various written assignments, including a formal essay.

(Prerequisite - Grade 10 French, Academic)

#### SCH3U - CHEMISTRY, Grade 11, University

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 behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment.

(Prerequisite – Grade 10 Science, Academic)

# AEA3O/40 - EXPLORING AND CREATING IN THE ARTS, Grade 11/12, College OR University

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

(Prerequisite – Any Grade 9 or 10 arts course)

#### SCH4U - CHEMISTRY, Grade 12, University

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 investigative skills as they investigate chemical processes and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

(Prerequisite – Grade 11 Chemistry, University)

#### PSK4U – Introductory Kinesiology, Grade 12, College OR University

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 spot. This 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)

#### SPH3U - ENVIRONMENTAL SCIENCE, Grade 11, College OR University

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

(Prerequisite – Grade 10 Science, Applied or Academic)

#### BAF3M – Accounting, Grade 11/12, College OR University

This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting.

(Prerequisite – none)

#### AMV3M – VOCAL/CHORAL MUSIC, Grade 11, University/College Preparation

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 analyse and evaluate live and recorded performances. They will continue to increase their understanding of the elements of music while developing their technical and imaginative abilities.

(Prerequisite – Grade 9 or 10 Music: Vocal/Choral)

## **Cooperative Education**

Cooperative Education allows students to learn outside the classroom in a real workplace environment. This learning opportunity is designed to suit the student's strengths, interests and needs, and to enhance the student's preparation for the future. For a list of possible workplace experiences, please see our website at <a href="https://www.umei.ca">www.umei.ca</a>.

#### PPL3O – Health & Physical Education, Open

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)

#### AVI30 - Visual Arts, Open

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)